ESSENTIALS OF
FORENSIC ACCOUNTING

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To my wife, Joan, and my late mother, Rita.
Mike Crain

To my friends, family, and colleagues.
William Hopwood

To my lovely wife, Angela, who supported me through the adventure of contributing to this book. I am also grateful to my mother-in-law, Shuzhen Chen, and my father-in-law, Maosheng Li, for their support.
Carl Pacini

To my wife, Sherry; my sons, Joshua and Angelo; and my late parents, George and Wilma.
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Mike practices mostly in the areas of forensic accounting, measurement of economic damages, and valuation of businesses and intangible assets. He is on the adjunct faculty of Florida Atlantic University in the College of Business, where he taught graduate valuation courses. He also taught corporate finance to global MBA students for Manchester Business School.

Mike previously worked in the auditing and consulting areas in public accounting firms, including an international firm where he was a senior manager. Mike served as a consulting and testifying expert in many commercial cases, working for both plaintiffs and defendants in state and federal courts. He also served as an arbitrator in commercial damages and minority shareholder cases and as a court-appointed accountant. Moreover, he served as a special investigator on behalf of the county attorney and board of county commissioners for a Florida county government to investigate their county manager. Mike was previously approved as an arbitrator for the American Arbitration Association's Commercial Panel. Furthermore, he is an author, coauthor, and contributing author of several professional books and journal articles. Mike also received several awards, including the AICPA's Lawler Award presented by the *Journal of Accountancy* for best article of the year, and was inducted into the AICPA's Business Valuation Hall of Fame.

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William S. Hopwood's PhD is from the University of Florida. He has published numerous articles in major accounting journals, including *The Accounting Review* and *Journal of Accounting Research*. He is also a coauthor of widely-used textbooks in the areas of Forensic Accounting and Accounting Information Systems. He has been an active co-developer of the Florida Atlantic University's Master of Accounting with a Concentration in Forensic Accounting, the first program of its kind in the United States. More recently, William developed a virtual digital forensics lab for Florida Atlantic University's forensics students in the School of Accounting Executive Programs.

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Carl Pacini is an associate professor of accounting at the University of South Florida St. Petersburg (USFSP), where he teaches auditing and forensic accounting courses. Prior to USFSP, he taught for 10 years at Florida Gulf Coast University and for 2½ years at Penn State University. He developed and taught numerous courses, including Auditing I, Auditing II, Introduction to Fraud Investigation, Advanced Fraud Investigation, Tax Fraud, Forensic Accounting Legal Issues, Introduction to Forensic Accounting, and Fraud Profiling. He received his PhD in accounting from Florida State University in 1997 and his law degree from the University of Notre Dame in 1979. He is a Florida CPA, a Certified Financial Services Auditor, is Certified in Financial Forensics (AICPA designation), and is a member of the Florida Bar. Carl made numerous continuing professional education (CPE) presentations to the Georgia Society of CPAs, Florida Institute of CPAs, American Association of Attorney-Certified Public Accountants (AAA-CPA), Institute of Internal Auditors, and groups in Pennsylvania. He also served as treasurer of the Financial and Investigative section of the AAA-CPA. He has published over 80 articles in various academic and practitioner journals, including

the *Journal of Forensic Accounting, Journal of Accountancy, The CPA Journal, Internal Auditor, Auditing: A Journal of Practice & Theory, Journal of Business Finance and Accounting, Abacus, Advances in Accounting, Research in Accounting Regulation, Journal of Management Information Systems, Fordham Journal of Corporate and Financial Law,* and the *American Business Law Journal.*

George Richard Young, PhD, CPA, CFE

George Richard Young is an associate professor at Florida Atlantic University (FAU), where he taught fraud examination, auditing, financial accounting, and tax. He is a Certified Public Accountant (CPA) and Certified Fraud Examiner (CFE) licensed in Illinois, where he practiced public accounting for nine years before entering academia. He earned his doctorate from the University of Texas at Arlington and has been academic director of the FAU School of Accounting Executive Programs since 2003. The School offers a master of accounting degree for forensic concentration and business valuation as well as a master of taxation degree. In 2014, George became the Associate Director of the School, a position that encompasses managing all master's degree programs offered by the school, as well as curriculum and assessment for both undergraduate and master's degree programs. George was a member of the Technical Working Task Group (sponsored by a National Institute of Justice grant administered by West Virginia University) that was charged with the responsibility to develop a model educational curriculum for fraud examination and forensic accounting. He is a coauthor of *Forensic Accounting and Fraud Examination* (McGraw-Hill, 2e) and a chair emeritus of the Association of Certified Fraud Examiners Higher Education Advisory Committee. George has published articles in academic journals such as *Auditing: A Journal of Practice & Theory, Advances in Accounting Behavioral Research, Research on Accounting Ethics, Issues in Accounting Education, Journal of Forensic & Investigative Accounting*, and practice journals such as *The Journal of Accountancy, The CPA Journal, Fraud Magazine, Internal Auditor,* and *Taxation for Accountants*.

Preface

Forensic accounting is a fascinating field of study and practice, encompassing knowledge from accounting, finance, law, psychology, criminology, and other disciplines. It involves the collection and evaluation of evidence, whether the forensic accountant is performing a fraud examination, providing litigation services, serving as a testifying expert or non-testifying consulting expert or determining the value of assets and liabilities. Forensic accountants can serve in a variety of roles, such as the prevention and detection of civil and criminal fraud, measuring economic damages in litigation matters, valuing business or intangible assets, and testifying as an expert in courts of law. Regardless of the particular service performed, forensic accountants generally need a diverse skill set, including the ability to think critically, use quantitative methods, conduct research and investigations, and communicate effectively.

The need for forensic accounting has existed for more than a hundred years and is now as important as it has ever been. One prominent area of forensic accounting is fraud prevention and detection. A reason for the ongoing need for forensic accountants in this area is that there will always be individuals who wish to exploit or gain an unfair advantage over other people. A second reason is that the world has changed in ways that facilitate the exploitation of others. For example, the proliferation of technology has made the perpetration of financial crimes easier and has decreased the risk of detection for the perpetrator. No longer do bank robbers have to physically appear at a bank with a gun to steal money; now they can sit in the safety of their homes and, with a few keystrokes, be unlawfully or unfairly enriched. On the other hand, technology is a tool in the arsenal of forensic accountants that can be used to expose many frauds. A third reason is that various markets have become increasingly complex. In these markets, financial assets, nonfinancial assets, and the structure of transactions have grown in sophistication and increased the demand for valuation services. In addition, the increased complexity of financial transactions has created opportunities for unscrupulous individuals to commit financial statement fraud.

To uncover fraud schemes, forensic accountants need knowledge of financial transactions, how they are recorded, and an awareness that fraud cannot always be found in business records and financial statements. They also need knowledge of types and sources of evidence, the process of evidence collection so as to preserve the chain of custody, and applicable laws and regulations. Also, forensic accountants must be able to think critically so they can assess situations, persons, and evidence to ensure that victims, to the extent possible, are made whole and fraudsters are brought to justice. Knowledge of forensic accounting can be used to recommend preventative strategies and measures that decrease the probability that fraud will be committed and increase the likelihood of early detection if it is committed.

Besides fraud investigation, forensic accountants engage in a wide variety of litigation services that include serving as a litigation consultant, expert witness, mediator, arbitrator, and bankruptcy trustee. Further, these services can involve many specialty practice areas. Examples of these specialty areas include due diligence in mergers or acquisitions, valuation of economic losses, the ability to resolve patent disputes, and assistance in the administration of estates and trusts. Business valuation is an especially broad practice area because almost any type of litigation or potential litigation can involve valuation issues. These issues include, for example, the value of intangibles in business acquisitions, asset values in divorce, economic damages in breach of contract case, the value of complex options, and the value of businesses.

When measuring economic damages and business valuation, forensic accountants generally need a variety of knowledge and skills such as financial analysis, finance, economics, industrial organization, critical thinking, and good communication techniques. On many occasions, these kinds of services are needed for matters in dispute that may be decided by triers of fact, such as a court of law or an arbitration panel.

This book focuses on methods, techniques, strategies, and thinking processes utilized in forensic accounting along with professional standards of practice, ethics, and law applicable to subfields in forensic accounting. When appropriate, this book encapsulates information from AICPA professional standards, practice aids, and other AICPA publications. It consists of three major sections. Section I introduces the forensic accounting profession. Section II provides a thorough coverage of relevant legal issues and the practice of forensic accounting. Section III covers various forensic accounting areas, including fraud, bankruptcy, digital forensics, matrimonial forensics, economic dam-

ages, and business valuation theory and applications. The overall coverage is consistent with the Content Specification Outline (CSO) for the Certified in Financial Forensics (CFF) examination at the time of our writing. Practitioners seeking the CFF certification may find our text useful when preparing for the exam. This book also expands on the CSO in many places, especially in the areas of digital forensics, expert witnessing, practice development, and fraud management.

Essentials of Forensic Accounting is designed for experienced and inexperienced forensic accounting practitioners and students who desire to enter the forensic accounting profession, as well as those who simply wish to know more about the comprehensive body of forensic accounting knowledge. Because the text covers many areas, it does not encompass the entire body of knowledge of particular topics. Some readers may peruse certain chapters and others may use the material contained in these pages as a springboard for the study of the various professional standards and AICPA practice aids. Extensive end-of-chapter materials make the book suitable for instructors and students of college and university courses that involve forensic accounting and fraud examination at the undergraduate and graduate levels. We hope that this book helps you understand the uniqueness of this fascinating area of study and encourages you to learn more about forensic accounting.

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Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Chapter 1
The Forensic Accounting Profession

Learning Objectives

- Explain the nature of **forensic accounting** services
- Explain the different categories of forensic accounting services
- Elaborate on the different types of knowledge areas and skills required for forensic accounting
- Explain the different professional opportunities available to forensic accountants
- Discuss three major organizations and credentials important to forensic accountants

Introduction

The Essence of Forensic Accounting

Forensic accounting involves the application of special skills such as accounting, auditing procedures, finance, quantitative methods, research, and investigations. It also involves knowledge of certain areas of the law. This knowledge combined with these skills enable forensic accountants to collect, analyze, and evaluate evidential matter and to interpret and communicate findings.

Key elements of this definition including the following:

- *Accounting.* Forensic accounting is a branch of accounting. At its most general level, accounting involves the communication of financial information.
- *Special skills.* Forensic accounting requires special skills that are not required of accountants in general.
- *Law.* Forensic means pertaining to the law. Forensic accounting deals with financial issues that may come before a trier of fact in a court of law or other venue (such as arbitration).
- *Evidential matter.* Especially important to forensic accounting is evidential matter that may bear on the truth or falsity of an assertion made before a trier of fact.
- *Interpretation and communication.* In many cases, forensic accounts interpret evidence and communicate expert opinions for clients and a trier of fact.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Forensic accounting is typically divided into two areas:

- *Litigation services.* The forensic accountant serves as a testifying expert or non-testifying consultant and provides assistance for actual or potential legal or regulatory proceedings before a trier of fact in connection with the resolution of disputes between parties. Litigation services include serving as an expert witness, a litigation consultant (that is, a non-testifying expert), and in various other roles in dispute-resolution or legal processes (for example, as a bankruptcy trustee.)
- *Investigative services.* The forensic accountant serves as a consultant in cases that do not involve actual or threatened litigation, but do involve performing analyses or investigations that may require the same skills used in litigation services.

Forensic Accounting Versus Traditional Accounting

Traditional accounting involves recording, classifying, analyzing, and reporting financial data and information. The emphasis is on converting raw financial data into information useful for decision makers by using an **applicable financial reporting framework**. The useful information is typically presented to decision makers in the form of financial statements. In summary, the work product of the traditional accountant is one or more financial statements.

On the other hand, the typical work product of forensic accountants tends to be much different from that of traditional accountants. The scope of each forensic accounting project is unique and the work product flows from the scope of the particular project. Such work products often consist of a written or oral report of findings or recommendations or both. When testifying before a trier of fact as an expert witness, forensic accountants ordinarily express their findings as expert opinions. In this use, "opinion" is a term of art in judicial guidelines on evidence and the law, and differs from its use in the accounting literature.

Forensic Accounting Versus Auditing

In some respects, forensic accounting is very much like auditing. Forensic accountants generally use procedures and exercise professional skepticism in a manner similarly used by auditors. For instance, both examine evidence (usually financial related) and form professional judgments on what they observe. But the overall objectives of these two kinds of engagements are very different. The objective of audit engagements usually is to express an **audit opinion** on whether financial statements, taken as a whole, are fairly presented. In contrast, forensic accounting engagements tend to be focused on one or more particular areas. Speaking simply, virtually all audit engagements have a single objective of expressing one opinion on a set of financial statements whereas each forensic accounting project is very uniquely focused on a client's particular needs and the objective is usually to report recommendations or findings.

All forensic accounting work performed by CPAs[1] is subject to Consulting Services (CS) section 100, *Consulting Services: Definitions and Standards* (AICPA, *Professional Standards*). In addition, forensic accounting services may be subject to other requirements such as applicable laws and regulations, rules of evidence, civil or criminal procedures, and other professional pronouncements such as other applicable professional standards. These other requirements are discussed in detail in subsequent chapters.

Forensic accountants sometimes engage in auditing work, but for purposes other than providing an opinion on an entity's financial statements. For example, a forensic accountant may conduct a forensic engagement as part of an occupational fraud investigation. The result of such an investigation will likely be a report that identifies, for example, the amount of the fraud loss and any control weaknesses that led to the fraud. These fraud engagements are performed as consulting engagements and are governed by CS section 100.

Forensic accountants apply specialized skills (in the form of specialized procedures) that differ from those used by auditors of historical financial statements. For example, auditors may use observation techniques whereas forensic accountants may use surveillance techniques. The differences between techniques used by traditional auditors and forensic accountants are discussed in chapter 11, "Digital Forensics."

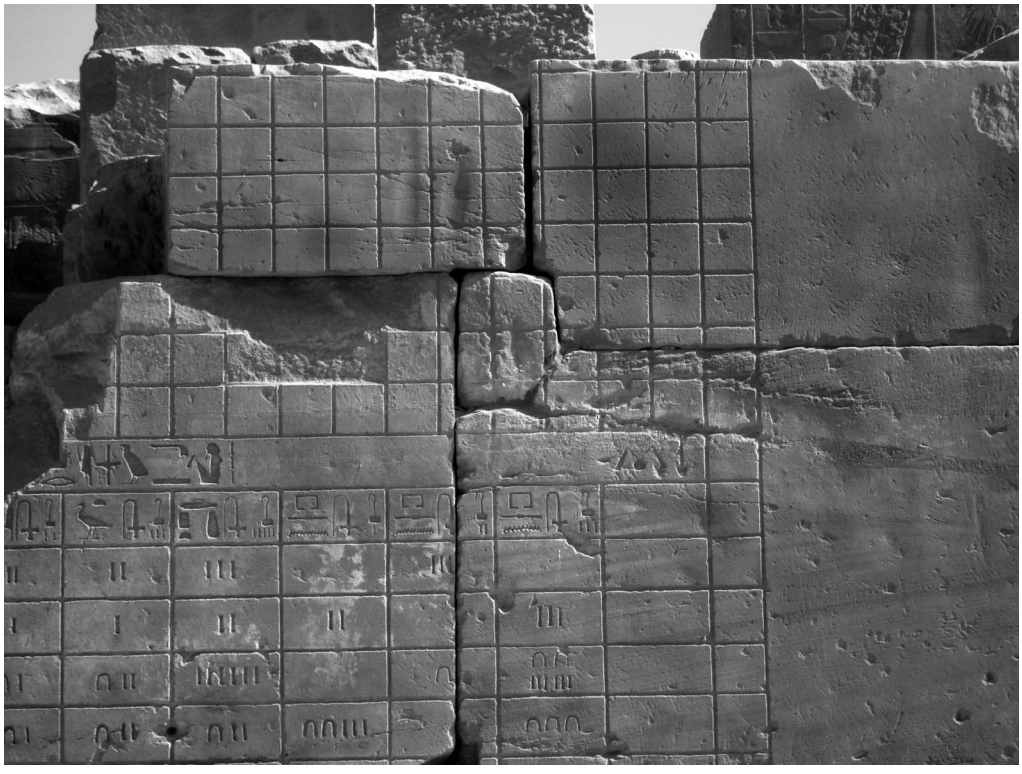
[1] For brevity, throughout the text we say that AICPA standards apply to CPAs. Strictly speaking, AICPA standards apply to CPAs who are members of AICPA or those who are licensed by state governments that require their licensees to comply with AICPA standards. Generally speaking, state regulators of CPAs in the US have requirements that almost certainly refer to AICPA standards in some degree.

Unlike traditional auditors, not all forensic accountants are required to be "independent" of their clients in the way the term is used in other accounting literature. Independence is required, though, when forensic accountants participate in **attest** engagements such as audits of financial statements for the purpose of opining on the fairness of their presentation and **reviews** of financial statements.

The Historical Development of Forensic Accounting

Forensic accounting has existed for thousands of years. In ancient Egypt, accountants were known as the eyes and ears of the pharaoh. By some reports, ancient forensic accountants were adept at getting to the truth and, at times, they availed themselves of harsh interrogation techniques and even torture.

Accounting for Offerings at the Temple of Karnak



Source: Flickr/Becsh

No discussion of forensic accounting would be complete without at least a mention of Sherlock Holmes, a fictional character from the late 1800s, who is widely known for his astute observations, impeccable logic, powers of deduction, and use of forensic science. Throughout the development of modern forensic accounting, Sherlock Holmes has occasionally been held up as a role model for aspiring forensic accountants. Such veneration of Sherlock Holmes by the accounting community is completely appropriate, because forensic accountants frequently investigate the how, where, when, and why of financial frauds.

In the United States and Canada, perhaps the first case of an accountant testifying in court as an expert witness was in the 1817 Canadian case *Meyer v. Sefton*. However, it was not until over a hundred years later that the term forensic accounting was coined by **Maurice Peloubet** (1892–1976) in 1946 when he published an article titled, "Forensic Accounting—Its Place in Today's Economy." Peloubet was a very prominent accountant in his era. Information about him can be found on the website of the New York State Society of CPAs (www.nysscpa.org).

Maurice Peloubet

Source: Find a Grave

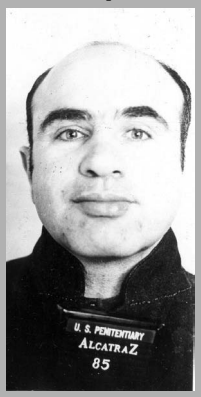
Since Peloubet published his article, forensic accounting as a practice area has continued to flourish. During World War II, the FBI hired large numbers of accountants to help with intelligence and counter-intelligence operations. In the 1960s, J. Edgar Hoover, the head of the FBI, hired large numbers of accountants to fight organized crime. The need for forensic accountants increased dramatically with the financial scandals that began in the 1980s and continues to persist. The Sarbanes-Oxley Act of 2002 significantly increased the interest in forensic accounting.

Case in Point

In one of the most famous uses of forensic accounting skills, Frank Wilson of the Internal Revenue Service's Special Intelligence Unit was assigned to investigate Alphonse Gabriel "Al" Capone who, in 1930, had become Chicago's "Public Enemy Number One" due to his involvement in smuggling and bootlegging liquor and other illegal activities.

Prior to Frank's investigation, Mr. Capone had only served prison time for possession of a firearm. After the 1927 U.S. Supreme Court ruling in *United States v. Sullivan* (274 U.S. 259 [1927]) that clarified that income from illegal sources was taxable, the government was able to move forward in prosecuting the head of the Capone organization. Unfortunately, finding evidence was not easy; Capone had never filed an income tax return, owned nothing in his name, and had conducted business through front men. Until Wilson examined a cash receipts ledger that contained the organization's net profits for a gambling house and the name of Mr. Capone, no records had been discovered by the government to link Mr. Capone to income of any kind. In 1931, it was this document that led to a 23-count indictment including income tax evasion for the years 1925–1929, failing to file tax returns for the years 1928 and 1929, and conspiracy to violate Prohibition laws from 1922–1931.

Al Capone



Source: FBI

Mr. Capone was found not guilty on 18 of the 23 counts. He was convicted on 3 counts of tax evasion (for years 1925, 1926, and 1927) and 2 counts of failing to file tax returns (for years 1928 and 1929). The judge sentenced him to a total of 10 years in federal prison and 1 year in the county jail. He was paroled on November 16, 1939, and shortly thereafter returned to his home in Palm Island, Florida where died, on January 25, 1947, from cardiac arrest.

Forensic Accounting Knowledge and Skills

Forensic accounting requires knowledge and skills in many different areas. Although these areas are discussed individually, keep in mind that they overlap each other.

Accounting

Forensic accounting spans many areas of accounting, therefore broad accounting knowledge and skills are required. However, certain accounting knowledge and skills are required within specialized areas of forensic accounting. For example, a forensic accountant specializing in investigating occupational fraud might not need to be an up-to-date expert in international accounting standards, but would likely need specialized knowledge and skills relating to accounting information systems, digital forensics, and accounting information systems auditing procedures. Similarly, a forensic accountant specializing in estimating economic damages may need **business valuation** skills. The many specialized areas within forensic accounting are discussed in subsequent chapters.

Auditing

Auditors are specialists in collecting, interpreting, and evaluating data and information. Such skills are essential to forensic accounting. As previously discussed, when forensic accountants testify before a trier of fact as an expert witness, they ordinarily express their findings as expert opinions. Their findings must be based on evidence, and evidence must be collected and interpreted. Therefore, forensic accountants should be skilled in collecting and interpreting evidence. Finally, as previously mentioned, forensic accounting requires knowledge and skills using specialized evidence gathering procedures.

Investigative

Special skills and knowledge are required to conduct forensic accounting investigations. These special skills and knowledge include an understanding of how to structure and manage investigations, the types of evidence that may be collected, how to maintain the chain of custody, the legal rights of those under investigation, how to identify different types of fraud schemes, how to conduct interviews, and how to detect deception.

Criminology and Digital Forensics

For criminal investigations, the forensic accountant should have a basic understanding of the various roles played by crime scene investigators, digital forensics experts, forensic scientists, forensic laboratories, prosecutors, and attorneys.

Almost all crimes these days involve digital devices, including computers.[2] Therefore it is helpful for the forensic accountant investigating fraud to have a basic understanding of digital forensics in both the areas of computer forensics and network forensics. In addition, advanced digital forensics are employed by, for example, using computer-assisted audit tools and techniques (CAATTs) to extract and analyze digital data from enterprise resource planning (ERP) and accounting systems.

Accounting Information Systems

Key elements of accounting information systems include internal control and business processes. Internal fraud schemes typically involve the violation of weak or nonexistent internal controls within specific business processes. Therefore, the forensic accountant must have a good understanding of internal control processes and how they interface with business processes and the accounting information system. For example, a sales-skimming fraud scheme may involve the absence of reconciliation controls in the revenue cycle.

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[2] See David W. Bennett, "The Challenges Facing Computer Forensics Investigators in Obtaining Information from Mobile Devices for Use in Criminal Investigations." *Forensic Focus.* August 20, 2011. articles.forensicfocus.com/2011/08/22/the-challenges-facing-computer-forensics-investigators-in-obtaining-information-from-mobile-devices-for-use-in-criminal-investigations/.

Risk Analysis

Fraud risk management is an issue commonly dealt with by forensic accountants.[3] Fraud risk management activities include fraud prevention, detection, and response. This type of management begins with fraud risk assessment.

Communication

Communication skills are essential in all areas of accounting. However, such skills can become even more critical in the area of forensic accounting. Forensic accountants serving as testifying experts often write expert reports that are likely to be subject to intense scrutiny in depositions and cross-examinations at trial. Furthermore, forensic accountants may need to explain their opinions on direct examination at trial, which requires effective presentation skills.

Psychology

Understanding the suspect and, in particular, his or her motivations can aid forensic accountants who perform investigations. Motivation can, for instance, help identify the areas that should be investigated. For example, a CEO may be motivated to compete successfully with a sibling by attempting to increase the market price of stock by artificially inflating net asset values and income.

The law enforcement community has long known that one of the best ways to solve a fraud case is by obtaining a confession. The process of obtaining a confession in financial fraud cases is a very carefully orchestrated one that begins with collecting documentary evidence, proceeds to interviews with non-suspects, and often terminates with an interview with the prime suspect. The key to success in interviewing involves the ability to assess honesty versus deception. Consequently, forensic accountants, at times, are aided by the employment of techniques rooted in psychology, such as the analysis of body language and eye movements.

Information Technology

The importance of information technology to forensic accountants is closely related to the importance of digital forensics and accounting information systems. Information technology is constantly evolving and is an inescapable aspect of many types of forensic accounting work. Not only do forensic accountants use the latest in technology in their investigations, they must also be aware of evolving technological advances to maintain up-to-date professional skills.

Problem Solving

If there is any one skill that stands out among the others, it is problem solving. Forensic accountants constantly deal with puzzles and mysteries that offer opportunities to sharpen their critical-thinking skills. In fraud investigations and litigation and dispute resolution, there is always an opposing side, and in many cases the opposing side is highly intelligent and seeks to deceive and cover up the truth. The opposing side might, for example, be a fraudster in an embezzlement investigation, a spouse hiding assets in a divorce, a debtor hiding assets in a bankruptcy, or a potential corporate acquisition target providing false financial statements in order to inflate its value.

Legal

By definition, forensic work is affected by the legal system. In performing litigation services, forensic accountants assist in the legal and dispute resolution processes. Therefore the forensic accountant is familiar with the court systems, applicable federal and state rules of procedure, and rules of evidence. The forensic accountant often needs a basic understanding of various types of common-law and financial crimes such as conspiracy, money laundering, and embezzlement.

[3] See www.pwc.com/id/en/forensic-services/.

Professional Opportunities in Forensic Accounting

Forensic accounting is an accounting specialty that is rich with many subspecialties. Forensic accountants tend to work in the subspecialties that interest them the most. Some of these subspecialties are discussed here in general terms and are discussed in greater detail in subsequent chapters.

Investigative Services

As previously discussed, the two main areas of forensic accounting are litigation services and investigative services. The distinction between the two areas rests not so much on the work done but rather on whether or not litigation is contemplated or anticipated.

There is almost no end to the types of financial cases that involve investigation, including those of occupational fraud and other kinds of fraud. Besides fraud, there are many other types of issues that forensic accountants investigate. Examples include determining the value of a spouse's assets in a divorce case, investigating public corruption, tracing the sources of funds in a terrorism case, determining the extent of money laundering in narcotics trafficking cases, and ascertaining the validity of specific representations made by the target of a corporate merger.

From the FBI's Website: Looking for a Few Good Accountants[4]

Desired Education

- Bachelor's degree in accounting or bachelor's degree with 24 semester hours in accounting (6 out of 24 hours can be in business law)

Applicable Certifications

- Certified Public Accountant (CPA)
- Certified Financial Forensics (CFF)
- Certified Fraud Examiner (CFE)
- Certified Internal Auditor (CIA)

Relevant Work Experience

- Forensic accounting
- Public accounting audit
- Government accounting

Fraud Risk Management

Forensic accountants tend to be experts in investigating fraud because of their deep understanding of many types of fraud schemes. As a result, they are in an excellent position to identify fraud risks and recommend ways to prevent and detect fraud schemes. One example of the need for fraud risk management is the proliferation of digital technologies, which has opened the door to constant, devastating fraud attacks against even some of the largest and strongest companies. Consequently, fraud risk management has grown into an enormous industry and has strongly embraced the forensic accounting profession for its knowledge and skills in preventing and detecting fraud.

Expert Consulting

As **expert consultants**, forensic accountants give advice on a wide range of areas. Examples include fraud risk mitigation, internal dispute resolution systems, the value of an estate, and the financial impact of bankruptcies, mergers, or acquisitions.

Expert Testimony

Generally speaking, **fact witnesses** are only permitted to testify in court to what they perceive through their senses (that is, touch, hearing, sight, and smell). On the other hand, qualified experts are permitted to give opinions on relevant issues before the trier of fact.

[4] *Source:* "FBI Forensic Accountants: Following the Money." March 9, 2012. www.fbi.gov/news/stories/2012/march/forensic-accountants_030912/forensic-accountants_030912.

Qualified forensic accountants can serve as **testifying experts** in virtually any area of forensic accounting. Testifying experts usually provide a written report to the opposing side before the trial. They are then subject to depositions and at trial they state their opinions in direct examination, which is then subject to cross-examination by the opposing party. The legal system permits the use of experts as a way of assisting the trier of fact (usually a judge or jury) rather than as an advocate for a particular party.

Business Valuation

Business valuation is a very important subspecialty area within forensic accounting. Forensic accounting and business valuation are so intertwined that they are in the same member interest area within the AICPA (the section is named Forensic and Valuation Services [FVS]).

Business valuation involves not only valuing businesses, but many kinds of assets or liabilities. Forensic accountants may measure or value economic damages, patents, assets owned by divorcing spouses, future medical expenses, loan portfolios, and stock options.

Business valuation is also applicable to financial reporting. Accounting standards have shifted towards valuing many assets at fair value. For example, goodwill listed on the balance sheet of a company is to be tested for impairment at least once a year; this impairment testing involves determining a value of the net assets that gave rise to the goodwill to arrive at a current fair value of goodwill. If the current value of goodwill is less than the carrying value of goodwill, goodwill is to be written down to its current value.

Therefore, a valuation expert may be engaged to value specific assets or groups of assets, or provide an opinion on an already determined fair value of assets.

Other

Other areas in which forensic accountants can serve include alternative dispute resolution, trust services, and bankruptcy. In dispute resolution, forensic accountants can serve as mediators or arbitrators. In trust services, they can serve as trustees or executors, and in bankruptcies they can serve as private trustees appointed by the U.S. Trustee Program, a component of the Department of Justice responsible for overseeing the administration of bankruptcy cases and private trustees.

Professional Organizations and Certifications

There are many professional organizations and certifications applicable to forensic accountants. The particular organizations that are most beneficial to individual forensic accountants depend on their education, training, experience, and areas of professional focus. Five of the major professional organizations and certifications are discussed here. Various other organizations and certifications are included in the discussion in chapter 6, "Litigation Services."

As a general rule, individual professional organizations require credential holders to adhere to specific ethics codes and professional guidelines, and maintain their credentialed status by means of continuing education or work experience. The organizations presented in the following sections are representative of leading international forensic accounting associations and institutes.

AICPA (www.aicpa.org)

The **American Institute of Certified Public Accountants (AICPA)** is the premier American organization for CPAs and the largest organization of CPAs in the world. It develops and determines answers to the Uniform CPA exam and the exam associated with the Certified in Financial Forensics (CFF) credential. The CFF credential can be earned by AICPA members who are CPAs by passing an examination of their knowledge of forensic accounting and business valuation. Education and experience requirements must also be met by those seeking this certification.

The AICPA also offers the Accredited in Business Valuation (ABV) credential. This credential is open to CPAs who are members of the AICPA and who pass the ABV examination and meet certain education and experience requirements. The ABV examination is waived for accredited members (AM) and accredited senior appraisers (ASA) of the American Society of Appraisers.

Case in Point

Richard A. Pollack, CPA, ABV, CFF, PFS, ASA, CBA, CFE, CAMS, CIRA, CVA, is the Director-in-Charge of Forensic and Business Valuation Services at Berkowitz Pollack Brant, Advisors and Accountants, LLP.

For more than 30 years, Mr. Pollack has served as a litigation consultant, expert witness, court-appointed expert, forensic accountant, and forensic investigator. His team has assisted bankruptcy courts, the Securities and Exchange Commission, school boards and government agencies, the FBI, and numerous other entities in proving or defending against allegations using a range of forensic and investigative strategies.

His areas of practice include accounting and auditing; management consulting; business and tax planning; business valuation; and litigation support (forensic services), including computation of economic damages, forensic investigations, special accountings, fraud prevention and detection, matrimonial disputes, contract cost and claims analysis, business interruption insurance claims, and bankruptcy or receivership matters. Mr. Pollack has been qualified in Dade, Broward, and Palm Beach counties as an expert in the U.S. District Court, U.S. Bankruptcy Court, and Circuit Courts. Additionally, Mr. Pollack has testified in various arbitration matters.

Mr. Pollack has experience in a variety of industries, including automotive dealerships, aviation, banking (including mortgage financing), construction, entertainment, health care, insurance, media, leisure and hospitality, manufacturing, not-for-profit, professional services, real estate, retail, securities (including broker dealers), technology, telecommunications, transportation, and wholesale distribution.

Throughout Mr. Pollack's career he has performed forensic investigations and audits of financial institutions and other enterprises. These investigations have included analyses of loan files and related documentation, check-kiting, uncovering employee embezzlement, and providing recommendations on proper policies and procedures.

Mr. Pollack also has performed peer reviews on other CPA firms on behalf of the AICPA and the Florida Institute of Certified Public Accountants.

Additionally, he has written articles on forensic accounting, business valuation, bankruptcy, finance, and other accounting topics. He co-authored the AICPA practice aid *Calculating Lost Profits*, which has been used by CPAs and courts nationwide, and provided assistance to the AICPA in publishing practice aids 06-1, *Calculating Intellectual Property Infringement Damages*, and 07-1, *Forensic Accounting—Fraud Investigations FVS (Formerly BVFLS)*.

One of the forensic accounting cases on which Mr. Pollack worked involved a Ponzi scheme perpetrated by Scott Rothstein of Fort Lauderdale, Florida. Mr. Rothstein, a now disbarred lawyer, pleaded guilty to 5 felonies in connection with his role in the $1.2 billion Ponzi scheme and is serving a 50-year sentence. Mr. Rothstein built a prominent law firm of 70 lawyers and 150 employees on Las Olas Boulevard in Fort Lauderdale and became well known in south Florida because of his lavish spending on cars and homes and due to his close ties to politicians. (Besides an 87-foot Warren yacht and other vehicles, his cars included 4 Ferraris, a Bentley, a Rolls-Royce, a Maserati GT, 2 Lamborghini Murcielagos, and a $1.6 million Bugatti Veyron.) His fraud included fabricating opportunities to entice investments in what Mr. Rothstein said were payouts from settlements of workplace discrimination lawsuits, having one of his attorneys pretend to be the head of the Fort Lauderdale office of the Florida Bar, and forging federal court orders in a lawsuit.

Mr. Pollack and his team spent three days visiting with Mr. Rothstein in prison at an undisclosed location, years analyzing transactions, and many hours deposing various parties. The results of their forensic accounting work, combined with work performed by the lawyers and receiver, resulted in a full recovery of monies invested by victims of the scheme.

ASA (WWW.APPRAISERS.ORG)

The **American Society of Appraisers (ASA)** is a nonprofit, international organization of professional appraisers that represents a variety of appraisal disciplines, including business valuation. Its mission is to encourage public trust of its members and the appraisal profession through compliance with high levels of ethical and professional standards by, for example, establishing and maintaining principles of appraisal practice and a code of ethics. It offers two designations for qualified candidates: Accredited Member (AM) and Accredited Senior Appraiser (ASA).

The ASA also promotes research and development in all fields of the appraisal profession through its American Society of Appraisers Educational Foundation (ASAEF), which is a separate, nonprofit corporation established by the ASA. The mission of the ASAEF is to conduct educational, research, and charitable activities related to the advancement of the appraisal profession.

ACFE (WWW.ACFE.COM)

The **Association of Certified Fraud Examiners (ACFE)** is the world's largest antifraud organization. Its mission is to reduce the occurrence of fraud and white-collar crime and to assist its members in their efforts to detect and deter fraud. The ACFE offers the Certified Fraud Examiner (CFE) credential. The CFE exam covers the fraud examination body of knowledge, which comprises four disciplines: fraud, prevention and deterrence, financial transactions, and fraud schemes, investigations, and law. The credential is maintained by engaging in continuing professional education and adhering to its code of ethics.

Every two years, the ACFE publishes its *Report to the Nations on Occupational Fraud and Abuse*, a study based on data compiled from worldwide cases of occupational frauds that occurred during the two years immediately prior to its publication and which were investigated by CFEs.

Although the ACFE is not an accounting association, many accountants are members and have the CFE credential, which focuses on one area within forensic accounting (fraud) and can be earned by those in accounting and nonaccounting practice areas. A bachelor's degree is required for the CFE, but can be in any area. Subject to specific rules, relevant experience can substitute for the bachelor's degree requirement. A minimum of at least two years of relevant experience is required.

ISACA (WWW.ISACA.ORG)

According to **ISACA**'s website

> [a]s an independent, nonprofit, global association, ISACA engages in the development, adoption and use of globally accepted, industry-leading knowledge and practices for information systems. Previously known as the Information Systems Audit and Control Association, ISACA now goes by its acronym only, to reflect the broad range of IT governance professionals it serves.

ISACA offers three credentials of interest to forensic accountants. These include the Certified Information Systems Auditor (CISA) credential, the Certified in Risk and Information Systems Control (CRISC) credential, and the Certified Information Security Manager (CISM) credential. Of particular interest to the forensic auditor is the CISA credential.

Most fraud investigations involve computer systems, and the need to use digital forensics in fraud investigations is fairly common. However, basic computer forensics does not include the skills needed to investigate frauds and other issues in many company accounting systems, database systems, and ERP systems. The CISA credential is an exam-based credential that focuses on the advanced skills needed by the forensic accountant.

NACVA (WWW.NACVA.COM)

The **National Association of Certified Valuators and Analysts (NACVA)** is an association of professionals who provide valuation and litigation services for various types of business transactions. Its mission is to provide resources to its members in the fields of valuation, financial forensics, and related advisory services. NACVA provides training in valuing businesses, damage determination, and fraud detection and prevention and offers continuing professional education courses for members and nonmembers. In addition, its members must adhere to an established code of ethics.

NACVA offers the following credentials: Certified Valuation Analyst (CVA), Accredited Valuation Analyst (AVA), Accredited in Business Appraisal Review (ABAR), and Master Analyst in Financial Forensics (MAFF).

Organization of This Book

This text is organized into three major sections:

- Section I introduces the forensic accounting profession.
- Section II provides a thorough coverage of relevant legal issues and the practice of forensic accounting.
- Section III covers various forensic accounting areas, including fraud, bankruptcy, digital forensics, matrimonial forensics, economic damages, and business valuation theory and applications.

Generally speaking, the overall coverage is consistent with the Content Specification Outline (CSO) for the CFF exam. The text expands on the CSO in many places, especially in the areas of digital forensics, expert witnessing, practice development, and fraud management.

Summary

Forensic accounting involves the application of special skills in accounting, auditing, finance, quantitative methods, research, and investigations. It also involves knowledge of certain areas of the law. These skills and knowledge enable forensic accountants to collect, analyze, and evaluate evidential matter and to interpret and communicate findings.

When practicing litigation services, the forensic accountant serves as an expert or consultant and provides assistance for actual or potential legal or regulatory proceedings before a trier of fact in connection with the resolution of disputes between parties. When performing investigative services, the forensic accountant serves as a consultant in cases that do not involve actual or threatened litigation, performing analyses, or investigations that may require the same skills as used in litigation services.

In many respects, forensic accounting is very much like auditing. Like the forensic accountant, the auditor generally gathers evidence and exercises professional skepticism; is subject to certain standards, laws, and regulations; and applies specialized skills. The auditing skills of collecting, interpreting, and evaluating data and information are also essential to the practice of forensic accounting. These skills are used to obtain evidence on which the findings, recommendations, and expert opinions of forensic accountants are based. But the overall objectives of these two kinds of engagements are very different. The objective of audit engagements usually is to express an opinion on whether financial statements, taken as a whole, are fairly presented. In contrast, forensic accounting engagements tend to be focused on one or more particular areas. Furthermore, forensic accountants apply specialized skills (in the form of specialized procedures) that differ from those used by financial statement auditors.

In addition to possessing auditing skills, the forensic accountant is knowledgeable as to how to structure and manage investigations, the types of evidence that may be collected, how to maintain the chain of custody, the legal rights of those under investigation, how to identify different types of fraud schemes, how to conduct interviews, how to detect deception, and other areas.

The forensic accountant should also have a basic understanding of the various roles played by crime scene investigators, digital forensics experts, forensic scientists, forensic laboratories, prosecutors, and attorneys. When performing litigation services, forensic accountants assist in the legal and dispute resolution processes. Therefore, the forensic accountant has familiarity with the court systems, applicable federal and state rules of procedure, and rules of evidence.

Because the key elements of accounting information systems include internal control and business processes, forensic accountants can benefit from a good understanding of internal control processes and how they interface with business processes and the accounting information system. Weak or nonexistent internal controls within specific business processes are often present in internal fraud schemes.

Although communication and problem solving skills are essential in all areas of accounting, these skills can be even more critical in the area of forensic accounting. Understanding psychology is another important skill required

in forensic accounting and affects the forensic accountant's success when determining the motivations of perpetrators and assessing the likelihood of deception during interviews.

Forensic accounting is an accounting specialty that comprises many subspecialties. The two main areas of forensic accounting are litigation services and investigative services. The primary distinction between the two areas is whether or not those knowledgeable of the case contemplate or anticipate litigation.

There are many professional organizations and certifications applicable to forensic accountants. Five of the major professional organizations and certifications are the AICPA (with the CPA, CFF, and ABV credentials), the ACFE (with the CFE credential), the ASA (with the AM and ASA credentials), ISACA (with the CISA, CRISC, and CISM credentials), and NACVA (with the CVA, AVA, ABAR, and MAFF credentials).

Review Questions

1. As consultants, which of the following services do forensic accountants not provide?
   a. Advice on fraud risk mitigation.
   b. Valuation of an estate.
   c. Opining on the fair presentation of financial statements.
   d. Financial impact of mergers and acquisitions.

2. When performing dispute resolution services, forensic accountants can serve as _____ or _____.
   a. Facilitators; advocators.
   b. Mediators; arbitrators.
   c. Judge; jury.
   d. None of the above.

3. Which approach is recommended when extracting data from an accounting information system?
   a. Use of client personnel to obtain the needed data.
   b. Comparing the output of an accounting information system to the expectations of the forensic accountant.
   c. Use of sampling.
   d. Use of computer-assisted audit tools and techniques (CAATTs).

4. Internal fraud schemes typically involve weaknesses in _____.
   a. Accounting.
   b. Internal controls.
   c. Leadership.
   d. Assessment.

5. Having knowledge in which of the following areas is important for a forensic accountant?
   a. Information technology.
   b. Psychology.
   c. Criminology.
   d. All of the above.

6. The use of an expert witness is primarily to do which of the following?
   a. Settle disputes out-of-court.
   b. Assist the trier of fact.
   c. Be an advocate for the defendant or plaintiff.
   d. Fulfill the court's obligation of due diligence.

7. According to professional standards, forensic accountants are engaged only to assist lawyers as they prepare for litigation and to testify in court.
   a. True.
   b. False.

8. To work effectively, a forensic accountant should have a basic understanding of all of the following except _____.
   a. Rules of evidence.
   b. Law applicable to conspiracy crimes.
   c. Court systems.
   d. Enharmonic equivalents.

9. Whereas traditional accounting has many subspecialties such as cost accounting, forensic accounting has relatively few sub-specialties.
   a. True.
   b. False.
10. Auditors and forensic accountants are similar in that they both _____.
   a. Use the auditing standards issued by the AICPA to guide their work.
   b. Are required to be independent of their clients.
   c. Are allowed to formulate opinions to assist their clients and others.
   d. Must be licensed to practice by the states in which they practice.

Short Answer Questions

1. What are the key elements of the definition of forensic accounting?
2. What does the word *forensic* mean?
3. What are the two areas into which the practice of forensic accounting is typically divided?
4. How does auditing differ from forensic accounting?
5. By whom and when was the term *forensic accounting* coined?
6. What are some of the knowledge and skills required in forensic accounting? (Name at least four.)
7. What are two examples of types of financial cases that require investigation?
8. What is the difference between fact witnesses and expert witnesses?
9. What are the three management activities associated with fraud risk management?
10. What special skills and knowledge are required to conduct forensic accounting investigations? (Name at least three.)
11. Are communication skills critical in forensic accounting? Why or why not?
12. What are two areas in which forensic accountants, as expert consultants, can give advice?
13. What are the names of three organizations that are applicable to forensic accountants and what factors play a role in determining the organizations to which forensic accountants belong?
14. What are the names of four credentials that are specific to the forensic practice of valuation?
15. Why is the skill of problem-solving so important in forensic accounting?

Brief Cases

1. You have just graduated from college with an accounting degree. During your degree program you took two courses in forensic accounting. You find forensic accounting to be a fascinating area and your ultimate goal is to start your own practice with a specialty in fraud investigation and business valuation. How might you go about developing a career in forensic accounting?
2. You are contemplating a career in forensic accounting. Write a brief report suggesting the advantages of starting your career in each of the following ways: a staff member in a private forensic accounting firm, an employee in law enforcement, the owner of your own fraud investigation firm.

3. You work as a staff accountant in a large manufacturing firm. Your company is considering a merger with another company in the industry. You have suggested to your boss that she consider hiring a forensic accountant to assist with the due diligence work associated with the proposed merger. Write a brief memo to your boss supporting your position.
4. Some say that a high degree of ethics is required to be a forensic accountant. Write an essay in which you agree or disagree with this proposition. Justify your position.
5. Write a brief essay explaining the limitations of investigating fraud without possession of an accounting degree. Specifically, what types of fraud might require an accounting education?
6. Write a brief essay explaining how auditing skills contribute to the work of a forensic accountant.
7. Your boss wants an explanation of what is involved in forensic accounting. Write a brief memo explaining what is involved.
8. According to the ACFE Code of Conduct, a person conducting a fraud examination is not to express an opinion regarding the guilt or innocence of any person or party. Write a brief essay explaining why such a rule is needed.
9. Write a brief essay explaining several different types of cases in which a forensic accountant might serve as a testifying expert.
10. Write a brief essay explaining the basic areas of law with which a forensic accountant is familiar. For each area, explain why the legal knowledge is important to the forensic accountant.

Internet Research Assignments

1. Find the Forensic and Valuation interest area at the AICPA website. What benefits does the FVS section provide to its members?
2. Find the Consulting Services section online. What does CS section 100 say about professional judgment with respect to estimating value?
3. Find information on Scott Rothstein of Fort Lauderdale, Florida, the person mentioned in the profile of Richard A. Pollack. Name three of the five felonies to which he pled guilty.
4. Use a search engine to search using the phrase "forensic accounting services." Choose a couple of firms and click through their pages to determine descriptions of forensic accounting services they provide.
5. Use a search engine to find information on the kidnapping and murder of the son of the famous pilot, Charles Lindbergh. What did President Franklin D. Roosevelt do that aided the FBI in determining the location of the person eventually convicted of the kidnapping and why did this help? Explain.
6. Research the role of forensic accounting in narcotics trafficking investigations.
7. Find information on the topic areas covered in the Certified in Financial Forensics (CFF) exam.
8. Search for information on the role of forensic accounting in counter-terrorism work.

Chapter 2
Professional Ethics and Responsibilities

Learning Objectives

- State the process through which authoritative guidance is created
- Understand the organization of the AICPA Code of Professional Conduct
- Properly cite the AICPA Code of Professional Conduct
- Interpret use of words such as "should consider" used in the AICPA Code of Professional Conduct
- Evaluate threats to compliance with the AICPA Code of Professional Conduct
- Give examples of threats to compliance with the AICPA Code of Professional Conduct
- Respond to an ethical conflict
- Describe and understand the sections of the AICPA Code of Professional Conduct most applicable to forensic accounting
- Explain the disciplinary procedures used by the AICPA, state CPA societies, and state boards of accounting
- Provide examples of codes of conduct of other organizations
- Briefly describe the requirements of Consulting Services (CS) section 100, *Consulting Services: Definitions and Standards* (AICPA, *Professional Standards*) and Valuation Services (VS) section 100, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*)
- Understand the relative importance of non-authoritative guidance and provide examples of practice aids and other non-authoritative guidance

Introduction

Certified public accountants who offer **forensic accounting services** are required to be knowledgeable about their responsibilities and to act according to professional standards that specify these responsibilities. Responsibilities of these practitioners are governed by **authoritative guidance** issued by the AICPA, other professional organizations to which the practitioner belongs, and governmental agencies that license them or exercise regulatory oversight. **Non-authoritative guidance** is also provided by the AICPA and by other organizations such as the National Association of Certified Valuators and Analysts (NACVA). In this chapter, we will discuss the various authoritative standards and non-authoritative guidance that applies to the practice of forensic accounting.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Authoritative Guidance

Authoritative guidance promulgated by the AICPA that pertains to forensic accounting services includes the AICPA Code of Professional Conduct, Statements on Standards for Consulting Services, and Statements on Standards for Valuation Services. In certain situations, standards such as Statements on Standards for Attestation Engagements may apply. Guidance is authoritative if issued only after following a process that includes deliberation in meetings open to the public, public exposure of proposed statements, and a formal vote by the appropriate body designated by the AICPA to issue such guidance. Over the years, various bodies have been designated by the AICPA to issue authoritative guidance, such as standards and interpretations of standards, in specific areas. See box 2.1 for a list of these bodies and the areas for which they have been granted authority to issue guidance.

Box 2.1 Bodies Designated by AICPA Council to Establish Guidance

Authoritative Body	Areas in Which Authority Is Granted to Issue Guidance
Non-AICPA Bodies	
Federal Accounting Standards Advisory Board	Accounting standards for the federal government
Financial Accounting Standards Board	Accounting principles and interpretation on disclosure of financial information for entities other than governmental entities
Governmental Accounting Standards Board	Standards of financial accounting and reporting for state and local governmental entities
Public Company Accounting Oversight Board	Auditing and related attestation standards, quality control, ethics, independence, and other standards under the Sarbanes-Oxley Act of 2002
International Accounting Standards Board	Standards with respect to international financial accounting and reporting principles
AICPA Bodies (Committees and Boards)	
Accounting and Review Services Committee	Standards applicable to unaudited financial statements or other unaudited financial information of an entity not required to file financial statements with a regulatory agency pursuant to the sale or trading of its securities in a public market; attestation standards in their respective areas of responsibility
Auditing Standards Board	Auditing, attestation, and quality control standards and procedures
Management Consulting Services Executive Committee (commonly known as Consulting Services Executive Committee)	Standards with respect to offering of management consulting services (but not standards that address the question of proscribed services); attestation standards in their respective areas of responsibility
Tax Executive Committee	Professional practice standards for tax services
Forensic and Valuation Services Executive Committee	Professional standards for forensic and valuation services
Personal Financial Planning Executive Committee	Professional standards for personal financial planning services

In addition to the bodies listed in box 2.1, one other body deserves mention. The Professional Ethics Executive Committee (PEEC) is a senior committee of the AICPA charged with interpreting and enforcing the AICPA Code of Professional Conduct, promulgating new interpretations and rulings, and monitoring those rules and making revisions as needed by, for example, proposing amendments to rules. The AICPA bylaws state that the committee is also to investigate potential disciplinary matters that involve AICPA members and to present a case before a trial board when it finds prima facie evidence of infractions of the bylaws or the code.

Box 2.2 Code of Professional Conduct

Preface
100 Overview of the Code of Professional Conduct
200 Structure and Application of the AICPA Code
300 Principles of Professional Conduct
Part 1: Members in Public Practice
000 Introduction
100 Integrity and Objectivity
200 Independence
300 General Standards
310 Compliance With Standards
320 Accounting Principles
400 Acts Discreditable
500 Fees and Other Types of Remuneration
600 Advertising and Other Forms of Solicitation
700 Confidential Information
800 Form of Organization and Name
Part 2: Members in Business
000 Introduction
100 Integrity and Objectivity
300 General Standards
310 Compliance With Standards
320 Accounting Principles
400 Acts Discreditable
Part 3: Other Members
000 Introduction
400 Acts Discreditable

Source: AICPA Code of Professional Conduct

Professional Ethics

The code was created to maintain quality of practice and provide guidance to all members of the AICPA, including those in public practice, industry, government, and education. Although the code applies only to members of the AICPA, some state and federal courts have extended its applicability to all CPAs, even those who are not AICPA members, on the basis that it has become the standard of expected behavior within the profession.

Organization

The code is organized by line of business and consists of four major parts: the preface, which applies to all members and which includes the principles of professional conduct; part 1, which applies to members in public practice; part 2, which applies to members in business; and part 3, which applies to other members, such as those who are retired or not currently employed.

The parts of the code and the topics within each part are shown in box 2.2. See box 2.3 for the corresponding code section numbers used prior to December 15, 2014.

Box 2.3 **Code of Professional Conduct and Corresponding Rule Numbers Used Prior to December 15, 2014**

Code of Professional Conduct	Corresponding Code Section Rule Numbers and Titles Used Prior to December 15, 2014
Preface	
100 Overview of the Code of Professional Conduct	ET Introduction
200 Structure and Application of the AICPA Code	ET section 91 Applicability
300 Principles of Professional Conduct	ET sections 51–57 (covers responsibilities, due care)
Part 1: Members in Public Practice	
000 Introduction	
100 Integrity and Objectivity	Rule 102 Integrity and Objectivity
200 Independence	Rule 101 Independence
300 General Standards	Rule 201 General Standards
310 Compliance With Standards	Rule 202 Compliance With Standards
320 Accounting Principles	Rule 203 Accounting Principles
400 Acts Discreditable	Rule 501 Acts Discreditable
500 Fees and Other Types of Remuneration	
600 Advertising and Other Forms of Solicitation	Rule 502 Advertising and Other Forms of Solicitation
700 Confidential Information	Rule 301 Confidential Client Information
800 Form of Organization and Name	Rule 505 Form of Organization and Name
Part 2: Members in Business	
000 Introduction	
100 Integrity and Objectivity	Rule 102 Integrity and Objectivity
300 General Standards	Rule 201 General Standards
310 Compliance With Standards	Rule 202 Compliance With Standards
320 Accounting Principles	Rule 203 Accounting Principles
400 Acts Discreditable	Rule 501 Acts Discreditable
Part 3: Other Members	
000 Introduction	
400 Acts Discreditable	Rule 501 Acts Discreditable

Source: http://www.aicpa.org/InterestAreas/ProfessionalEthics/Community/Pages/ethics-codification-implementation-tools.aspx

Each part of the code is organized by topic and, if necessary, each topic is organized by subtopics and each subtopic is then divided into sections. See box 2.4 for an illustration of ET section 1.100.001, "Integrity and Objectivity Rule" and its interpretations (for example, ET section 1.110.010, "Conflicts of Interest" [AICPA, *Professional Standards*]).[1]

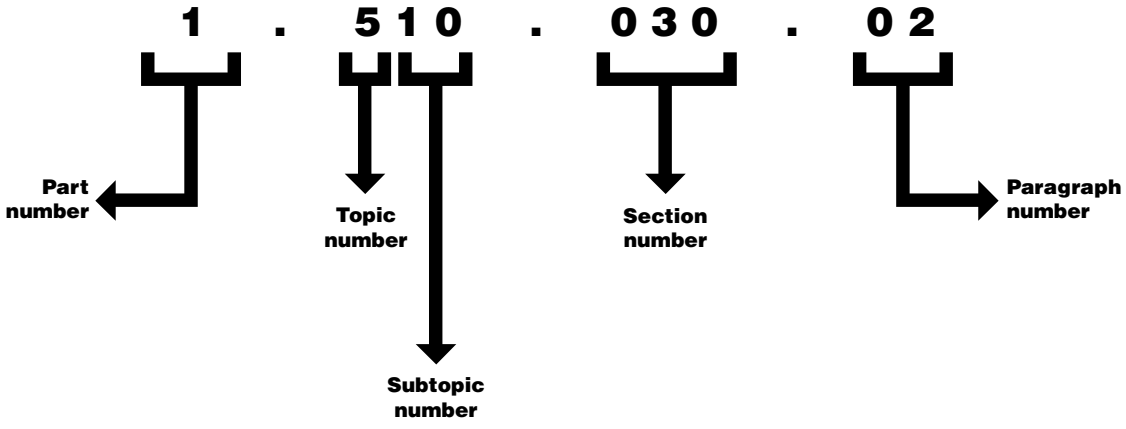
When citing the code, the part number, topic number, subtopic number, and section number are to be used. For example, the appropriate citation to the ET section addressing the situation in which a spouse provides services for a contingent fee is ET section 1.510.030.02. (See figure 2.1 for an illustration of the part number, topic number, subtopic number, and section number for this section.)

Box 2.4 Integrity and Objectivity

Part 1: Members in Public Practice
100 INTEGRITY AND OBJECTIVITY
100.001 Integrity and Objectivity Rule
100.005 Application of the Conceptual Framework for Members in Public Practice and the Ethical Conflicts Interpretation
1. 110 Conflicts of Interest
110.101 Conflicts of Interest
2. 120 Gifts and Entertainment
120.010 Offering or Accepting Gifts or Entertainment
3. 130 Preparing and Reporting Information
130.010 Knowing Misrepresentations in the Preparation of Financial Statements or Records
4. 140 Client Advocacy
140.010 Client Advocacy
5. 150 Use of a Third-Party Service Provider
150.010 Use of a Third-Party Service Provider

Source: AICPA Code of Professional Conduct

Figure 2.1
Illustration of Part Number, Topic Number, Subtopic Number, Section Number, and Paragraph Number



From left to right, the number 1 refers to part 1, which pertains to members in public practice; the number 5 indicates a topic in the 500 topical area of "Fees and Other Remuneration;" the number 10 denotes the "Contingent Fees" subtopic area; the number 030 section number refers to the area in which "Services Performed by a Member's Spouse For a Contingent Fee" is addressed; and the number 02 is the paragraph number that refers to the location of specific information about this subtopic area.

[1] Note that prior to the adoption of the new format shown, the Integrity and Objectivity Rule could be found in Rule 102. The new format was adopted by the Professional Ethics Executive Committee on January 28, 2014, and became effective on December 15, 2014. The new format was adopted to make the AICPA Code of Professional Conduct more user-friendly.

Content found in the preface begins with the single digit "0" as in ET section 0.100, "Overview of the Code of Professional Conduct" (AICPA, *Professional Standards*). These principles are applicable to all members, whether in public practice or in business, and address responsibilities, the public interest, integrity, objectivity and independence, due care, and the scope and nature of services. These principles are statements of ideal conduct but are not enforceable. The rules of the code, which represent the minimum standard of conduct and which are enforceable, are contained in parts 1, 2, and 3.

Forensic accounting is usually practiced as a part of public accounting; therefore, part 1, which pertains to members in public practice, applies. However, members in business, such as those who work in firms and companies that do not conform to the rules contained in ET section 1.800.001, "Form of Organization and Name Rule," may also perform forensic accounting services. The content of the topics most applicable to forensic accountants are, for the most part, the same regardless of whether the members practice as public accountants or as members in business. There are two differences: (1) the first number of the citation is to part 1 if the member practices as a public accountant, or part 2 if the member is in business, and (2) the topics and interpretations codified within each part can differ depending on whether the interpretation would be of concern to a member in public practice or a member in business (note that if a topic and interpretation apply to both, it would be found in each part). For example, Topic 200, Independence, appears in part 1 but not in part 2 because independence is a concern to members in public practice but not to members in business. The following references are, as a matter of convention, relative to part 1, but the sections discussed are applicable to the offering of forensic accounting services, regardless of whether the member is in public practice or is a member in business (except for any discussion of independence).

If a member cannot find an interpretation in the code that pertains to his or her situation, he or she can apply the Conceptual Framework for Members in Public Practice of ET section 1.000.010 (discussed under "Threats to Member's Compliance with Code of Professional Conduct").

Use of the Words "Should Consider," "Consider," "Evaluate," and "Determine"

Throughout the code, particular phrases are used to convey differing levels of responsibility of the forensic accountant. When the code states that a procedure or action is one that the member "should consider," consideration of the procedure or action is presumptively required, whereas carrying out the procedure or action is not required and depends on the forensic accountant's professional judgment. For example, if the code states that the "member should consider the 'Conflicts of Interest' interpretation under the Integrity and Objectivity Rule," the member is to consider whether the interpretation applies to the member's situation but is not required to comply with the interpretation.

The word "consider" is used in the code when the member is required to think about various matters, whereas the word "evaluate" is used when the member is to assess and weigh the importance of a matter. "Determine" is used when a member is to arrive at a conclusion and make a decision.

Case in Point

According to ET section 1.000.020.04, "Ethical Conflicts,"

> [b]efore pursuing a course of action, the member should consider consulting with appropriate persons within the firm or the organization that employs the member.

The directive "should consider" in paragraph .04 does not mean that the member must or even should consult with appropriate persons within the firm or organization that employs the member. Instead, it means that the member is to carefully think about whether consulting with these persons is necessary.

Threats to Member's Compliance With Code of Professional Conduct

ET section 1.000.010, "Conceptual Framework for Members in Public Practice," states that various relationships or circumstances that create threats to the member's compliance with the rules may not be covered by all rules and interpretations. In that case, the member should evaluate whether the relationship or circumstance would cause a

reasonable and informed third party who is aware of relevant information to believe that there is a threat to the member's compliance with the rules and that this threat is not at an acceptable level.

When making this evaluation, the member should identify threats to compliance with the rules and evaluate the significance of these threats. Threats should be identified both individually and in the aggregate because of the potentially cumulative effect threats can have on a member's compliance with the rules. There are three main steps in applying the conceptual framework approach: identify threats, evaluate the significance of a threat, and identify and apply safeguards (safeguards are actions or other measures that may eliminate or reduce a threat to an acceptable level).

- *Identify threats.* When a member encounters a relationship or circumstance not specifically addressed by a rule or an interpretation, he or she should determine whether the relationship or circumstance creates one or more threats. The existence of a threat does not mean that the member has violated any rules, only that the member should evaluate the significance of the threat. These threats are subsequently discussed and include adverse interest threat, advocacy threat, familiarity threat, management participation threat, self-interest threat, self-review threat, and undue interest threat.
- *Evaluate the significance of a threat.* After a member has identified threats, he or she is to evaluate the significance of each threat by determining whether the threat is at an acceptable level. An acceptable level exists when a reasonable and informed third party who is aware of the relevant information is likely to conclude that the threat would not adversely affect the member's compliance with the rules. Both qualitative and quantitative factors are to be considered when evaluating each threat's significance; these factors include the effect that existing safeguards have had in reducing the threat to an acceptable level. If, after evaluating the threat, the member concludes that a reasonable and informed third party who is aware of the relevant information would be likely to conclude that the threat does not adversely affect his or her compliance with the rules, the threat is at an acceptable level and no further evaluation of the threat is necessary.
- *Identify and apply safeguards.* If, after evaluating the significance of an identified threat, the member concludes that the threat is not at an acceptable level, he or she should apply safeguards to eliminate the threat or reduce it to an acceptable level. Professional judgment should be applied when determining the nature of the safeguards to be applied because differing circumstances can cause the effectiveness of safeguards to vary. Under certain circumstances, one safeguard may eliminate or reduce multiple threats whereas in other circumstances, multiple safeguards should be applied to eliminate or reduce one threat to an acceptable level. In some cases, an identified threat may be so significant that either (1) no safeguards will eliminate the threat or reduce it to an acceptable level, or (2) the member is unable to implement effective safeguards. In these circumstances, providing the specific professional services would compromise the member's compliance with the rules and he or she should decide whether to decline or discontinue providing the professional services. The code specifies that under certain circumstances no safeguards can reduce a threat to an acceptable level. In these circumstances, a member may not use the conceptual framework to overcome a prohibition or requirement contained in the code. For example, the code specifically refers to the Integrity and Objectivity Rule (ET section 1.100.001) that specifies that a member may not subordinate his or her professional judgment to others. Thus, a circumstance that would cause the member to subordinate his or her judgment to others is a threat that cannot be reduced to an acceptable level by any safeguards.

The threats that a forensic accountant can encounter include the adverse interest threat, advocacy threat, familiarity threat, management participation threat, self-interest threat, self-review threat, and undue interest threat.

The adverse interest threat is the threat that a member will not be objective because his or her interests are opposed to the client's interests. Examples of this type of threat include the situation in which the client has indicated that it desires to engage in litigation against the member.

The advocacy threat is the threat that the member will promote the client's position to such an extent that his or her objectivity or attest independence is compromised. These types of threats can occur when a member provides forensic accounting services to a client in litigation or a dispute with third parties.

A familiarity threat is the threat that a member will become too sympathetic to the client's interests or too accepting of the client's work or product as a result of a long or close relationship with a client. For example, a familiarity threat exists when a close friend of the member is employed by the client.

The management participation threat is the threat that a member will assume the role of management for the client or otherwise assume management responsibilities. This type of threat can occur if the member performs consulting services for the client and implements any improvements suggested to the client.

A self-interest threat is the threat that a member could benefit, financially or otherwise, from an interest in, or relationship with, a client or anyone associated with the client. An example of this type of threat is the possibility of losing a client that generates a large amount of revenue on which the member heavily relies.

The self-review threat is a threat that a member will not properly evaluate the results of a previous judgment made or service performed or supervised by the member (or an individual in the member's firm). This threat can also exist when a member relies on an inappropriately evaluated judgment or service when forming a judgment in another engagement. An example of this threat is the reliance, by a member, on the **work product** of the member's firm.

The undue influence threat is the threat that a member will subordinate his or her judgment to that of an individual (such as a client or any third party) as a result of the individual's reputation or expertise, aggressive or dominant personality, or attempts to coerce or exercise excessive influence over the member. Examples of the undue influence threats include the situation in which the client (or any individual associated with the client) threatens to dismiss the member's firm from the engagement if the member does not reach a certain judgment or conclusion.

Members are to closely monitor engagements and carefully assess proposed engagements to determine whether any of these threats exist. If one or more of these threats exist, the member is to apply appropriate safeguards, if possible, to reduce or eliminate the threat. If the threat cannot be eliminated or reduced to an acceptable level, the member should decline acceptance of the engagement or, if already involved in the engagement, dissociate him or herself from the engagement and consider whether to consult with an attorney.

Responses to Ethical Conflicts

ET section 1.000.020, "Ethical Conflicts" (AICPA, *Professional Standards*), states that

> [a]n ethical conflict arises when a member encounters obstacles to following an appropriate course of action due to internal or external pressures or when conflicts exist in applying relevant professional standards or legal standards, or both. For example, a member suspects a fraud may have occurred, but reporting the suspected fraud would be in violation of the member's responsibility to maintain client confidentiality.

If an ethical conflict is encountered, the member is to consider relevant facts and circumstances and the rules, laws, or regulations that apply; the ethical issues involved; and established internal procedures that are to be followed to resolve the conflict. The member should then choose a course of action and take steps to comply with the rules and applicable laws.

The member should also be prepared to justify any departures from the code that the member believes were appropriate in applying the relevant rules and law. If the member is not able to resolve the ethical conflict by complying with the applicable rules and law, he or she may have to bear the consequences of violations.

Before choosing a course of action, the member should consider consulting with appropriate persons within the member's firm or organization. If he or she decides not to consult with appropriate persons within the firm or organization and, after following a course of action, the conflict remains, the member should consider requesting the advice of other individuals in resolving the ethical conflict or obtaining advice from an appropriate professional body (such as the AICPA) or legal counsel.

When members encounter ethical conflicts, they should consider documenting the substance of the issue that gave rise to the conflict, the parties with whom the issue was discussed, the details of discussions held, and any decisions made by the member.

If the ethical conflict remains unresolved, the member may have violated one or more rules, particularly if he or she continues to be associated with the issue that created the conflict. If this is the case, the member should consider whether to continue his or her relationship with the engagement team, the assignment in which the conflict arose, the client, the firm, or the employer organization.

ET Sections Most Applicable to Forensic Accountants

The topics that affect forensic accountants include integrity and objectivity, general standards, compliance with standards, acts discreditable, contingent fees, and confidential information. Each of these topics is subsequently discussed.

Integrity, Objectivity, and Conflicts of Interest

ET section 1.100.001, "Integrity and Objectivity Rule" (AICPA, *Professional Standards*), states

> [i]n the performance of any professional service, a member shall maintain objectivity and integrity, shall be free of conflicts of interest, and shall not knowingly misrepresent facts or subordinate his or her judgment to others.

Being objective is a state of mind. Objectivity requires that the member be impartial, intellectually honest, disinterested, and free from conflicts of interest. Maintaining integrity means to conduct oneself in accordance with an ethical code and not be affected by corrupting influences and motives.

Members are not to subordinate their judgment to others. Whereas attorneys are advocates of their clients, forensic accountants who serve as expert witnesses are advocates of their opinions and, as such, are to assist the court in understanding concepts that are either complex or unfamiliar, or both.

According to ET section 1.110.010, "Conflicts of Interest," a subtopic of Integrity and Objectivity,

> [i]n performing a professional service for a client, a conflict of interest may occur if a member or the member's firm has a relationship with another person, entity, product, or service that, in the member's professional judgment, the client or other appropriate parties may view as impairing the member's objectivity. In such situations, adverse interest or self-interest threats to the member's compliance with the "Integrity and Objectivity Rule" [1.100.001] may exist.

This section provides many examples of situations in which a conflict of interest could exist, including the situation in which a plaintiff or plaintiff's attorney requests that a member perform litigation services in connection with a lawsuit filed against a client of the member's firm and the situation in which the member has provided tax or personal financial planning services to a married couple who is now divorcing and who wish the member to continue providing services to both parties.

Members should evaluate the significance of threats to objectivity to determine if they are at an acceptable level. If the member determines that the threats are so significant that no safeguards could eliminate or reduce the threat to an acceptable level (that is, the member's objectivity is impaired), the member should either (1) not perform the service or (2) terminate the relationships that cause the conflict.

A member may perform the service if the threats are not significant or can be reduced to an acceptable level by applying safeguards. Threats to objectivity would be at an acceptable level and thus objectivity would not be impaired if both of the following safeguards exist before performing the service:

a. The member provides notification to the client or other appropriate parties of the relevant facts and circumstances.
b. The member obtains consent from the client or other appropriate parties to perform the service. If these parties refuse to give their consent, the member should either (1) not perform the service or (2) terminate the relationships that cause the conflict.[2]

The member should consider the guidance provided by the Confidential Client Information Rule of ET section 1.700.001 when providing notification to and obtaining consent from clients and other appropriate parties.

General Standards

ET section 1.300.001.01, "General Standards Rule" (AICPA, *Professional Standards*), states

> [a] member shall comply with the following standards and with any interpretations thereof by bodies designated by Council.

[2] This section points out that some engagements (for example, audits, reviews, and other attest services), require independence and that disclosure and consent cannot eliminate impairments of independence discussed in the Independence Rule and its interpretations found in ET section 1.200.001.

a. Professional Competence. Undertake only those professional services that the member or the member's firm can reasonably expect to be completed with professional competence.

b. Due Professional Care. Exercise **due professional care** in the performance of professional services.

c. Planning and Supervision. Adequately plan and supervise the performance of professional services.

d. Sufficient Relevant Data. Obtain sufficient relevant data to afford a reasonable basis for conclusions or recommendations in relation to any professional services performed.

Competence means that the member (and the member's staff) has the appropriate qualifications to perform the professional services for which he or she has been engaged to perform and, when required, can appropriately supervise and evaluate the quality of work performed. The member is required to have knowledge of the profession's standards, the techniques used, and the subject matter. Members are also to exercise sound judgment in applying this knowledge.

Although professional competence is a standard with which the member is expected to comply, the courts have instituted safeguards to determine whether practitioners are competent to testify. These safeguards arose principally from two court cases: *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Company, Ltd. v. Patrick Carmichael*, 526 U.S. 137 (1999). Members are to determine whether they have the requisite knowledge and skills to provide relevant and reliable testimony in accordance with these court cases; if they do not, the court will likely bar them from testifying. The impact of these cases on forensic accountants engaged as expert witnesses is discussed in chapter 4, "Evidence," and chapter 6, "Litigation Services."

The requirement to exercise due professional care in the performance of professional services means that members are to be diligent when performing professional services and to engage in critical analysis of their work. Due professional care also requires conformity to applicable professional standards of the AICPA and the code.

Planning the engagement is essential to conducting an efficient and effective engagement. Planning involves formulating the objectives of the engagement and selecting the nature, timing, and extent of the procedures required to obtain and analyze evidence. It also provides the structure for the conduct, supervision, and completion of the engagement in a timely manner. Supervision of staff is important to ensure that the quality of the engagement meets professional standards. The extent of supervision necessary will depend on the number of assistants, their education, and training.

The member may need to engage other individuals who have the necessary training and experience to assist the member in completing the engagement in a competent manner. Any member who employs a specialist to perform consulting services for the member's clients should be capable of defining the tasks, supervising, and evaluating the work (including the work product) of the specialist. Whether work is performed by assistants or specialists, the member is responsible for the quality of the work.

The member should obtain sufficient relevant data to provide a reasonable basis for conclusions or recommendations. Gathering this data is often accomplished by using procedures such as document reviews and background investigations, interviews of knowledgeable persons, use of confidential sources, analysis of physical and electronic evidence, physical and electronic surveillance, and ratio analysis. Some information is obtained through document production motions, depositions, and interrogatories by means of the legal process of discovery.

At times, forensic accountants rely heavily on documents as a source of relevant data. If the engagement has progressed to the point that a case is being prepared for trial, the documents that are most beneficial are those that have been authenticated by the litigants or are otherwise admissible by the court under the applicable rules of evidence, which can vary by jurisdiction.

Apart from obtaining the relevant documentation, the forensic accountant generally should document the work performed (including the source of documents relied upon) and the conclusions reached. The type, quantity, and content of the documentation are affected by several factors, including professional judgment and the nature of the engagement, and thus are to be tailored to the engagement itself. Also important are the documentation of the assumptions made by the practitioner, the source of information that provided the basis for the assumptions, and the reasoning used to arrive at the assumptions.

Documentation is not only the basis for the conclusions or recommendations made; it also supports the assertion that the member complied with professional standards when performing the engagement. Documentation that was essential in determining the conclusions or recommendations made should be retained for a sufficient period.

Compliance With Standards

According to ET section 1.310.001.01, "Compliance With Standards Rule" (AICPA, *Professional Standards*),

> [a] member who performs auditing, review, compilation, management consulting, tax, or other professional services shall comply with standards promulgated by bodies designated by Council.

The Forensic and Valuation Services Executive Committee is one of the principal bodies that promulgate standards for forensic accountants. It has the authority to issue professional standards that guide the practice of offering forensic and valuation services. There are, of course, standards issued by other AICPA bodies that affect the practice of forensic accounting such as Statements on Auditing Standards (SASs; codified as AU-C sections[3]) and Statements on Standards for Attestation Engagements (SSAEs; codified as AT sections) issued by the Auditing Standards Board, Statements on Standards for Accounting and Review Services (SSARSs; codified as AR sections) issued by the Accounting and Review Services Committee, Statements on Standards for Consulting Services (SSCSs; codified as CS sections) issued by the Consulting Services Executive Committee, and Statements on Standards for Valuation Services (SSVSs; codified as VS sections) issued by the AICPA Consulting Services Executive Committee. For example, the Code of Professional Conduct and relevant interpretations should be consulted if a member is determining whether the member's independence would be impaired if he or she were to perform forensic and valuation services for an attestation client of his or her firm. See figure 2.2, "Decision Tree to Determine the Application of Professional Standards," for a tool designed to assist members in determining which standards apply to litigation services engagements.

Case in Point

In some cases, determination of the proper standard to use is dependent on a careful reading of the standards themselves. For example, assume that a forensic accountant has been engaged, by counsel, to determine whether the computation of Allowance for Doubtful Accounts is, in all material respects, correct given assumptions provided by management.

Is this an agreed-upon procedures engagement? If so, AT section 201, *Agreed-Upon Procedures Engagements* (AICPA, *Professional Standards*), applies. However, according to paragraph .02,

> This section does not apply to the following:
> …
> (d) Certain professional services that would not be considered as falling under this section as described in paragraph .04 of section 101, *Attest Engagements*.

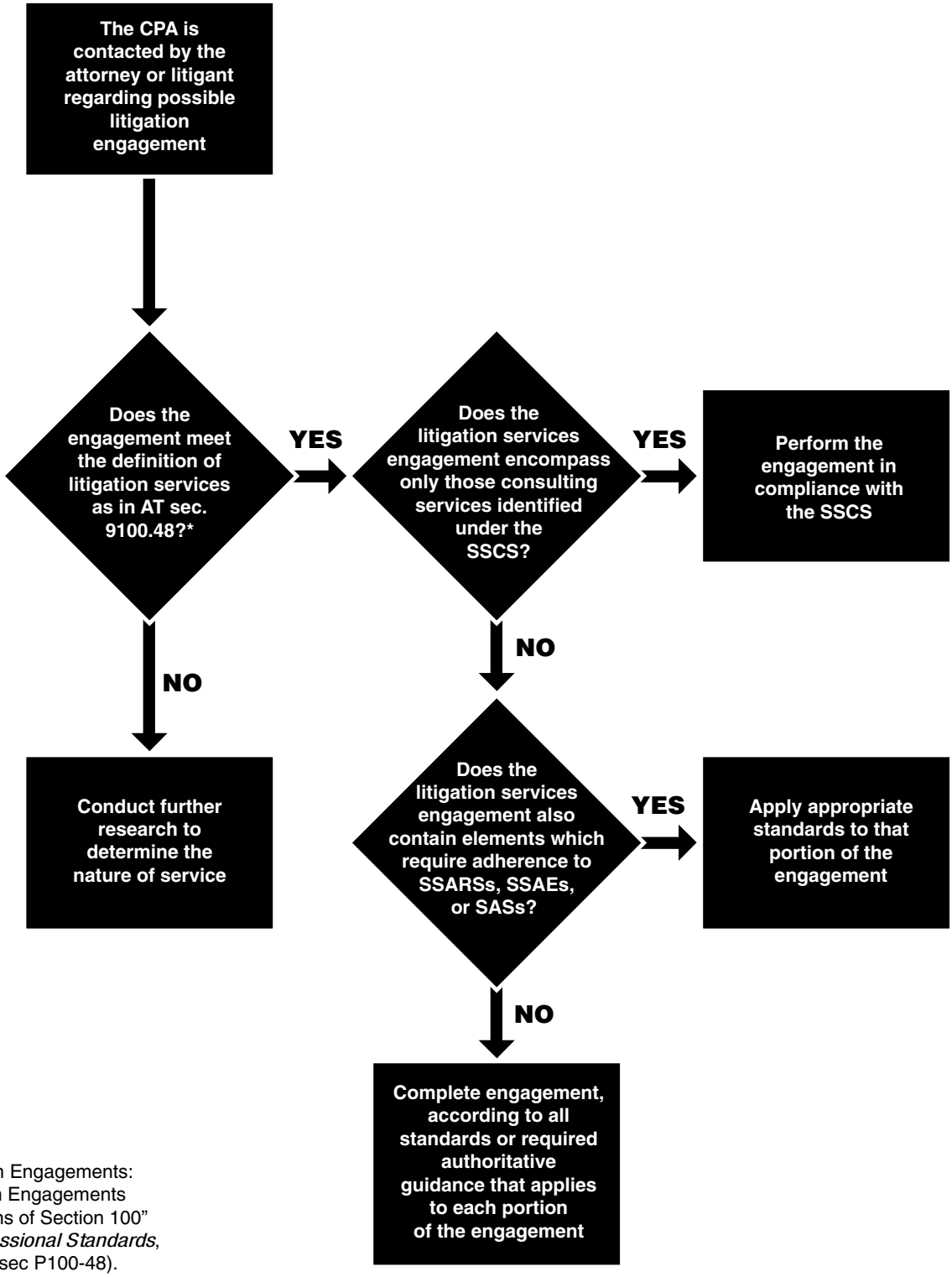
Furthermore, AT section 101.04 states

> [p]rofessional services provided by practitioners that are not covered by this SSAE include the following:
> …
> (c) Services performed in accordance with the Statement on Standards for Consulting Services (SSCS), such as engagements in which the practitioner's role is solely to assist the client (for example, acting as the company accountant in preparing information other than financial statements), or engagements in which a practitioner is engaged to testify as an expert witness in accounting, auditing, taxation, or other matters, given certain stipulated facts.

Therefore, because the engagement was performed solely to assist the client, the service is considered a service to be performed in accordance with the Statement on Standards for Consulting Services.

[3] AU-C refers to clarified audit standards. When the AICPA redrafted (clarified) its auditing standards, it chose to distinguish the clarified standards from the audit standards in existence prior to clarification by adding the symbol "C" to "AU" (prior to clarification, auditing standards were codified simply as "AU").

Figure 2.2
Decision Tree to Determine the Application of Professional Standards



* "Attestation Engagements: Attestation Engagements Interpretations of Section 100" (AICPA, *Professional Standards*, vol 1, AT sec P100-48).

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According to AICPA Bylaw (BL) section 220, *Requirements for Admission to Membership* (AICPA, *Professional Standards*), a person engaged in the practice of public accounting as an owner or as an employee who has been licensed as a CPA for more than two years may become a member of the AICPA if the person is practicing in a firm that is enrolled in an AICPA-approved practice-monitoring program (that is, **peer review**) if the services performed by such a firm are governed by SASs; SSARS; SSAEs; Government Auditing Standards (the Yellow Book), issued by the U.S. General Accounting Office (GAO); and engagements under PCAOB standards. For example, persons who are practicing forensic accounting and who perform reviews subject to SSARS and who wish to be AICPA members must have their relevant practices peer reviewed. One objective of peer review is to determine whether the firm being peer-reviewed is in compliance with applicable standards.

Acts Discreditable

According to ET section 1.400.001, "Acts Discreditable Rule" (AICPA, *Professional Standards*),

> A member shall not commit an act discreditable to the profession.

Application of this simple rule depends partly on adherence to the various interpretations of this rule that exist. Selected interpretations that pertain to members who practice forensic accounting are discussed as follows:

- *Disclosure.* Disclosure of confidential information obtained from a prospective client or non-client without consent is considered an act discreditable under this rule.

  In addition, disclosure, without proper authority or specific consent, of confidential information pertaining to the member's current or previous employer or confidential information obtained about organizations for which the member works (or worked) as a volunteer is an act discreditable unless there is a legal or professional responsibility to use or disclose this information. For purposes of this rule, confidential employer information is any proprietary information pertaining to the employer or any entity for which the member works (or worked) in a volunteer capacity obtained as a result of these relationships and which is not available to the public.
- *False promotion, misleading, or deceptive behavior.* Also considered an act discreditable is falsely promoting a member's abilities to provide professional services; engaging in misleading or deceptive behavior; or making false, misleading, or deceptive claims about the member's experience or qualifications. Efforts are false, misleading, or deceptive if they contain any claim or representation that is likely to cause a reasonable person to be misled or deceived.
- *Compliance with rules and regulations of authoritative regulatory bodies.* Members must comply with the rules and regulations of authoritative regulatory bodies (for example, state boards of accountancy) when subject to these rules and regulations. To not comply is an act discreditable.
- *Retention of records.* Members are to, at the client's request, return records that the client provided and which are in the member's custody or under his or her control. A member need not comply with a second request for the return of client records if the member complied with the client's initial request unless the client lost the records due to a natural disaster. The member may make copies of any client-prepared records he or she returned but must return the records within a reasonable period of time, if practicable (for example, no later than 45 days after the request has been made). Even if the state in which the member practices allows the member to place a lien on records under his or her control, the member must comply with the interpretations of ET section 1.400.001, "Acts Discreditable Rule."

  Although the member's work papers are the member's property, if the client requests these records related to work the member has completed and for which the work product has been issued to the client, the member should comply with the client's request. If, however, the member has not been paid for the work product to which the member-prepared materials pertain, these records may be withheld. Members may also not comply with a client's request for member-prepared materials if the work product is incomplete, the noncompliance is for the purpose of complying with professional standards, or if actual or threatened litigation exists related to the engagement or member's work.

  When providing copies of client-prepared or member-prepared materials or the member's work product, the member may charge the client a reasonable fee and require that the client pay the fee prior to providing the materials or work product to the client. The member may provide the requested records in any format

usable by the client, but is not required to convert records to electronic format if they are not in electronic format. If the client requests records in a specific format and the records are available in the requested format, the member should honor the client's request. The member is not required to provide the client with formulas, unless the formulas support the client's underlying accounting or other records or the member was engaged to provide the formulas as part of a completed work product.

Contingent Fees

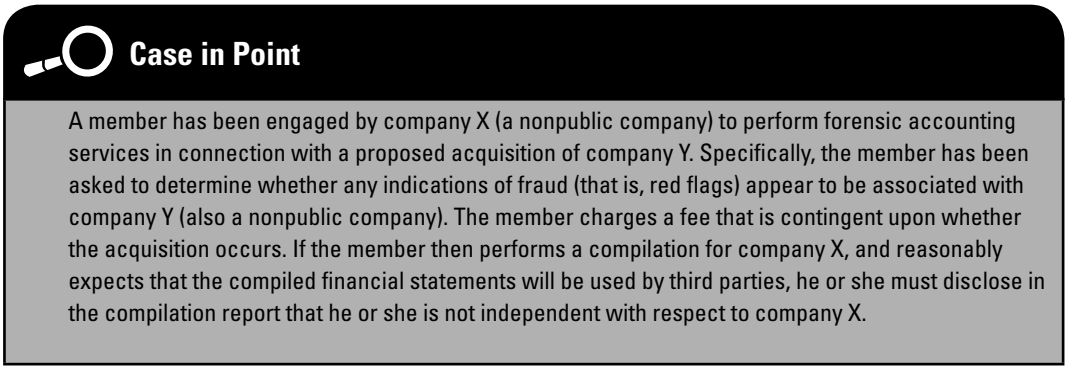
ET section 1.510.001, "Contingent Fee Rule" (AICPA, *Professional Standards*), states

> [a] member in public practice shall not
>
> a. Perform for a contingent fee any professional services for, or receive such a fee from a client for whom the member or the member's firm performs,
>
> i. an audit or review of a financial statement; or
>
> ii. a compilation of a financial statement when the member expects, or reasonably might expect, that a third party will use the financial statement and the member's compilation report does not disclose a lack of independence; or
>
> iii. an examination of prospective financial information; or
>
> b. Prepare an original or amended tax return or claim for a tax refund for a contingent fee for any client.

The prohibition stated in this section applies during the period in which the member performs a service and the periods covered by any financial statements referred to in the preceding paragraphs. Note that if the member does not perform any of the services previously listed, he or she is allowed to perform a service for a contingent fee.

A contingent fee is defined as a fee for the performance of any service under an agreement that stipulates that no fee will be charged unless a specified finding or result is attained or that the amount of the fee is dependent on the finding or result of the service. For purposes of ET section 1.510.001, "Contingent Fee Rule," fees are not considered contingent if fixed by courts or other public authorities; in tax matters, fees are not contingent if based on the results of judicial proceedings or if based on the findings of governmental agencies if the member can demonstrate that, at the time of the fee arrangement, he or she reasonably expected that a government agency would substantively consider the subject matter.

Nothing in the prohibition against the acceptance of a contingent fee would preclude a member from charging a fee (either fixed or hourly) that is dependent on the complexity of services performed. Therefore, a higher hourly fee may be charged for services that are more complex than are other services.



Confidential Information

ET section 1.700.001.01, "Confidential Client Information Rule" (AICPA, *Professional Standards*), states

> [a] member in public practice shall not disclose any confidential client information without the specific consent of the client.

This confidentiality rule cannot be used to relieve a member of certain obligations. These include the member's obligation to

a. adhere to the Compliance With Standards Rule (1.310.001) or the Accounting Principles Rule (1.320.001);
b. comply with a validly issued and enforceable subpoena or summons and to comply with applicable laws and government regulations;
c. submit to a review of his or her professional practice under AICPA or state CPA society or Board of Accountancy authorization; and
d. initiate a complaint with, or respond to any inquiry made by, the professional ethics division or trial board of the AICPA or an authorized investigative or disciplinary body of a state CPA society or Board of Accountancy.

In addition, information to which the member is privy as a result of being involved with a review or disciplinary matter of another member is not to be used for personal advantage (exchanging information in connection with investigative or disciplinary proceedings is not considered using information for personal advantage).

The Confidential Client Information Rule is a very important rule in the practice of forensic accounting. The forensic accountant is not to divulge any confidential information—including prior experiences that may be helpful to the court—that would disclose confidential client information of parties that are not involved in the case presently before the court. The forensic accountant should be wary; if he or she bases his or her opinion on prior experiences gained from work performed for individuals or organizations that are not involved in the present case, the court may require that the source of the basis for opinion be disclosed. If the forensic accountant refuses to divulge the source, the testimony of the forensic accountant may be excluded from evidence. If the forensic accountant obtains the consent of the individuals or organizations for which the work was performed, the source may be disclosed and the testimony accepted into evidence.

Case in Point

In some cases, the fact that the forensic accountant performed services for a party may be confidential. For example, assume that four years ago one spouse considered divorcing the other and hired a forensic accountant to perform investigative services such as background checks and financial analyses of the couple's net worth. Further assume that the spouse who was considering divorce decided to abandon the idea of divorce and had the forensic accountant sign an agreement stating that she would not divulge the fact that she had performed work related to the anticipated divorce.

In this case, the relationship between the spouse who considered the divorce and the forensic accountant is considered confidential information. If the forensic accountant is later approached by the other spouse to perform financial analyses for the couple due to a renewed interest in divorce, the forensic accountant may decide not to accept the engagement because of the possibility that her prior work relationship might be subject to disclosure. If, however, the spouse for whom the forensic accountant performed the earlier work consents to allow the forensic accountant to reveal the former work relationship, the forensic accountant could accept the engagement without violating ET section 1.700.001.01, "Confidential Client Information Rule."

Other Sections That May Be Applicable

Although the sections of the code previously discussed are those most directly related to the practice of forensic accounting, other sections such as those discussed in the following section, may also affect the practice of forensic accounting.

Independence

ET sections 1.200 and 1.210 on independence may be applicable if the member is considering whether to perform litigation services, such as forensic accounting, for an attest client.

ET section 1.200.001.01, "Independence Rule" (AICPA, *Professional Standards*), states

> [a] member in public practice shall be independent in the performance of professional services as required by standards promulgated by bodies designated by Council.

If the client is a company that is required to register and file reports under the securities acts, the Sarbanes-Oxley Act of 2002 may preclude the member from offering litigation services to that client.

Related to the issue of independence, ET section 1.295.140, "Forensic Accounting," defines (for purposes of this independence interpretation) forensic accounting and states that forensic accounting services are made up of investigative services and litigation services (which are further categorized as **expert witness services** and **fact witness services**). This ET section also defines investigative services, litigation services, and **litigation consulting services**, and discusses the threats to the independence of a **covered member** and whether they are at an acceptable level when performing these services. See box 2.5, "Forensic Accounting Services and Threats to Independence," for a summary of these threats and safeguards that can be applied to reduce the effect of these threats.

ET section 1.295.140, "Forensic Accounting," also states that when a law firm engages a member on behalf of the member's attest client and the law firm is also an attest client of the member, the member should consider the applicability of ET section 1.265.010, "Cooperative Arrangements With Attest Clients." ET section 1.265.010 defines cooperative arrangements with attest clients as a business activity in which a member (or his or her firm) and an attest client jointly participate. If a cooperative arrangement does exist, independence may be impaired by operation of the self-interest, familiarity, and undue influence threats. These threats to compliance with the Independence Rule of ET section 1.200.001 would not be at an acceptable level and could not be reduced to an acceptable level by safeguards if, during the period of the professional engagement, the cooperative arrangement is material to the CPA firm or the attest client. As a result, independence would be impaired.

Examples of cooperative arrangements include the existence of prime and subcontractor arrangements to provide services or products to a third party, joint ventures to develop or market products or services, and agreements to combine one or more of the CPA firm's services or products with one or more of the attest client's services or products and market the package by referring to both the CPA firm and the attest client.

However, a cooperative arrangement does not exist when all of the following safeguards are met:

a. The firm's and attest client's participation are governed by separate agreements, arrangements, or understandings that create no rights or obligations between the firm and attest client.
b. Neither the firm nor the attest client assumes responsibility for the other's activities or results.
c. Neither party has the authority to act as the representative or agent of the other party.

Advertising

If a member chooses to advertise his or her services as a forensic accountant, the member is required to comply with ET section 1.600, "Advertising and Other Forms of Solicitation" (AICPA, *Professional Standards*).

ET section 1.600.001, "Advertising and Other Forms of Solicitation Rule," states that

> [a] member in public practice shall not seek to obtain clients by advertising or other forms of solicitation in a manner that is false, misleading, or deceptive. Solicitation by the use of coercion, over-reaching, or harassing conduct is prohibited.

Ethics interpretation ET section 1.600.010.02, "False, Misleading, or Deceptive Acts in Advertising or Solicitations," states that promotional efforts would be considered false, misleading, and deceptive if they

a. create false or unjustified expectations of favorable results.
b. imply the ability to influence any court, tribunal, regulatory agency, or similar body or official.
c. contain a representation that the member will perform specific professional services in current or future periods for a stated fee, estimated fee, or fee range when it was likely at the time of the representation that such fees would be substantially increased and the member failed to advise the prospective client of that likelihood.
d. contain any other representations that would be likely to cause a reasonable person to misunderstand or be deceived.

Box 2.5 Forensic Accounting Services and Threats to Independence

Type of Forensic Accounting Non-Attest Service	Threats to Covered Member's Compliance With Independence Rule and Safeguards, if any, That Can Be Applied to Reduce Their Effects
Investigative services	Self-review and management participation threats may exist. If the member applies the following safeguards (found in ET section 1.295.040, "General Requirements for Performing Nonattest Services" [AICPA, *Professional Standards*]), the threats are at an acceptable level and independence is not impaired: a. The attest client and its management agree to i. assume all management responsibilities. ii. appoint an individual, preferably within senior management, who possesses suitable skill, knowledge, or experience to oversee the service. iii. evaluate the adequacy and results of the services performed. iv. accept responsibility for the results of the services. b. The member does not assume management responsibilities and the attest client and its management will i. meet the conditions specified in item (a). ii. make an informed judgment on the results of the member's non-attest services. iii. accept responsibility for making significant judgments and decisions that are the responsibility of management. (If the attest client is unable or unwilling to assume the responsibilities enumerated in items (a) and (b), the member's performance of non-attest services would impair independence.) c. Before performing non-attest services, the member establishes and documents (in writing) his or her understanding with the attest client, including i. objectives of the engagement, ii. services to be performed, iii. attest client's acceptance of its responsibilities, iv. member's responsibilities, and v. any limitations of the engagement. (The preceding safeguards do not apply to certain activities performed by the member, such as providing advice and responding to the attest client's questions as part of the client-member relationship. Also, the member is not to not assume management responsibilities in these circumstances.)
Litigation services	*Expert witness services:* The advocacy threat exists. The advocacy threat would not be at an acceptable level and could not be reduced to an acceptable level by the use of safeguards. As a result, if a member is engaged (conditionally or unconditionally) to provide expert witness services or expert testimony for an attest client, independence would be impaired unless the member provides expert witness services for a large group of plaintiffs or defendants that includes one or more attest clients of the firm and if, from the beginning of the engagement to testify, 1. the member's attest clients represent less than 20 percent of the members of the group, voting interests of the group, and the claim; 2. no attest client within the group is named as the lead plaintiff or defendant of the group; and 3. no attest client has the sole decision-making power to select or approve the selection of the expert witness.

Box 2.5 Forensic Accounting Services and Threats to Independence *(continued)*

Type of Forensic Accounting Non-Attest Service	Threats to Covered Member's Compliance With Independence Rule and Safeguards, if any, That Can Be Applied to Reduce Their Effects
Litigation services	*Fact witness services:* No threats to compliance would exist because acting as a fact witness is not considered a non-attest service. Therefore, serving as a fact witness would not impair the member's independence. (To determine whether the service is an expert witness or fact witness service, members can consult Rules 701–703 of Article VII, Opinions and Expert Testimony, of the Federal Rules of Evidence and all other applicable laws, regulations, and rules.)
Litigation consulting services	The advocacy and management participation threats may exist. If the member applies the safeguards discussed under "Investigative Services," these threats would be at an acceptable level and independence would not be impaired (instead of designating an appropriate individual such as a person from senior management to oversee the engagement, the attest client may designate its attorney to oversee the litigation consulting services).
Other litigation services	The advocacy threat exists if a member serves as a trier of fact, a special master, a court-appointed expert, or an arbitrator (including serving on an arbitration panel) in a matter that involves an attest client. This threat is not at an acceptable level and thus would impair the independence of a member with respect to an attest client. However, if the member applies the safeguards discussed under "Investigative Services," these threats would be at an acceptable level and independence would not be impaired when a member serves as a mediator or any similar role in a matter that involves an attest client as long as the member does not make any decisions on behalf of the parties and is acting only as a facilitator by assisting the parties in reaching their own agreement. The member should also consider the requirements of the interpretations of the Conflicts of Interest Rule (ET section 1.110.010) and of the Integrity and Objectivity Rule (1.100.001).

Therefore, a forensic accountant should not promote himself or herself in a manner that fosters a misunderstanding in the minds of reasonable persons. Note that false, misleading, and deceptive efforts of promotion are considered discreditable acts under ET section 1.400.001, "Acts Discreditable Rule."

Disciplinary Procedures

Potential disciplinary matters are investigated by the PEEC of the AICPA Ethics Division. Deliberations by the PEEC will result in one of three possible conclusions:

1. No prima facie evidence of a violation of the code
2. Prima facie evidence of a violation of the code
3. The member has failed to cooperate with the committee in its investigation of the member

If no prima facie evidence of a violation of the code is found, the matter is closed. If a violation is found, the PEEC determines whether it will offer a settlement to the member (which is published), issue a confidential letter of corrective action (for example, a specified number of continuing professional education [CPE] hours in a specific area) that is required of the member, or to present the case before the Joint Trial Board (board). If the member rejects the offer of settlement, the PEEC may refer the matter to the board for a hearing.

The board hears and determines disciplinary action for violations of the bylaws and ethics codes of the AICPA and some state CPA societies (see "State CPA Societies"). It comprises at least 36 members; at least 3 members of the

36 are from each of the 12 regions of the United States. Disciplinary hearings are conducted by a panel of at least 5 members of the board.

Members who have allegedly violated the AICPA bylaws or code and whose case has been referred to the board may, but are not required to, appear before the board with counsel and may produce witnesses. There is an established procedure of notification so that the member is apprised of scheduled hearings.

Decisions the panel can make include acts to

1. expel the member from membership in the AICPA (and his or her state society);[4]
2. suspend the member from membership in the AICPA (and his or her state society)[5] for a period of up to two years;
3. admonish the member; or
4. take additional action, such as requiring the member to complete specific CPE courses, submit a work product for review, or supply a pre-issuance review of engagements.

If the member is found guilty of violating the AICPA bylaws or code, the member can request a review of the board's decision, but the request will be granted only in certain situations, such as when the discipline appears disproportionately harsh relative to the offense.

If the member fails to comply with the stipulated correction action, membership of the member can be terminated under AICPA BL section 740 (7.4.6) and the similar bylaw of the member's state society, if the state society is a member of the Joint Ethics Enforcement Program (see "State CPA Societies") or the Acts Discreditable Rule of ET section 1.400.001.

Under certain conditions, the AICPA can expel or suspend a member without a hearing. These conditions exist when

1. the member's CPA certificate or license to practice is suspended or revoked; or
2. the member is convicted of
   a. a crime punishable by imprisonment for more than one year;
   b. the willful failure to file any income tax return which he or she is required by law to file;
   c. the filing of a false or fraudulent income tax return; or
   d. the willful aiding in the preparation and presentation of a false and fraudulent income tax return of a client.

The bylaws also provide that a member can be expelled or suspended (or admonished) without a hearing when disciplinary action is taken against the member by an approved governmental or other organization. Examples of approved governmental or other organizations are the Securities and Exchange Commission (SEC), the Public Company Accounting Oversight Board (PCAOB), and the IRS Office of Professional Responsibility.

If the case has been referred by certain federal or state agencies or is an SEC matter, AICPA procedures allow the confidential exchange of information on PEEC's disciplinary actions between the AICPA or state society and the relevant federal or state regulatory agencies responsible for disciplinary action.

Information regarding the outcome of investigations becomes public information only after the PEEC committee finds prima facie evidence of a violation of the AICPA code (or AICPA bylaws if the member did not cooperate with the investigation) and the finding results in either (1) the member's acceptance of a settlement agreement, which requires admonishment, suspension, or termination of his or her AICPA (and state society, if the member belongs to a state society) membership; or (2) a guilty finding resulting from the member's hearing before the AICPA's Joint Trial Board.

[4] This is true if the state society is a member of the Joint Ethics Enforcement Program (JEEP) discussed under "State CPA Societies;" if the state CPA society is not a member of JEEP, it makes its own determination of whether its members are to be expelled, suspended, admonished, or required to engage in corrective action.

[5] Ibid.

Case in Point

The following disciplinary actions were published on the AICPA website:[6]

> Under the AICPA's bylaws, Mr. Kenneth Porter of Knoxville, Tennessee, was admonished as a result of the disciplinary action taken by the North Carolina State Board of CPA Examiners. The North Carolina State Board of CPA Examiners had censured Mr. Porter for misrepresenting information provided to clients and for disclosing confidential client information without client consent.
>
> The AICPA suspended the AICPA membership of Ms. Rachel Fortune of Boonville, Indiana, for a period that coincided with the duration of the suspension period by the Indiana Board of Accountancy for her failure to pay a civil penalty which was imposed upon Ms. Fortune for failing to comply with the Indiana Board of Accountancy's continuing education requirements.
>
> The AICPA terminated the membership of Mr. Dennis Glick of Huntingdon Valley, Pennsylvania due to a final judgment of conviction for crimes punishable by imprisonment for more than one year. Mr. Glick was found guilty of violating Title 26, §7212(a), Corruptly Endeavoring to Obstruct and Impede the Due Administration of the Internal Revenue Laws and Title 26, §7206(2), Aiding and Abetting the Preparation and Filing of False Tax Returns.

State CPA Societies

The ethics codes of many state CPA societies, institutes, and associations (state societies) are almost identical to the AICPA code. Many CPAs are members of both the AICPA and one or more state societies; as a result, the AICPA and nearly all of the state societies have joined together to create the Joint Ethics Enforcement Program (JEEP). When a state society joins JEEP, the state society elects either to assume responsibility for investigating alleged disciplinary matters or to have the AICPA Ethics Division to assume this responsibility (sometimes with the state's assistance). Even when the state society assumes responsibility, there are certain circumstances under which the AICPA Ethics Division is to assume responsibility for investigation. These circumstances include the following situations: (1) the state ethics committee requests that the AICPA Ethics Division perform the investigation and the AICPA Ethics Division has agreed, (2) the allegations arose from litigation or regulatory proceedings and involves independence, accounting, or auditing issues; involves national or international issues; was referred by the PCAOB; or involves more than one state society, and (3) a timely investigation was not performed by the state ethics committee.

Just as with the AICPA, the investigation can result in no prima facie evidence of a violation of the code, prima facie evidence of a violation of the code, or that the member has failed to cooperate with the committee in its investigation of the member. When a state is a member of JEEP, the Ethics Charging Authority (ECA), comprising the AICPA PEEC and the state society ethics committee, can automatically expel a member under certain conditions, offer a settlement to the member, or proceed with a hearing usually conducted by the AICPA Joint Trial Board.

[6] See a listing of Disciplinary Actions at www.aicpa.org/ForThePublic/DisciplinaryActions/Pages/default.aspx.

Case in Point

The ECA investigated an alleged disciplinary matter involving David G. Friehling of Princeton Junction, New Jersey. The ECA charged Mr. Friehling with violating AICPA BL section 7.4.6 and Rule 506 of the New York State Society of Certified Public Accountants (NYSSCPA) Code of Professional Conduct for failing to cooperate with the ECA in its investigation of his alleged misconduct.

AICPA BL section 740, *Disciplining of Member by Trial Board* (AICPA, *Professional Standards*) provides that the AICPA may expel or suspend a member if the member fails to cooperate with the professional ethics division in any disciplinary investigation of the member by not making a substantive response to interrogatories or a request for documents from a committee of the professional ethics division or by not complying with the educational and other action deemed necessary by the professional ethics executive committee, within 30 days after being apprised of the requirement to submit to interrogatories or produce documents or take CPE or corrective action (AICPA BL section 7.4.6). NYSSCPA Code of Professional Conduct Rule 506 requires a member of the NYSSCPA to communicate with the NYSSCPA within 30 days of its mailing of a communication of complaint against the member.

Mr. Friehling signed, without admitting or denying such charge, a settlement agreement charging him with violating AICPA BL section 7.4.6 and Rule 506 of the NYSSCPA Code of Professional Conduct.

The agreement specified that Mr. Friehling would

a. waive his rights to a hearing under AICPA BL section 7.4 and New York State Society of CPA bylaws.
b. neither admit nor deny the charges under AICPA BL section 7.4.6 and Rule 506 of the NYSSCPA Code of Professional Conduct.
c. be expelled from membership in the AICPA and the NYSSCPA.
d. understand that the ECA would publish his name, the charges, and the terms of the settlement agreement.

Even if the state society is not a member of JEEP, a member of the AICPA who violates the bylaws or code of conduct of the state society to which he or she is a member most likely has violated the AICPA Code of Professional Conduct and the AICPA will take disciplinary action against the member. If a state society's bylaws permit the sharing of disciplinary information about its members with the state board of accountancy, the state society may share this information without the consent of its members.

State Boards of Accountancy

Most state boards of accountancy have codes of conduct (codified in state law) that are very similar to the AICPA code; as a result, when a member violates a section of the AICPA code, he or she most likely has also violated a board of accountancy rule. Whereas the violation of a section of the AICPA code can result in expulsion, suspension, admonishment, or corrective action, violation of a state statute or rule can result in the suspension of the license to practice, loss of the license, or monetary penalties. In some states, the license holder is allowed to surrender his or her license before disciplinary action is commenced by the state board of accountancy. This occurred in the case of David G. Friehling (see the Case in Point box above), the accountant for Bernard L. Madoff Investment Securities LLC. On July 19, 2010, the New York Board of Regents granted Mr. Friehling's application to surrender his license.

Other Codes of Conduct

There are other codes of conduct that have been developed by organizations that affect the practitioner, particularly if the practitioner is a member of these organizations. These include the General and Ethical Standards of the National Association of Certified Valuators and Analysts, the Code of Ethics for Professional Accountants promulgated by the International Ethics Standards Board for Accountants, and the Code of Ethics of the Association of Certified Fraud Examiners.

National Association of Certified Valuators and Analysts

Members of the National Association of Certified Valuators and Analysts (NACVA) are bound to follow the authoritative guidance issued by NACVA, such as its General and Ethical Standards. These standards, summarized in box 2.6, are similar to those of the AICPA code.

Box 2.6 General and Ethical Standards of the National Association of Certified Valuators and Analysts

Standard	Key Concepts
Integrity and Objectivity	• Be objective • Possess professional integrity • Do not knowingly misrepresent facts or subrogate judgment • Do not act in a misleading or fraudulent manner
Professional Competence	• Only accept engagements that a member can reasonably expect to complete with a high degree of professional competence • If a member lacks knowledge or experience to complete engagement with a high degree of professional competence, take steps to gain necessary expertise by either or both of the following: ○ Performing additional research ○ Consulting with other professionals believed to have such knowledge or experience prior to completing engagement
Due Professional Care	• Exercise due professional care when performing services, including engaging in sufficient research and obtaining adequate documentation
Understandings and Communications With Clients	• Establish a written or oral understanding with the client about the nature, scope, and limitations of services to be performed and responsibilities of the parties • If circumstances occur during the engagement that require a significant change in this understanding, notify the client • Inform the client of the following: ○ Conflicts of interest ○ Significant reservations about the scope or benefits of the engagement ○ Significant engagement findings or events
Planning and Supervision	• Adequately plan and supervise the performance of any service provided
Sufficient Relevant Data	• Obtain sufficient relevant data to afford a reasonable basis for conclusions, recommendations, or positions relating to services rendered
Confidentiality	• Do not disclose any confidential client information to third parties without first obtaining the consent of the client, unless required to do so by legal authority
Contingent Fees	• Do not perform a valuation engagement which results in the expression of a conclusion of value for a contingent fee
Acts Discreditable	• Do not commit an act discreditable to the profession
Client Interest	• Serve the client by seeking to accomplish the objectives established by an understanding with the client while maintaining integrity and objectivity
Independence	• Do not express a conclusion of value unless the member and the member's firm state either of the following: ○ "I (We) have no financial interest or contemplated financial interest in the property that is the subject of this report" ○ "I (We) have a (specified) financial interest or contemplated financial interest in the property that is the subject of this report" ○ Only state a conclusion of value associated with this statement of independence with the consent of the client and full disclosure of the financial interest, present or contemplated, in the report

International Ethics Standards Board for Accountants

International ethics standards for accountants are promulgated by the International Ethics Standards Board for Accountants (IESBA), the body that sets ethics standards for the International Federation of Accountants (IFAC). These standards are called the Code of Ethics for Professional Accountants (IESBA code) and apply to accountants who belong to member organizations of IFAC, such as the AICPA. When AICPA rules differ from those of the IESBA, AICPA members are to comply with the professional standards (either AICPA or IESBA) that are more restrictive.

The IESBA code applies to accountants in public practice, business, education, and the public sector. The IESBA code is organized in three parts: Part A, Framework; Part B, Accountants in Public Practice; and Part C, Professional Accountants in Business. The framework of part A consists of five fundamental principles, similar to those of the AICPA: integrity, objectivity, professional competence and due care, confidentiality, and professional behavior (that is, accountants are to comply with laws and regulations and not do anything that would discredit the profession). Parts B and C are similar to the rules of the AICPA code in their risk assessment approach: the accountant is to evaluate the significance of any threats and apply safeguards when necessary to eliminate them or reduce them to an acceptable level. However, the IESBA code provides less specific guidance compared to the AICPA code, although it is not wholly without rules; for example, in section 270 of part B (pertaining to accountants in public practice), an accountant is not to have custody of client assets unless permitted by law. Generally, the IESBA code uses a conceptual framework approach to evaluate ethical conduct by referring to the framework principles in part A, whereas the AICPA code requires its members to refer to the principles only if its members cannot locate a rule or interpretation to address their situations.

A few differences between the AICPA code and the IESBA code exist. For example, section 230 of the IESBA code, on obtaining second opinions on the application of accounting and reporting standards, is not specifically addressed in the code (it is addressed in AU-C section 915, *Reports on Application of Requirements of an Applicable Financial Reporting Framework* [AICPA, *Professional Standards*]). The Integrity and Objectivity Rule (ET section 1.100.001) and due professional care standard of the General Standards Rule (ET section 1.300.001.01[b]) of the code would apply in this situation.

The AICPA's code and the IESBA code are converging over time. One way this convergence is occurring is that the AICPA's PEEC participates in the IESBA's standard-setting activities to provide the U.S. perspective in the IESBA's deliberations before IESBA's standards are exposed for comment. Convergence has become more important as the practices of accountants become more global in scope. For example, a U.S. company could acquire a company in Europe or outsource part of its operations to workers in a country outside the U.S.

Association of Certified Fraud Examiners

The Association of Certified Fraud Examiners (ACFE), which administers and regulates the Certified Fraud Examiner (CFE) credential, requires its members to adhere to its Code of Conduct, which very much mirrors that of the AICPA code. The ACFE Code of Conduct includes the concepts of diligence; integrity; professional competence; testifying truthfully and without bias or prejudice; obtaining adequate evidence; revealing matters that, if omitted, would cause misunderstanding; and a commitment to continually increase the competence and effectiveness of professional services performed by the CFE. It also includes prohibitions against engaging in illegal or unethical conduct, activities that would represent a conflict of interest, expressing an opinion as to guilt or innocence, and revealing confidential information.

Other Organizations

Other organizations have issued or adopted ethical rules and codes with which their members are supposed to comply. These include the Ethics Rule promulgated by The Appraisal Foundation in the Uniform Standards of Professional Appraisal Practice, which contains requirements for conduct related to integrity, objectivity, and competency, and the Code of Ethics issued by the American Society of Appraisers (ASA).

Authoritative Regulatory Bodies

Members are required to comply with independence regulations of authoritative regulatory bodies when performing non-attest services for attest clients and are required to be independent of clients under the regulations of applicable

regulatory bodies. These regulatory bodies include the SEC, the Government Accountability Office, the Department of Labor, and the PCAOB.

Professional Responsibilities

ET section 1.310.001.01, "Compliance With Standards Rule" (AICPA, *Professional Standards*), requires that members who perform various services, including other professional services (for example, forensic accounting), are to comply with standards promulgated by bodies designated by Council. Besides the Forensic and Valuation Services Executive Committee, the Management Advisory Services Executive Committee is a body that promulgates standards that can affect the practice of forensic accounting.

In addition to the AICPA code, there are two primary standards that apply to forensic accounting services: **Statement on Standards for Consulting Services (SSCS) No. 1**, *Consulting Services: Definitions and Standards* (AICPA, *Professional Standards*, CS sec. 100) issued by the Consulting Services Executive Committee; and **Statement on Standards for Valuation Services (SSVS) No. 1**, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*, VS sec. 100) issued by the AICPA Consulting Services Executive Committee. These standards are introduced here and discussed in more detail in chapter 7, "Engagement and Practice Management."

SSCS No. 1, Consulting Services: Definitions and Standards

CS section 100 applies to AICPA members who practice as CPAs and provide consulting services or anyone who provides these services for clients on behalf of the member or the member's firm. Therefore, it applies to almost all forensic accounting engagements.

Consulting services are services that utilize a practitioner's knowledge, experience, and skills in applying an analytical approach when evaluating alternatives, formulating proposed actions, implementing plans of action, and assessing how well the implemented actions serve the client's interest. Consulting services involve determining client objectives, gathering facts, defining problems or opportunities faced by clients, and communicating results of the engagement. Consulting services can be any one of the following types of services: consultations, advisory services, implementation services, transaction services, staff and other support services, and product services.

In addition to the general standards established under ET section 1.300.001.01, "General Standards Rule," (mandating that members only undertake engagements for which they possess adequate professional competence, exercise due professional care when performing professional services, adequately plan and supervise engagements, and obtain sufficient relevant data to afford a basis for a conclusion), CS section 100 promulgates the following three general standards: (1) serve the client interest by seeking to accomplish the objectives established by the understanding with the client while maintaining integrity and objectivity; (2) establish with the client a written or oral understanding about the responsibilities of the parties and the nature, scope, and limitations of services to be performed, and amend the understanding if significant changes to circumstances occur during the engagement; and (3) communicate with the client when conflicts of interest occur, significant reservations about the scope of the engagement or benefits to be obtained from the engagement exist, and significant engagement findings or events are discovered.

The standard states that performing consulting services for an attest client does not, in and of itself, impair independence but that members and their firms who perform attest services for a client should comply with applicable independence standards, rules and regulations issued by the AICPA, the state boards of accountancy, state CPA societies, and other regulatory agencies (for example, PCAOB).

SSVS No. 1, Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset

The guidance provided in VS section 100 is to be followed by all AICPA members who perform valuation services, litigation services, personal financial planning, tax, or accounting engagements. The standard was promulgated to improve the consistency and quality of practice among AICPA members who perform engagements in which values are estimated. It includes a discussion of the various acceptable approaches and methods for performing valuation and calculation engagements.

AICPA members are to adhere to VS section 100 when they perform an engagement or any part of an engagement that estimates a value resulting in an expression of either a conclusion of value or a calculated value and requires the use of professional judgment to apply the approaches and methods used to estimate the value, unless they are performing an engagement that is specifically excluded from applying VS section 100. The valuation standard applies even when the act of estimating a value is only a part of a larger engagement.

The standard provides six situations (engagements) in which VS section 100 is not applicable. These include estimating a value as part of an audit, **review**, or compilation engagement and a jurisdictional exemption that calls for the use of an approach not discussed in VS section 100.

The standard also specifies the types of written reports that are permitted for the two kinds of valuation engagement. For a **valuation engagement**, the member is allowed to issue detailed reports and summary reports. If the engagement is a **calculation engagement**, only one type of written report is permitted: calculation reports. Members are allowed to issue oral reports for either kind of engagement.

VS section 100 addresses issues the member considers prior to accepting a valuation engagement, such as whether the member possesses the professional competence to perform the engagement, the nature and risk of the valuation services, whether the member can perform the engagement with objectivity and avoid conflicts of interest, the effect the engagement might have on independence if attestation services are also performed for the client, the identification of assumptions and limiting conditions, and any anticipated need to use the work of specialists. It suggests obtaining a written **engagement letter** as a means of formally establishing an understanding of the services to be performed and to define the responsibilities of the practitioner and client.

For more information on valuation engagements and the reports that are to be issued, see chapter 16, "Valuation Applications."

Other Valuation Standards

Other organizations have issued valuation standards. These standards are to be followed when (1) practitioners are members of organizations that require adherence to these standards or (2) federal, state, or local law requires their application. These standards include the ASA's business valuation standards and standards issued by NACVA.

Non-Authoritative Guidance

The AICPA code is the only authoritative source of AICPA ethics rules and interpretations for its members. Although the staff of the Professional Ethics Division has issued guidance to assist members and others in their efforts to implement the code, this guidance does not amend or override the code. Further, non-authoritative guidance does not represent official pronouncements of the AICPA, because they were not approved by means of the AICPA's normal due process, which requires exposure of proposed changes to the public and consideration of comments made on these proposals by members and other interested parties. However, members who depart from non-authoritative guidance issued by the AICPA may want to be prepared to justify their departure based on the facts and circumstances of their situation.

Besides the authoritative guidance provided by CS section 100 and VS section 100, the AICPA has issued a number of non-authoritative guidance publications to assist forensic accountants in performing their duties. Although the numbers of these publications change over time (for example, the issuance of additional special reports or the superseding of existing reports), those in existence at this time include the practice aids and other guidance listed in box 2.7.

Box 2.7 Selected Non-Authoritative Guidance Published by the AICPA

Practice Aids

Accounting and Valuation Guide *Testing Goodwill for Impairment* (for purchase only)
Accounting and Valuation Guide *Valuation of Privately-Held Company Equity Securities Issued as Compensation*
A CPA's Guide to Family Law Services, 2nd Edition
Calculating Intellectual Property Infringement Damages Practice
Discount Rates, Risk, and Uncertainty in Economic Damages Calculations
Mergers and Acquisitions Disputes
FVS Practice Aid 10-1 *Serving as an Expert Witness or Consultant*
FVS Practice Aid 07-1 *Forensic Accounting: Fraud Investigations*
FVS Practice Aid 06-4 *Calculating Lost Profits*
FVS Practice Aid 06-3 *Analyzing Financial Ratios*
FVS Practice Aid 06-2 *Preparing Financial Models*
FVS Practice Aid 04-1 *Engagement Letters for Litigation Services*
FVS Practice Aid 98-2 *Calculation of Damages from Personal Injury, Wrongful Death, and Employment Discrimination*
FVS Practice Aid 96-3 *Communicating in Litigation Services—Reports*
Assets Acquired to Be Used in Research and Development Activities

Special Reports
AICPA Consulting Services Special Report 03-1: Litigation Services and Applicable Professional Standards
FVS Special Report: Forensic Procedures and Specialists—Useful Tools and Techniques

White Papers
"Intangible Asset Valuation—Cost Approach Methods And Procedures"
"Valuation and Transactional Issues Associated With Employee Stock Ownership Plans"
"Computer Forensic Services and the CPA Practitioner"
"How to Organize a Forensic Accounting Investigation"
"Risks Associated With Converting from One Form of GAAP to Another"
"Conducting Effective Interviews"
"Managing the Business Risk of Fraud"
"Characteristics and Skills of a Forensic Accountant"

Other Aids
A CPA's Guide to Valuing a Closely-Held Business
Understanding Business Valuation

(Some of these aids are available only to members of the Forensic and Valuation Services Section of the AICPA.)

In addition to the non-authoritative practice aids and other guidance listed in box 2.7, organizations such as NACVA and the ACFE publish materials that are designed to assist the practitioner when he or she performs forensic accounting (including fraud examination) services.

Summary

Certified public accountants who offer forensic accounting services are required to comply with authoritative professional guidance issued by the AICPA, other professional organizations to which the practitioner belongs, and governmental agencies that license them or exercise regulatory oversight. Non-authoritative guidance offered by the AICPA and other organizations such as NACVA help practitioners implement authoritative guidance. In the area of forensic

accounting, the primary authoritative pronouncements are those of the AICPA Code of Professional Conduct, Statements on Standards for Consulting Services, and Statements on Standards for Valuation Services.

The AICPA Code of Professional Conduct comprises four major parts: the preface, which applies to all members; part 1, which applies to members in public practice; part 2, which applies to members in business; and part 3, which applies to other members.

Certain relationships or circumstances may create threats to a member's compliance with the rules of the code. If the member is aware that threats exist, he or she evaluates whether the relationship or circumstance would cause a reasonable and informed third party who is aware of relevant information to believe that there is a threat to the member's compliance with the rules and that this threat is not at an acceptable level. The process of evaluating threats involves identifying threats, evaluating whether they are significant, and identifying and applying safeguards to eliminate or lessen the threat. Threats that may face a forensic accountant include the adverse interest threat, advocacy threat, familiarity threat, management participation threat, self-interest threat, self-review threat, and undue interest threat.

If a member encounters an ethical conflict, he or she is to consider relevant facts and circumstances and the rules, laws, or regulations that apply; the ethical issues involved; and established internal procedures that are to be followed to resolve the conflict. The member then chooses a course of action and takes steps to comply with the rules and applicable laws.

The rules of the code that are most applicable to forensic accountants include those on integrity and objectivity, general standards, compliance with standards, confidential information, contingent fees, and acts discreditable.

The AICPA can expel a member, suspend him or her from the AICPA for a period of up to two years, or admonish a member. If the member is admonished, often he or she is required to engage in some form of correction action, which is usually a specified number of CPE hours. Because the ethics codes of many state societies are almost identical to the AICPA code, and many CPAs are members of both the AICPA and one or more state societies, the AICPA and nearly all of the state societies created JEEP to efficiently adjudicate violations of the AICPA code and state society codes of conduct. Similarly, most state boards of accountancy have codes of conduct that are very similar to the code. As a result, when a member violates a section of the AICPA code, he or she most likely has also violated a board of accountancy statute. Violation of a state statute can result in the suspension of a license to practice accounting, the loss of the license, or other penalties.

Other codes of conduct have been developed by organizations, such as NACVA and the ACFE, which may affect the practitioner. International ethics standards for accountants also exist and are very similar to the AICPA code.

AICPA members who practice forensic accounting are also required to comply with CS section 100 and, if they perform valuations as a consulting, litigation services, personal financial planning, tax, or accounting engagement, VS section 100 applies.

Besides the authoritative guidance provided by the code, CS section 100, and VS section 100, the AICPA and organizations such as NACVA and the ACFE have issued non-authoritative guidance to help forensic accounting practitioners to perform their duties.

Review Questions

1. Which of the following is the AICPA body designated by the AICPA Council as having rule-making authority in the area of forensic and valuation services
   a. Auditing Standards Board.
   b. Public Company Accounting Oversight Board.
   c. Forensic and Valuation Services Executive Committee.
   d. Consulting and Litigations Standards Committee.

2. The Professional Ethics Executive Committee (PEEC) is a senior committee of the AICPA charged with which of the following tasks?
   a. Promulgating new interpretations and rulings.
   b. Investigating potential disciplinary matters that involve AICPA members.
   c. Interpreting and enforcing the AICPA Code of Professional Conduct.
   d. Both (b) and (c).
   e. Answers (a), (b), and (c).

3. A threat to an AICPA member's compliance with the rules of the AICPA code is at an acceptable level when which of the following is true?
   a. The member documents the threat and is vigilant as to the possible negative effects the threat could have on the member's compliance.
   b. A reasonable and informed third party who is aware of the relevant information concludes that the threat would not adversely affect the member's compliance with the rules.
   c. Attest services are no longer required by the member's client.
   d. None of the above.

4. Before choosing a course of action when responding to an ethical conflict, a member of the AICPA considers doing which of the following?
   a. Consult with appropriate persons within the member's firm or organization.
   b. Request the advice of other individuals in resolving the ethical conflict or obtain advice from an appropriate professional body (such as the AICPA) or legal counsel.
   c. Both (a) and (b).
   d. None of the above.

5. If an AICPA member determines that he or she faces threats to objectivity that are so significant that no safeguards could eliminate or reduce the threat to an acceptable level, the member _____.
   a. Should not perform the service.
   b. Should terminate relationships that cause the ethical conflict.
   c. Perform the service, but only under tight controls supervised by a senior member of the firm.
   d. Both (a) and (b).

6. AICPA members may withhold records only if which of the following is true?
   a. The client has not paid for the engagement, the records were created by the client, and the client has a copy of its records (the forensic accountant has the original records).
   b. The client has not paid for the engagement and the records are the work product created by the forensic accountant.
   c. The client has paid for the engagement and the records are the work product created by the forensic accountant.
   d. Both (b) and (c).

7. Chris is preparing to testify as an expert witness. She bases her testimony on prior experience obtained in a case that she worked on two years ago and which was settled out-of-court. What is your advice to Chris?
   a. Do not use the experience obtained from the case two years ago because the judge may require Chris to reveal the source of the experience.
   b. Use the experience because, under the Rules of Federal Evidence, the court must allow testimony from an expert witness without requiring revelation of the source of the witness's experience.
   c. Seek consent to reveal the names and information from the parties to the case that occurred two years ago. If consent cannot be obtained, do not use the experience as a basis for testimony.
   d. None of the above.
8. If investigative services are performed for an attest client, independence may be impaired and, if it is, threats to independence cannot be reduced to an acceptable level.
   a. True.
   b. False.
9. Which of the following statements is not true?
   a. The IESBA code contains more detailed guidance than the AICPA code.
   b. The IESBA code uses a conceptual framework approach to evaluate ethical conduct by referring to the framework principles.
   c. The IESBA code requires accountants to evaluate the significance of any threats and apply safeguards when necessary to eliminate them or reduce them to an acceptable level.
   d. The IESBA code applies to accountants in public practice, business, education, and the public sector.
10. Although non-authoritative guidance issued by the AICPA does not represent official pronouncements of the AICPA, members _____.
    a. Shall comply with this guidance if the facts and circumstances match those to which the guidance applies.
    b. Need not comply with the guidance, but may need to justify departures, particularly if the facts and circumstances of the member's engagement are nearly similar to those of which the guidance applies.
    c. Are to comply with the guidance as though they are authoritative if no authoritative guidance exists in the area.
    d. None of the above.

Short Answer Questions

1. What are the three primary items of authoritative guidance issued by the AICPA that apply to the practice of forensic accounting?
2. What are the names of two non-AICPA bodies that have been designated as bodies designated by AICPA Council to establish guidance?
3. Why was the AICPA code created?
4. What are the four parts of the AICPA code and who are the members to whom each part applies?
5. What is the difference between the words "evaluate" and "determine" as used in the AICPA code?
6. What should a member do if a relationship or circumstance that might represent a threat to the member's compliance with the rules is not covered by the rules and interpretations of the AICPA code?
7. Which threats may adversely affect a member's compliance with the AICPA code? (Name three.)
8. What is the process an AICPA member should follow when faced with an ethical conflict?
9. One of the general standards found in ET section 1.300.001.01, "General Standards Rule" (AICPA, *Professional Standards*), is professional competence. What are the other three general standards found in this section?

10. If a member has disclosed confidential client information without having the client's specific consent to disclose the information, he or she could be changed with violating ET section 1.700.001.01, "Confidential Client Information Rule" (AICPA, *Professional Standards*). Could the member be charged with violating any section of the AICPA code if he or she disclosed confidential information obtained from a prospective client or non-client without consent? If so, under which section could he or she be charged?
11. If a cooperative arrangement exists, independence may be impaired by operation of which three threats?
12. What are the three possible outcomes of the Professional Ethics Executive Committee's deliberations of potential disciplinary matters?
13. What are the four possible decisions the Joint Trial Board can make?
14. Besides the AICPA, what are the names of two organizations that have their own codes of conduct?
15. Besides the AICPA code, what are the names of the two primary standards that apply to forensic accounting services?

Brief Cases

1. Robin had worked at Hawkes & Company, a medium-sized CPA firm, for several years when she was singled out to testify in a forensic accounting case. That evening, when she was out with friends, talk turned to what each was doing at work. Robin casually mentioned that she was working on a case and would likely be testifying in court. "Wow," said one of her friends. "Your side is sure to win! If I know you, you'll stop at nothing to help someone who needs you." What would be an appropriate response by Robin to her friend?
2. Charlene, a member of the AICPA, works in the internal audit department of a large publically-held company that manufactures parts for a major automotive manufacturer. Charlene's duties are primarily in the area of forensic accounting and are investigative in nature. What areas of the code apply to Charlene when she performs her duties in the internal audit department?
3. Karen has a passionate interest in promoting animal rights and preventing cruelty to animals. She has organized several fundraisers to benefit organizations that protect animals. Karen has recently been approached by an attorney who represents a well-known animal rights organization to assist in litigating an alleged employee embezzlement of funds from that group. The embezzlement was alleged to have caused the organization to lay off a significant number of its staff and curtail its protective activities. Is there any threat to Karen's compliance with the code if she accepts this engagement? Explain your answer.
4. Sidney, the sole proprietor of a small CPA firm, has practiced for 10 years. She employs one other accountant who is studying to become a CPA and who has worked for her for the last two years since he graduated from the university. Sidney was approached to assist an attorney who is representing one of her largest clients, Century, in court. Sidney is to perform forensic accounting services in anticipation of litigation. Should Sidney be wary of any threats to her compliance with the code? Explain.
5. Donald, a CPA, recently became licensed to practice public accounting and decided to work as a sole practitioner in public accounting. His past experience was limited to practicing bookkeeping for three years. He has read a couple of books about forensic accounting and is very interested in the field. On the Internet, he paid for advertising in which he stated that he "…possessed many years of accounting experience and is the Sherlock Holmes of forensic accounting." Has Donald violated any rules of the code?
6. Adam performed work for a client that required Adam to obtain client records (for example, a daily log of sales). Adam finished the work for the client on March 31, 20X8, and billed the client for the work on April 5, 20X8. On June 1, 20X8, the client—who had not yet paid for the work performed by Adam—requested that Adam return the client's records. What is the latest date that the AICPA would consider a reasonable date by which the records should be returned? May Adam retain a copy of the client's records that he made?

7. Kim, a CPA, accepts an engagement to prepare for litigation in a forensic accounting case. She will be paid $30,000 if Kim's client, an attorney who represents the injured party, wins the case. Otherwise, she will be paid $5,000. Has Kim violated ET section 1.510.001, "Contingent Fees Rule" (AICPA, *Professional Standards*)? Are there any other issues Kim may need to consider that might operate to threaten her compliance with the code?

8. Jennifer has been approached by an attorney who is representing one of Jennifer's attest clients in litigation. The attorney needs a person who is knowledgeable about the client and who also understands forensic accounting. Jennifer seems to have the necessary qualifications because she has supervised the client's audits for the last four years and, through a combination of forensic accounting experience and having passed an examination, has earned the CFF credential. During Jennifer's initial meeting with the attorney, she asks the attorney whether he is engaging her to testify as an expert witness or as a fact witness. Why would Jennifer ask this question?

9. Classify the following members of the AICPA by which part (part 1, part 2, or part 3) of the code pertains to the members:
   a. Tom works for a financial services firm that is not peer-reviewed and does not perform attestation services.
   b. Sally works in a CPA firm that performs only compilations and reviews.
   c. Joseph works for the General Accountability Office (GAO).
   d. Kurt is presently out of work.

10. The AICPA and state CPA societies publish disciplinary information on their members who have been expelled, suspended, and admonished. What are the benefits of publically disclosing these disciplinary actions?

Cases

1. Gary is a forensic accountant and CPA who has practiced for nine years and has established an excellent reputation for the quality of his work and for his honesty. Two years ago he and another CPA, Sandy, merged their practices. Although Gary handles all forensic accounting engagements, Sandy performs attestation work.

   Recently, Gary was approached by an attorney who would like to engage him to help prepare a case for litigation. The case involves a matter that requires the skill of a forensic accountant. Gary's initial meeting went well and provided him with enough information to determine that he was qualified to perform the work needed by the attorney. Telling the attorney that he would think about whether to accept the engagement, he returned to his office.

   After thinking about the potential engagement and checking his work calendar to determine whether he would be able to perform the engagement within the time period expected by the attorney, he decided that he would accept the engagement. Once he called the attorney to let her know that he would be happy to work on the case, she divulged the name of the party involved in the litigation. Gary recognized the name immediately. It was his wife's brother-in-law (the husband of Gary's wife's sister).

   Required

   a. Are there any threats that might operate to affect Gary's compliance with the code and what code rule (or rules) should Gary consult before performing work on the engagement?
   b. Under what circumstances, if any, may Gary accept the engagement?
   c. Are there any safeguards that Gary can implement to reduce any threats that exist?

2. Mary, a CPA who practices forensic accounting as a sole proprietor, was engaged to perform investigative services for an attorney pursuant to impending litigation. Mary was very busy with other engagements, so she hired a private investigator (PI) who recently became licensed and was relatively inexperienced to perform the financial investigation required for the engagement. When the PI completed his report, the PI apprised Mary that he had made several judgments as to what to include in the report. Mary scanned it quickly and reproduced it, unchanged, on her letterhead.

   Required

   What section(s) of the code did Mary most likely violate?

3. Robert had worked for Smith, Ford, and Weston, CPAs (SFW) for five years. Recently, Robert became aware that Smith, a CPA and one of the partners in the firm, had indicated on an electronic work paper that he had reviewed the work of subordinates (one of which was Robert). Robert is certain that Smith had not reviewed the work (Smith told Robert he had not) and when he talked with Smith to determine whether Smith was aware of any exceptions to professional standards that would support Smith not having to review work, Smith became very agitated. Robert left the employ of SFW shortly after that incident and is now working for another CPA firm. Within a year of leaving SFW he was called to testify about the matter before the Joint Ethics Enforcement Program.

   Required

   Based on code rule, is Robert allowed to testify about what he knows?

4. Able & Company, CPAs is performing a forensic accounting engagement and, after a couple of weeks, realizes that part of the engagement requires significant travel to another state. Able & Company has used a CPA firm, Pickford, Ashcroft, and Miller, in that state and is considering the use of this firm to help it perform the engagement by obtaining evidence, such as interviews of individuals.

   Required

   What issues should Able address before it commits to using the CPA firm of Pickford, Ashcroft, and Miller? (In the code, the firm of Pickford, Ashcroft, and Miller is called a third-party service provider.)

5. Kevin is preparing to perform a valuation engagement for ABS Inc., a commercial business that provides a service to the state of Virginia. The valuation engagement involves valuing a plot of land near ABS for the purpose of determining a value to use in negotiations to purchase the land from its present owner. Because Kevin knows the management of ABS well (he performs monthly compilation services for ABS), he decides not to issue an engagement letter. As part of its contractual arrangement with Virginia, ABS is required to use a valuation approach specified by the state. This valuation approach is not addressed in VS section 100, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*). Kevin dutifully follows the guidance contained in VS section 100 (except for using the valuation approach specified by Virginia) applicable to a valuation engagement and issues a calculation report.

   Required

   Has Kevin complied with the provisions of the code? Explain.

Internet Research Assignments

1. Locate the AICPA Code of Professional Conduct online. Find ET section 1.400.040, "Negligence in the Preparation of Financial Statements or Records." What does this interpretation say about the act of a member signing, permitting, or directing another person to sign a document containing materially false and misleading information?

2. Find the most current version of the International Ethics Standards Board for Accountants (IESBA) Handbook of the Code of Ethics for Professional Accountants. What does section 210.18 say about the reliance on the advice or work of an expert by a professional accountant in public practice?

3. Go to the website of the AICPA and find the disciplinary actions. Find an example of an admonishment, an example of a suspension of membership, and an example of termination of membership. What, if any, are the actions required of the members when the admonishment and suspension was determined by the Joint Trial Board?

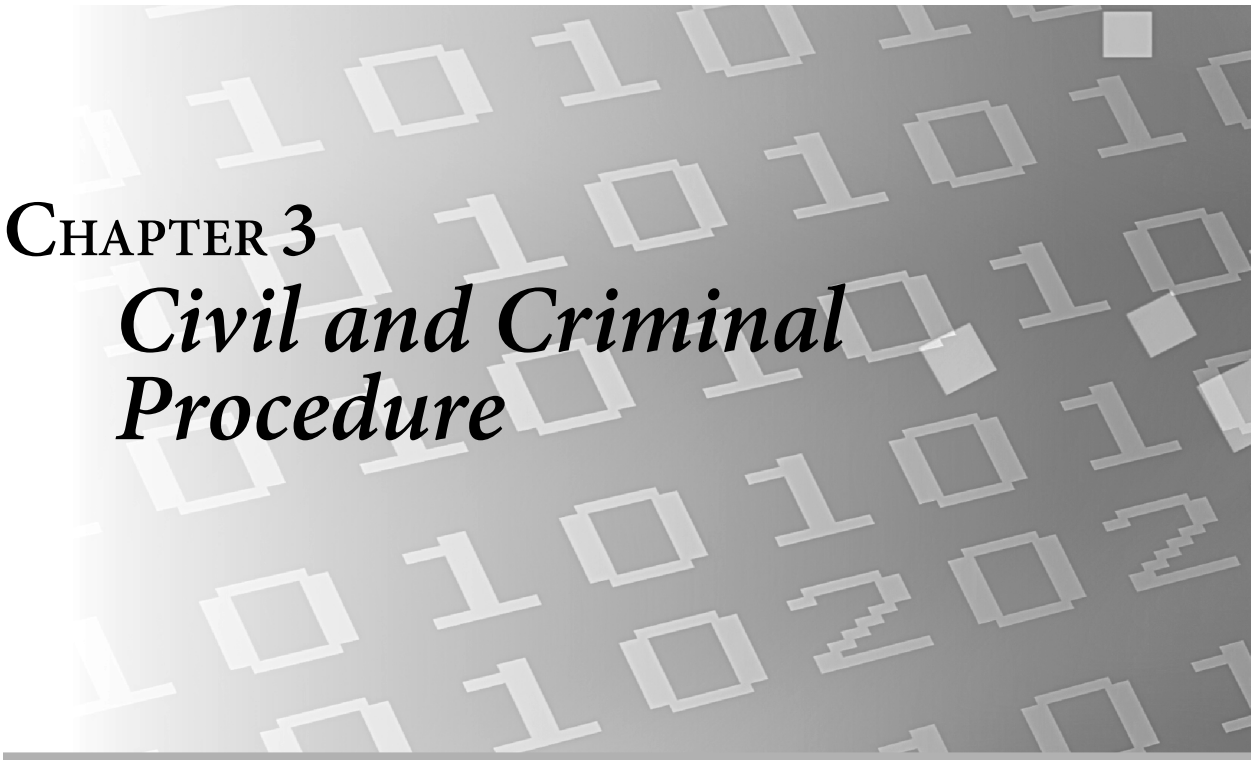
4. Locate a state CPA society's published disciplinary actions by entering, in a search engine, a phrase such as "[Name of state CPA society or institute] disciplinary actions" (but without quotation marks). For example, "Illinois CPA Society disciplinary actions" could be entered to find published reports of disciplinary actions taken by the Illinois CPA Society. How much detail does the state society (or institute) provide about the actions that gave rise to expulsion, suspension, or admonishment by the state society?

5. Go online and find the AICPA or National Association of State Boards of Accountancy (NASBA) link to State Boards of Accountancy by searching for "State Boards of Accountancy Links." Select a state and find the code of conduct (it may be contained in rules and regulations) of the state board of accountancy that you selected. Find the rule, if it exists, on Integrity and Objectivity. Contrast the state Integrity and Objectivity rule with the AICPA rule. How is it similar? What differences exist?

Section II

Fundamental Forensic Knowledge

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.



Chapter 3
Civil and Criminal Procedure

Learning Objectives

- Learn the steps in a federal criminal proceeding
- Understand the basic rules that apply to searches and seizures (arrests and searches)
- Grasp the legal concept of probable cause
- Learn the concept of standing in a criminal case
- Learn the steps in a federal civil proceeding (except for discovery)
- Learn basics of the most important motions that can be made in a civil lawsuit (for example, motion to dismiss, motion for judgment on the pleadings, or motion for summary judgment)
- Understand the various remedies available in a civil trial
- Understand personal jurisdiction, in rem jurisdiction, subject matter jurisdiction, diversity of citizenship and federal question jurisdictions, venue, removal, standing to sue, and real parties in interest in federal civil suits
- Understand joinder of parties and joinder of claims
- Learn about impleader and interpleader
- Study the concepts of verdicts and judgments
- Learn about federal appeals
- Understand post-trial motions

Introduction

In this time of increased regulatory scrutiny, forensic accountants find themselves working with various parties, including company management and directors, lawyers, federal and state regulators, and law enforcement officials. **Allegations** of wrongdoing such as employee fraud, financial statement fraud, bribery, kickbacks, mail fraud, wire fraud, conspiracy, insider trading, and intellectual property fraud can emanate from many sources, including external and internal auditors, vendors, customers, whistleblowers, employees, and investigations at other firms. More complex situations may trigger involvement by several regulatory and law enforcement agencies.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Case in Point

An alleged fraud scheme involving a publicly traded community bank with a national bank charter may bring in federal bank examiners (Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation), SEC officials, Department of Justice officers, Federal Bureau of Investigation and IRS agents, and local law enforcement.

It is not uncommon for a firm to conduct its own internal investigation in cooperation with and in parallel to a regulatory or law enforcement agency. Receipt of a state or federal grand jury **subpoena** or becoming aware that federal or state law enforcement officials have an eye on one's firm or employees in that firm gets immediate attention. Simultaneously or prior to the receipt of a subpoena, a firm will likely conduct its own investigation. Such investigations often entail at least the assistance of outside professionals, such as lawyers and forensic accountants. Any internal investigation raises many questions that may be considered.

Some or all of the following questions may be raised by an investigation:

- Could the alleged misconduct involved lead to a criminal investigation or prosecution?
- Who might be the target of such an investigation?
- Is the alleged misconduct publicly known?
- Is there potential firm or corporate civil or criminal liability?
- Is the alleged misconduct the result of whistleblowing?
- Can the alleged misconduct result in a qui tam action under the Federal False Claims Act?
- Can the alleged misconduct result in an action under the Foreign Corrupt Practices Act (FCPA)?
- Should the alleged misconduct be investigated internally or externally?
- What is the likelihood that present internal controls are deficient?
- Does the firm have a duty to report the alleged misconduct to an insurer?

It is crucial in most investigation and litigation situations to have both the legal and forensic accounting perspectives to attain the optimal outcome. Attorneys and forensic accountants both bring rich skill sets to bear. Although differences exist in these skill sets, attorneys and forensic accountants who work together often develop a more comprehensive view of the issues at bar.

In investigative scenarios, forensic accountants and lawyers work together in various ways. The forensic accountant is retained directly by the client or indirectly by the lawyer (with the forensic accountant assisting in the provision of legal advice). During fact collection, an attorney's inquiry may target the transactional, contractual, and regulatory aspects of a situation. A forensic accountant may focus on the details of accounting records or inconsistencies between a witness's event description and the proper understanding of business controls and processes. In document collection, forensic accountants are comfortable with quantitative data and target accounting as well as bookkeeping records and transaction-related documents. Attorneys prefer narrative or word evidence such as contracts, memos, correspondence, and other non-quantitative paperwork.

As facts emerge in a case, forensic accounting and legal analyses tend to diverge but remain connected. Forensic accountants can provide attorneys with relevant facts needed to reach sound legal conclusions. Attorneys assist forensic accountants in understanding aspects of legal work that might be overwhelming and the application of legal rules and procedural standards to given fact patterns. Forensic accountants who possess more knowledge and have a better understanding of laws applicable to forensic accounting, structure of federal and state court systems, and the procedural aspects of criminal and civil cases are in a better position to assist lawyers and clients and make more valuable contributions to the investigative or dispute resolution team. We provide an overview of federal fraud-related laws in Appendix A and focus on the structure of court systems and procedural aspects of criminal and civil cases in the text.

The American Court System

Before a lawsuit can be filed in federal or state court, certain judicial criteria have to be met. These various criteria are jurisdiction, **standing to sue**, and **venue**. Different types of jurisdiction exist (for example, in personam or jurisdiction over the person and in rem or jurisdiction over the thing and subject matter jurisdiction). Jurisdiction refers to the authority of a court to entertain a particular case. In personam jurisdiction refers to the fact that many courts can exercise authority over those who live in a certain geographical area. A court acquires in personam jurisdiction over a person when he or she files a civil lawsuit. The person or entity being sued becomes subject to the court's jurisdiction when served with a **complaint** and **summons**. A complaint specifies the factual and legal basis for a civil lawsuit. The summons is a court order that notifies the defendant of the lawsuit and indicates how to respond to the complaint. **Service of process** is the means by which courts present the complaint and summons to a defendant (often personal service). In some instances, a court can exert authority over a nonresident defendant through a state **long-arm statute**. Use of such a statute requires a showing that the nonresident party had sufficient or minimum contacts with the state to justify jurisdiction. For various entities, such as corporations or limited liability companies, the minimum contacts requirement is met if the entity does business within the state. Service of process on an entity, such as a corporation, is usually accomplished by service on a registered agent.

The Federal Rules of Civil Procedure contain a provision similar to a long-arm statute. Rule 4 sets forth when a federal court may assert personal jurisdiction over a defendant outside the area served by the court. Two issues are considered by Rule 4. First, the federal court is authorized to assert jurisdiction if the courts of the state in which the court is located could assert jurisdiction over the defendant. Also, Rule 4 authorizes federal courts to take jurisdiction in certain limited situations, including impleaded parties served within 100 miles of the courthouse, when authorized by a federal statute, and in federal question cases over parties who have minimum contacts with the United States as a whole (not necessarily the state where the court sits).

Jurisdiction over property or in rem jurisdiction means that a court can exert authority over real or personal property within its boundaries.

Case in Point

Suppose a dispute arises over a yacht in dry dock in Charleston, South Carolina. One party is a resident of Maryland. The other party to the dispute resides in Vermont. Although a South Carolina court does not have in personam jurisdiction over the parties, it does have in rem jurisdiction over the yacht.

A court can also exercise quasi in rem jurisdiction over a person's property. It is a kind of jurisdiction exercised by a court over an out-of-state defendant's property that is within the area served by the court. This type of jurisdiction applies when a suit is against a defendant (person or entity) in which the property is not the source of the dispute.

Subject matter jurisdiction refers to the type of cases a court can hear or, if you like, a limitation on the types of cases a court can consider. In both the federal and state court systems, there are courts of general (almost unlimited) jurisdiction and courts of limited jurisdiction. An example of a federal court of general jurisdiction is a U.S. district court. Trial courts at the state level go by various names. An example of a state court of limited jurisdiction is traffic court. In both the federal and state court systems, a court's subject matter jurisdiction can be limited not only by the subject matter of the lawsuit but also by the amount of money in controversy.

The federal court system has exclusive jurisdiction over a few types of cases: patent, trademark, and copyright cases; admiralty cases; bankruptcy cases; federal criminal cases; claims against the United States; lawsuits in which one state sues another state; and cases involving treaties with foreign countries. State courts have jurisdiction over all cases that do not fall within the exclusive jurisdiction of the federal courts. States do have exclusive jurisdiction over a limited set of cases such as those dealing with wills, adoption, divorce, and juvenile matters.

Federal courts can also hear cases that are based on the U.S. Constitution, a treaty, or a federal statute because these raise federal questions. Federal district courts can also exercise jurisdiction over cases involving diversity of citizenship. Such cases may arise between (1) citizens of different states; (2) a foreign country and citizens of a state or of different states; or (3) citizens of a state and citizens or subjects of a foreign country. The amount in controversy must be more than $75,000. For purposes of diversity jurisdiction, a corporation or other business entity is a citizen of both the state in which it is incorporated and the state in which its principal place of business is located. Federal courts share jurisdiction of cases which involve a federal question and diversity of citizenship. When both state and federal courts have jurisdiction over a case it is called concurrent jurisdiction.

In a case involving concurrent jurisdiction, the plaintiff initially selects the court system in which the case is filed. If a plaintiff files a case in state court, the defendant has a right of removal. This right permits the defendant to try to move the case to a federal court. Sometimes a forensic accountant who has knowledge about a given court system can be of valuable assistance to an attorney and client who are trying to decide in which court system to proceed on a case.

Once a case is in the proper court system, venue determines which trial court in the system will hear the dispute. The concept of venue reflects the policy that a court trying a suit should be in a geographical neighborhood in which the incident leading to the lawsuit occurred or in which the parties involved in the dispute reside. If the location of the court where the case is started is an inconvenience for the defendant, or pretrial publicity may make it difficult to obtain an unbiased jury, the defendant may move for a change in venue.

Before a person or entity can start a lawsuit in court, the party must have a sufficient stake in the matter to justify seeking relief. A party must have a legally protected interest at stake in the litigation to have standing (or standing to sue). The party initiating a lawsuit must have suffered a harm or injury or been threatened by the action about which the suit is concerned. Standing to sue also requires that the controversy at issue be real and substantial, not hypothetical or academic.

The federal court system is a three-tiered model consisting of U.S. district courts or trial courts at the lowest level, circuit courts of appeal or intermediate appellate courts, and the U.S. Supreme Court. There is at least 1 federal district court in each state. Trial courts have the power to hear and decide cases when a lawsuit is first filed. In trial courts, disputing parties call witnesses and present evidence. Appellate courts have the authority to review decisions and findings of trial courts. Appellate courts handle mostly questions of law, not questions of fact. A question of law is one about an interpretation or application of a law or regulation. A question of fact is one about an event or attribute in a case. A jury decides questions of fact. In a bench trial (one without a jury), the judge decides both questions of fact and law. Appellate courts do not conduct trials, do not hear witnesses, and do not consider new evidence. In the United States, there are 13 courts of appeal or circuit courts. Each federal case that is appealed is heard by at least 3 appellate justices. The decisions of U.S. circuit courts are final in most federal cases but an appeal to the U.S. Supreme Court is possible.

The highest level of the three-tiered federal court system is the U.S. Supreme Court. This court is the court of last resort. It can review any case decided by any of the federal courts of appeal and it also has appellate authority over some cases decided in state courts (those involving a federal question). The court has nine justices. A party who wishes to bring a case before the U.S. Supreme Court files a petition for a writ of certiorari. The court will not issue a writ of certiorari (that is, agree to hear a case) unless at least four justices approve it. About 99 percent of petitions are denied.

No uniform state court structure exists as each state is free to design its own court system. Many states have a court structure similar to the federal system. Most state court systems include courts of general jurisdiction, courts of limited jurisdiction, intermediate appellate courts, and a high appellate or supreme court. Most states have a trial court of general jurisdiction in each county, district, or circuit. The names of these trial courts vary from state to state. Most, but not all, also have courts of limited jurisdiction such as traffic court, small claims court, probate court, and juvenile court. Intermediate appellate courts, analogous to the federal circuit courts of appeal, exist in about half the states. These courts hear many different types of cases: civil, criminal, and administrative. Every state also has a court of last resort or high appellate court. The decisions of each state's highest court (usually called a state supreme court or court of appeals) on all questions of state law are final. A state's highest court can only be overruled by the U.S. Supreme Court when a federal issue or question is involved.

Steps in Civil Litigation (Rules of Civil Procedure)

The U.S. litigation system is an adversarial one: a neutral fact finder—be it judge or jury—that receives evidence and hears arguments presented by opposing sides and then decides the case by applying law to the facts. In federal courts, the Federal Rules of Civil Procedure (FRCP) govern civil case proceedings. Most states' rules of civil procedure are similar to the federal rules.

The FRCP consists of 11 titles with each title containing individual rules. The sequence of rule numbers spans titles, with rule numbers ranging from 1–86. The list of 11 titles is as follows:

1. Scope of Rules; Form of Action
2. Commencing an Action; Service of Process, Pleadings, Motions, and Orders
3. Pleadings and Orders
4. Parties
5. Disclosures and Discovery
6. Trials
7. Judgment
8. Provisional and Final Remedies
9. Special Proceedings
10. District Courts and Clerks: Conducting Business
11. General Provisions

Commencing a Civil Suit

Filing a Complaint

The plaintiff commences a civil suit by filing a complaint in the appropriate court. The complaint contains a statement alleging the facts necessary for the court to take jurisdiction, a brief summary of the facts necessary to show the plaintiff is entitled to a remedy, and a statement of the remedy sought. In federal courts, allegations can be made only after reasonable inquiry and with a belief that the pleading is likely to have evidentiary support.[1] Complaints may be long or brief, depending on the case's complexity. In any event, a complaint must state sufficient facts to make it plausible, not just possible, that the plaintiff is entitled to relief. The complaint must be signed by the attorney. The signature on a pleading by a party or his attorney constitutes a certification by him that to the best of his knowledge, information, and belief, the evidentiary contentions have support. The signature also certifies that the claims or defenses are warranted by existing law.[2]

Joinder of Claims

FRCP 18(a) provides that a litigant asserting a claim for relief may join as many claims as he or she has against an adversary, regardless of subject matter. This is referred to as joinder of claims. Although there are no restrictions on the number or nature of claims that may be joined where a single plaintiff is suing a single defendant, the FRCP on joinder of parties impose limitations where there are numerous co-plaintiffs or co-defendants. FRCP 20(a) indicates that when a lawsuit has multiple parties, at least one of the claims by or against each party must arise out of the same transaction, occurrence, or series of transactions and occurrences and must involve a common question of law or fact affecting each of the parties joined. Hence, joinder of parties rules limits joinder of claims in multiparty cases to those which possess a subject matter relationship. A federal trial court may order separate trials to remedy any possible inconvenience or hardship.[3] A defendant, however, may move to have lawsuits with related claims consolidated into one trial.[4] The trial court has the authority to order separate lawsuits consolidated into one action if they involve a common question of law or fact.

[1] FRCP 11.
[2] Ibid.
[3] FRCP 20(b).
[4] FRCP 42(a).

Common sense is achieved by allowing parties to join as plaintiffs or to sue defendants jointly in a single action if FRCP 20(a) is satisfied. When a number of claims involve a single transaction or occurrence, and the same issue or issues must be litigated to resolve each claim, it is more efficient to resolve those issues in a combined action rather than in separate suits. Reaching a legal solution to issues in a single legal action avoids the possibility of inconsistent judgments on the same legal question.

Case in Point

If Barney sues Fred and recovers for fraud, but Wilma sues Fred for fraud and loses, two juries must have disagreed on whether Fred committed fraud.

These inconsistent outcomes reflect negatively on the court system and should be avoided where possible. If Barney's and Wilma's claims are tried together, such inconsistent results can be avoided. Only one finding on whether Fred committed fraud will be forthcoming.

FRCP 20(a) does not require parties to be joined whenever the criteria in the rule are met. Initially, the joinder decision is up to the plaintiffs. Plaintiffs may choose to sue some but not all defendants in one action and the remaining defendants in another lawsuit. If a party chooses not to join in a lawsuit with other plaintiffs, such party remains free to pursue his or her own claims in separate and distinct lawsuits.

A closer look at determining which parties may or are to be joined as plaintiffs or defendants means consideration of the FRCP that apply to compulsory and permissive joinder. Compulsory joinder rules address situations where parties must be joined (called indispensable parties) and those who should be joined if possible (called conditionally necessary parties). FRCP 19 states joinder is required for any person who has a material interest in the case if

1. in his absence, complete relief cannot be accorded those already parties; or
2. his interest is such that to proceed without him would be substantially prejudicial as a practical matter because it would
   a. impair his ability to protect his interest in later proceedings; or
   b. expose the parties already before the court to the risk of double liability or inconsistent obligations.

If one who must be joined cannot be made a party to the lawsuit (for example, he is outside the country and the federal court's jurisdiction), the court must decide whether the lawsuit can continue without him or should be dismissed. The court's decision is based on these factors:

1. The extent to which any judgment rendered in the action would be prejudicial to the interest of the absent party, or the interests of those already before the courts
2. The extent to which such prejudice could be lessened or avoided by protective provisions in the judgment, shaping the relief or other measures
3. Whether relief rendered in the person's absence would be adequate
4. Whether the plaintiff would have an adequate remedy if the action were dismissed for non-joinder.[5]

Fact patterns in which compulsory joinder may be an issue include, but are not limited to, multiple parties to a contract, multiple tortfeasors (for example, several defendants all who allegedly committed negligence against a plaintiff), co-owners of real property, real property litigation which involves enforcement of an interest in property (for example, a mortgage lien), shareholder derivative suit, and auditor liability suit filed by a non-client. If the plaintiff has failed to join necessary parties, the court will order that they be joined unless it is impossible to do so.

Permissive joinder rules apply to parties who may be joined (called proper parties). Under the FRCP, parties may be joined if

1. a right to relief is asserted by or against them jointly, severally (this means separately), or in the alternative;

[5] FRCP 19(b).

2. the right to relief arises out of the same transaction or series of transactions; and
3. there is at least one question of law or fact common to all parties to be joined.[6]

Each plaintiff is not required to possess an interest in every cause of action or claim put forward. The requirement of "same transaction or series of transactions" is broadly construed by federal courts. Some interrelation among the defendants' conduct usually suffices.

Case in Point

Where a plaintiff firm claims damage after two former employees allegedly committed trade secret infringement or espionage, a claim of doubt as to whether the damage was caused by the first or second former employee means joinder of both former employees is proper.

If a so-called common question or issue is not significant, a court may delineate the transaction narrowly to preclude joinder of claims where no important evidentiary relationship is present. If there are intertwined facts and joinder is permissible, then FRCP 18 indicates that each of the parties may propound as many claims as he or she has against any adversary.

A special type of joinder that deserves mention is known as impleader. FRCP 14 refers to this as third-party practice. The procedure permits a defendant to bring into a lawsuit a third party who is or may be liable for all or part of the plaintiff's claim against the defendant. Impleader under the FRCP is limited to those situations in which the defendant has a right to indemnification from the third party (that is, a defendant would have a legal right to collect some or all of any damages won by the plaintiff from the third party). Many courts do not allow a plaintiff to implead a defendant's insurer until after the plaintiff has obtained a judgment against the defendant. An impleaded third party may plead any defenses that the defendant may have against the plaintiff's claim and may be involved fully in defending against the cause of action. The third party may be granted a separate trial on any issue to prevent undue confusion or prejudice. If the defendant files a third-party complaint of impleader within 14 days after he serves his original answer, no leave of court is necessary.[7]

Intervention

FRCP 24 permits a process or procedure known as intervention. This procedure permits a nonparty to become a party to a lawsuit to protect his or her interests. Different types of intervention are allowed under the rule. Intervention is granted as a matter of right where a federal statute confers an unconditional right to intervene (for example, when the intervenor claims an interest in the property or transaction that is the subject matter of the lawsuit). One must have a significantly protectable interest to have intervention of right. An intervenor must be in a position such that resolution of the litigation would impede or impair his or her interest. Permissive intervention is permitted by a court within its discretion if (1) a federal statute confers a constitutional right to intervene or (2) a question of law or fact in common with the main action is part of the applicant's claim or defense. Any judgment rendered after intervention is binding on the intervening party as if he or she had originally been a party to the lawsuit.

FRCP 22, a device called interpleader, permits a party against whom conflicting claims are asserted with regard to the same debt or asset to join all the claimants in the same action. This allows the claimants to litigate so a court can decide which, if any, has a legitimate claim to the debt or asset. Once the party who held the debt or asset has deposited or awarded custody to the court, he or she can be released or discharged from the litigation. The party against whom claims are asserted may initiate the interpleader action or may interplead in any pending action among the claimants. For FRCP 22 interpleader to be invoked, there must be complete diversity of citizenship between the plaintiff (one who possesses or has custody of the debt or asset) and all of the adverse claimants or a federal question

[6] FRCP 20(a).
[7] FRCP 14.

must be involved. Alternatively, the parties may avail themselves of statutory interpleader under 28 U.S.C. sections 1335, 1397, and 2361, which contain special provisions as to jurisdiction, service of process, and venue.

Case in Point

An insured passes away who has a $500,000 life insurance policy. A named beneficiary and two third parties all claim the proceeds. The life insurer may interplead all parties in a legal action and deposit the $500,000 with the relevant court.

Moving the Civil Action Forward

After the complaint has been filed, the sheriff, deputy, or another process server serves a summons and a copy of the complaint on the defendant. The summons notifies the defendant that he or she must answer the complaint within a set time period. Service of process refers to service of the initial notice to the defendant of the filing of a lawsuit against him or her. Service of this initial summons notifies the defendant he or she has been sued and informs him or her that the court intends to adjudicate his or her rights in the matter.

All courts, state and federal, have detailed provisions governing service of process. FRCP 4 specifies in detail what documents must be served on the defendant, the contents of the summons, how the papers must be served, when they must be served, who must serve them, and how the requirement of service may be waived. FRCP 4 sets forth the methods for serving process on various types of defendants, including individuals, corporations, and other entities; the U.S. government; and other governmental defendants. These provisions apply whether the defendant is served in the district where the lawsuit is filed or elsewhere.

Five different methods apply to serving process on individuals. Three routine methods include service by personally delivering the summons and the complaint to the defendant, leaving copies of the complaint and summons at the defendant's home with a person of suitable age and discretion residing there, or delivering the papers to an agent appointed by the defendant to receive service of process. A fourth option is to serve a defendant according to the provisions governing service of process on individuals in the courts of the state where the federal court sits. A fifth alternative for defendants who are served outside the state where the lawsuit is underway is service according to the law of the state where the defendant is being served.

The permissible methods of service of process on corporations and other entities are to perform service in the manner prescribed by the FRCP for individuals through delivery of a copy of the summons and complaint on an officer, a managing or general agent of the entity, or an agent authorized to receive service of process. Also, service may be made by a method prescribed by the law of the state where the federal court resides or by a method set forth in the law of the state in which process is to be served.

The person making service must make proof of service (called return of service) by promptly completing an affidavit with the court setting forth the manner in which service was made. Proof of service is often placed on the summons itself.

Importantly, many other papers or documents get served on parties and witnesses in lawsuits in addition to the original complaint and summons. All motions and other pleadings, discovery requests, and other papers filed with the court must be served on each party. Almost all such papers may be served under FRCP 5, which authorizes service of papers subsequent to the complaint by mailing them to the party's attorney. If the person has no attorney, then service may be accomplished by handing it to the person, leaving it at the person's office with a clerk or at the person's home with someone of suitable age and discretion, mailing it to the person's last known address, sending it by electronic means if the person consented in writing (in which case service is complete upon transmission), or delivering it by any other means that the person consented to in writing.

We must distinguish the concept of service of process from the notion of personal jurisdiction. A challenge to service of process under FRCP 12(b)(5) attacks the adequacy or validity of the method used by the plaintiff to provide the defendant notice of the legal action, not the power of the court, to exercise personal jurisdiction. Raising an issue with the exercise of personal jurisdiction by the court would fall under FRCP 12(b)(2).

The Defendant's Response

Either in the answer or by separate motion, the defendant may attack the validity of the complaint in several ways.[8] A **motion to dismiss** is often made by a defendant before filing an answer. Grounds for dismissal include the following:

- Lack of jurisdiction over the subject matter
- Lack of jurisdiction over the person
- Improper venue
- Insufficiency of process
- Insufficiency of service of process
- Failure to state a claim upon which relief may be granted
- Failure to join a necessary party

The defendant is not compelled to file a motion under FRCP 12, but if he or she does, he or she must include all defenses and objections that could then be raised by motion. If the defendant omits an available defense or motion, he or she may not make a further motion on the omitted ground.[9] The following defenses are waived unless raised by motion or in the first responsive pleading: objections to the form of the complaint and objections to venue, personal jurisdiction, or sufficiency of process.[10] If a judge grants a motion to dismiss, the plaintiff is usually given time to file an amended complaint.

When the defendant files a FRCP 12(b)(6) motion to dismiss for failure to state a claim, the court assumes the facts in the complaint are true. The court assesses whether the complaint supports the legal claim that would entitle the plaintiff to relief. When a claim is based on fraud, the FRCP requires the plaintiff to plead with particularity.[11] Examples include common law fraud and securities fraud. Trial courts look to whether the plaintiff has given specifics concerning the date and content of representations on which a fraud theory is based. In cases involving several defendants, plaintiffs may have to specify the involvement of each defendant that purportedly gives rise to liability. Most federal securities fraud claims must specify each statement alleged to have been misleading and state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind or intent (Private Securities Litigation Reform Act).

FRCP 12(e) allows a narrow attack on a pleading known as a motion for a more definite statement (see box 3.1 for pleadings allowed under FRCP 7[a]). Such a motion is appropriate only if the pleading being attacked requires a response. This motion will be granted only where the pleading under attack is so vague and ambiguous that it would be unreasonable to require the moving party to respond. FRCP 12(f) allows for either party to file a motion to strike. This is permitted for an insufficient defense or any redundant, immaterial, impertinent, or scandalous matter. Such a motion will usually be denied unless the claims challenged have no possible relation to the dispute.

Box 3.1 Pleadings Allowed Under FRCP 7(a)

Plaintiff's Pleadings	Defendant's Pleadings
Complaint	Answer, which may contain a counterclaim against plaintiff
Answer to counterclaim	Not applicable

The defendant's response to the complaint is an **answer**. In the answer, the defendant states in short and plain terms defenses to each claim asserted and admits or denies each count of the complaint.[12] Averments in a complaint, other than those concerning the amount of damages, are deemed admitted if the allegation is not denied in the

[8] FRCP 12(b).
[9] FRCP 12(g).
[10] FRCP 12(h)(1).
[11] FRCP 9(b).
[12] FRCP 8(b).

answer.[13] Affirmative defenses must be explicitly pleaded (not just generalized) in the answer. In addition to defenses, if the defendant has a claim against the plaintiff, he must plead that claim as a **counterclaim**.

Either party may attempt to get a case dismissed before trial through the use of various pretrial motions. Two important pretrial motions are the motion for judgment on the pleadings and motion for summary judgment. A motion for judgment on the pleadings challenges only the sufficiency of the adversary's pleading. Such a motion may be made by either party at any time after the pleadings have closed, but within such time as will not delay the trial.[14] A judge will grant the motion only when there is no dispute over the facts of the case and the only issue to be resolved is a question of law. The judge may only consider the evidence contained in the pleadings.

In a motion for summary judgment, the court may consider evidence outside the pleadings, such as sworn statements (affidavits) by parties or witnesses.[15] Material acquired or developed through discovery, whether by interrogatory, deposition, document request, or request for admissions, may be used in connection with a motion for summary judgment. A motion for summary judgment can be made by either party. If both the plaintiff and defendant move for summary judgment, the showing by each party must be evaluated by the court independently. Such a motion will be granted only if there is no genuine material issue of fact.

Case in Point

Jonathan, the plaintiff, alleges in a complaint that Marcia, the defendant, made defamatory statements about him to two people. Marcia moves for summary judgment with affidavits from both persons saying that Marcia never made such statements to them and her own affidavit denying that she ever made such a statement to another. The affidavits show that there is no factual dispute warranting a trial because there never was a publication.[16]

A defendant may move for summary judgment at any time and the plaintiff may move 20 days after commencement of the lawsuit.[17] In a summary judgment situation, the court should make all reasonable inferences in favor of the opposing party. A principle that is significant in fraud-related litigation is that if issues of motive, intent, or state of mind are presented, then summary judgment is particularly inappropriate. Evaluations of a person's motive are made best based on evidence presented or admitted at trial. When the opposing party cannot provide materials in opposition to the motion, the court may continue the hearing to permit such materials to be acquired.[18]

Parties

A civil suit can be brought only in the name of the real party in interest.[19] The real party in interest rule means that the one suing must use his or her own name as plaintiff (except under special circumstances) and has a legal right to enforce the claim in question under substantive law. The plaintiff has the burden of proving that he or she is a real party in interest.

Certain parties have a right to sue as a representative despite having no true or real interest in the claim at issue (for example, guardian or trustee). Various situations arise in which a problem may exist in determining a real party in interest: assignments, subrogation, trusts, executors and administrators, principal and agent, and third-party beneficiaries.

[13] FRCP 8(b)(6).
[14] FRCP 12(c).
[15] FRCP 56(e)(1).
[16] Dyer v. MacDougall, 201 F. 2d 265 (2nd Cir. 1952).
[17] FRCP 56(a) and (b).
[18] FRCE 56(f).
[19] FRCP 17.

In certain multiparty situations, known as class actions, one or more persons are allowed to sue on behalf of themselves and all others who have suffered similar harm from substantially the same wrong. Under FRCP 23(a), the following four conditions must be satisfied in any type of class action suit:

1. The class is so numerous that joinder of all members is impracticable.
2. There are questions of law or fact common to the class.
3. The claims or defenses of the representative parties are typical of the claims or defenses of the class.
4. The representative parties will fairly and adequately protect the interests of the class.

There is no fixed minimum number required to make a class too numerous for joinder of all members individually. A class must be defined with sufficient clarity that its members can be identified. If the claims put forth in a class action suit emanate from state law and class members live in different states with non-uniform laws, common questions might not be present. Also, the claims of the class representative must be typical of the whole class.

If all four of the preceding conditions are present, the class action may be based on any one of the following grounds under FRCP 23(b):

1. If the prosecution of separate actions by or against individual class members would create a risk of
   a. establishing incompatible standards of conduct for defendant through inconsistent adjudications or judgments; or
   b. substantially impairing the interests of other members of the class.
2. If the basis on which the opposing party has acted applies generally to the class and declaratory or injunctive relief would benefit the entire class.
3. Questions of law or fact common to class members predominate over questions affecting only individual members and a class action is superior to other available methods for solving the controversy.

With regard to making a decision in number 3, factors relevant to the court's findings include

1. the class members' interests in individually controlling their own cases;
2. the extent and nature of any litigation concerning the controversy already begun by or against the class members;
3. the desirability or undesirability of concentrating litigation in a single lawsuit before a single court; and
4. the likely difficulties in managing a class action.

Under FRCP 23(c), at an early practicable time after the class action filing, the court must determine whether to certify the case as a class action. The class certification order is tentative. Before trial, the court may revise class certification by decertifying or altering class configuration. Class counsel must be appointed at the same time as class certification. Unnamed members of the class may opt out, thereby excluding themselves from the binding effects of the class action.

Trial

A civil trial can be held in federal court with or without a jury. In certain types of cases, such as a tort action seeking an injunction, no right to a jury trial exists. If there is no jury, the judge determines the truth of the facts in the case. One of the litigants must request a jury or the right is waived. In jury trials, FRCP 48 provides that a jury of at least six members will be seated. The **verdict** of a federal civil jury must be unanimous (FRCP 48).

The process by which a jury is selected is called the **voir dire**. Voir dire consists of oral questions from both sides' counsel to the prospective jurors. The questions are aimed at discovering whether jurors are not impartial or have connections with a litigant or witness. A litigant may challenge a juror if it seems that the juror has an event or interest to make the juror biased or partial (challenge for cause). No limit is set on the number of challenges for cause. Each litigant is also entitled to a limited number of challenges without a showing of cause (that is, a **peremptory challenge**). In federal courts, each litigant is entitled to three peremptory challenges. In many districts, the judge may control the voir dire examination by asking questions of jurors. The judge is under an obligation to ask all proper questions submitted by counsel to allow them to make use of their peremptory challenges.

The party opening each phase of a civil trial is usually the party who has the burden of proof. The decision to accord the right to speak first and last is within the discretion of the trial judge. The usual sequence of a civil trial is: opening statement of the plaintiff, opening statement of the defendant, presentation of evidence by the plaintiff (with cross examination of each witness by the defendant), presentation of evidence by the defendant (with cross examination of each witness by the plaintiff), presentation of rebuttal evidence by the plaintiff and then the defendant, closing argument by the plaintiff, closing argument by the defendant, instructions by the judge to the jury, and jury verdict.

Proceedings in federal court are governed by the Federal Rules of Evidence. Failure to object to the admission of an item of evidence usually waives the ground for objection. The plaintiff must produce sufficient evidence tending to prove each element of the **prima facie case**. If the plaintiff fails to meet this burden, the defendant is entitled to **judgment as a matter of law (JMOL)**. Either party, however, may move for JMOL when the adversary has been fully heard.[20] The general standard for granting a motion for JMOL is whether there is a legally sufficient evidentiary basis on which the jury could find for the moving party. In a nonjury trial, after any party has been fully heard with respect to an issue, the court may enter JMOL against that party.[21]

Case in Point

A contract for the sale of real estate provides for the purchase price of $100,000. The buyer, Brutus, does not pay and sues for reformation of the contract to reflect the alleged agreed-upon price of $70,000, asserting a typographical error was made. The seller, Caesar, files an answer arguing that the contract accurately reflects the price. At a jury trial, an appraiser testifies on behalf of Brutus that the real estate is worth $75,000. Caesar testifies that the agreed price is $100,000. The jury returns a verdict for Caesar and Brutus moves for JMOL. The court grants Brutus's motion. The trial court's ruling is in error. A reasonable jury could have found for Caesar.

FRCP 51 indicates that counsel's argument to the jury or the judge occurs at the close of evidence presentation and before the judge instructs the jury on the applicable law. Lawyers are subject to the following constraints when making a closing argument: (1) statements or comments must be based on the evidence; (2) closing arguments have to be within the limits of substantive law; and (3) lawyers may not appeal to the prejudices of the jury. Before a case is submitted to a jury, the trial judge instructs the jury on applicable law. The jury's role is to decide issues of fact and the judge's role is to decide issues of law. The judge may not give an instruction that assumes a fact in dispute. The judge must explain to the jury which party has the **burden of persuasion** in regard to each issue of fact. In a civil case, the trier of fact must be convinced that a fact is more probable than not to resolve an issue in favor of that party (that is, **preponderance of the evidence**). However, in regard to issues of fraud, duress, or undue influence, the trier of fact is instructed to find for the party having the burden of persuasion if the evidence is **clear and convincing**. This is a more difficult burden to meet than preponderance of the evidence.

Verdicts and Judgments

After a trial, a jury retires to a private room to deliberate. The jury attempts to reach a decision, unanimous or otherwise, on guilt involving a crime or damages in the case of a civil suit. In federal court, FRCP 48 requires the jury to render a unanimous decision. If a jury cannot reach a unanimous decision, then the jury is "hung." A jury verdict is a formal fact-finding made after application of the relevant law to the facts that lay out the collective decision of the jurors. A jury verdict is not binding on a court. In a criminal case, the verdict is either guilty or not guilty. Different counts or legal theories or charges in a criminal case may have different verdicts. In a civil case, there is no verdict of guilty or not guilty, but a finding for the plaintiff or for the defendant with different verdicts possible on different counts or legal theories.

[20] FRCP 50(a).
[21] FRCP 52(c).

The verdict form used in the majority of trials is the general verdict, which requires only that the jury declare which party wins and the amount of damages, if the plaintiff wins, in a civil trial and a finding with regard to guilt or non-guilt in a criminal trial. The jury neither states its findings of fact nor explains its application of the law to the facts. Another type of verdict form is the special verdict. In this instance, the jury makes specific, written findings of fact in response to questions posed by the trial judge.

Once the judge has taken the jury's verdict into consideration and rules once and for all, such a ruling is the final judgment. In most cases, the judge enters judgment in agreement with the jury's verdict.

Post-Trial Motions

In federal court, a renewed motion for JMOL is a device for nullifying a jury verdict that is not supported by the evidence.[22] The standard for this motion is the same as a motion for JMOL. A renewed motion for JMOL may not be entered by a federal court on its own motion. In federal court, a renewed motion for JMOL must be made within 10 days after entry of the judgment after the verdict.[23]

In federal court, a motion for renewed motion for JMOL cannot be considered unless the moving party made a motion for JMOL after the opposing party has been fully heard on the issue raised by the motion.[24] See box 3.2 for a list of motions after verdict or judgment.

Box 3.2 Motions After Verdict or Judgment

Motion	Circumstances	Timing
Motion for a new trial	Verdict contrary to law or weight of evidence, erroneous evidentiary ruling, misconduct	No later than 10 days after judgment
Renewed motion for judgment as a matter of law	Verdict could not have been reached by a reasonable fact finder. The moving party must have made a prior motion for judgment as a matter of law (JMOL).	No later than 10 days after judgment
Motion to amend judgment	To correct legal errors	No later than 10 days after judgment

A federal court may order a new trial in a jury case "for any reason for which a new trial has heretofore been granted in an action at law in federal court."[25] A new trial may be granted after a nonjury trial for which a rehearing has been granted in an equity suit.[26] See box 3.3 for grounds for a new trial in civil cases.

[22] FRCP 50(b).
[23] FRCP 50(b).
[24] FRCP 50(b).
[25] FRCP 59 (a)(1)(A).
[26] FRCP 59.
[27] FRCP 59(d).

Case in Point

A false answer by a juror on voir dire examination may allow for a new trial.

A new trial may not be ordered, however, for misconduct that is not prejudicial or is adequately corrected by appropriate instructions from the judge (FRCP 61). A federal trial judge may grant a partial new trial (that is, a retrial limited to a given issue). A federal court may grant a new trial on its own motion.[27]

Appellate federal courts may reverse the denial of a motion for new trial if it is determined that the refusal to grant the motion is an abuse of discretion. This is a relatively high standard to satisfy. Appellate courts conduct a more probing review of fact finding by judges in bench trials than fact-finding in jury trials.[28]

Box 3.3 Grounds for a New Trial in Civil Cases

Jury Trials

A new trial may be granted after a jury verdict in civil trials on the following grounds:

1. Prejudicial misconduct by the court, jury, or opponent
2. Incorrect evidentiary rulings
3. A party is unfairly surprised by evidence presented at trial that materially affected the outcome
4. New significant evidence is discovered and could not have been acquired before trial by due diligence
5. The verdict is contrary to law (that is, weight of evidence)

Nonjury Trials

A new trial motion may be granted on the following grounds:

1. Newly discovered evidence
2. Erroneous findings of fact
3. Error in running a trial

Enforcement of Judgments

In a civil case, when the defendant fails to pay as required after a trial, the plaintiff must enforce the judgment. The plaintiff's lawyer goes to the clerk of courts and obtains a writ of execution. This is a judicial order authorizing a law enforcement official to seize and sell any of the debtor's nonexempt real or personal property within the court's jurisdiction to satisfy the judgment. Before a law enforcement official can act on a writ of execution, the plaintiff's attorney usually must provide instructions for levy. Such instructions identify specific property and its location for law enforcement to be able to seize it.

Remedies

In civil actions, the main form of relief is money damages. These are considered legal remedies. Sometimes, however, the appropriate form of relief is equitable, not legal. The two main forms of equitable relief are injunctions and orders for specific performance. An injunction is an order of the court prohibiting a party from doing something.

Case in Point

Johnson, a former employee of Axis Insurance Agency, has misappropriated a customer list (a trade secret) from Axis. The owner of Axis Insurance brings a trade secret infringement action in court, proves his case, and the court issues an injunction against Johnson to prevent any further use of the customer list by his new employer.

[28] FRCP 52(a)(6).

A temporary restraining order (TRO) is a short-term, pretrial temporary injunction. A party must convince a judge that he or she will suffer immediate irreparable harm unless the order is issued. In some cases, a judge may issue such an order without informing the other parties and without holding a hearing. A TRO only lasts until the court holds a hearing on whether or not to grant a preliminary injunction. A court's decision on a TRO may not be appealed. FRCP 65(b) governs the issuance of TROs. A preliminary injunction is a court order made in the early stages of litigation which prohibits the party or parties from doing some act thereby maintaining the status quo until there is a final determination by the court. The party against whom a preliminary injunction is sought must receive notice and an opportunity to appear at a hearing to argue that the injunction should not be granted.[29] A preliminary injunction should be granted only when the requesting party is likely to be successful in a trial on the merits of the case and there is a substantial likelihood of irreparable harm unless the injunction is granted.

A decree of specific performance is an order from a court commanding a party to do something affirmative, typically to comply with a contract of some type. One of the most important equitable principles is that a court may only award equitable relief if legal relief is inadequate in the circumstances.

Three types of damages are available in tort cases: compensatory, nominal, and punitive. The primary type of damages is compensatory damages, designed to compensate the victim. Compensatory damages are awarded for costs of repairing damaged property, pain and suffering, medical expenses, and lost earnings. Attorneys' fees are not considered compensatory damages. Nominal damages are a small amount of money awarded to recognize that a defendant committed a tort in a case where the plaintiff suffered no compensable injuries. Nominal damages can be important because if a party is awarded such damages, the court may require the losing party to pay all court costs. Punitive damages are awarded both to punish conduct that is deemed egregious and to deter such outrageous behavior by others. Juries and judges usually consider the willfulness and outrageousness of a tort and the wealth of the defendant in awarding punitive damages.

A person who has been injured by a breach of contract may recover compensatory damages. In computing damages, a court will try to provide the aggrieved party with the benefit of the bargain. The idea is to place the victim in the position he would have been had the contract been performed as agreed. Usually compensatory damages include one or more of the following: loss in value, allowable consequential damages, and allowable incidental damages. A starting point for computing compensatory damages is the loss in value of the performance that the plaintiff could expect. The computation of the loss varies according to the type of contract involved. Consequential damages compensate for losses that happen as a result of the breach of contract. These damages occur as a result of some special or unusual circumstances of the particular breached contract. Lost profits from a breach of contract may be recovered as consequential damages if they are foreseeable and can be proven with reasonable certainty. Incidental damages compensate the aggrieved party for reasonable costs that he or she incurs after the breach to avoid further loss.

In a contract case, nominal damages are very small dollar amounts that are awarded when a technical breach of contract has occurred. The plaintiff has not suffered any actual damage or injury.

Contract parties may specify in their agreement that a specific sum shall be paid as damages in the event of breach. These are referred to as liquidated damages. A liquidated damages clause will be enforced if the amount specified is reasonable and actual damages would be difficult to ascertain.

Three other types of provisional remedies permitted under FRCP 64 are attachment, garnishment, and replevin. Attachment is a court order permitting a court officer, such as a sheriff, to seize a debtor's property. Under state statutes, a creditor who has an enforceable right of payment under law may obtain an attachment. Often a creditor seeks an attachment as a prejudgment remedy in a legal action. The attachment is not an independent action, but is ancillary to the civil action for money. A creditor may seek to attach the debtor's checking and savings accounts, certificates of deposit, or even personal or real property. An attachment can help ensure that a debtor does not sell or hide property in an attempt to avoid paying a debt. Attachment is typically used more by unsecured creditors. The creditor must usually post a bond with the court that covers the amount of the court costs along with any damage associated with a wrongful attachment. State statute usually establishes the amount of the bond. Any attachment order issued by a court directs the county clerk to issue a writ of attachment, a document authorizing a law officer to seize the subject property until the court makes a final decision.

[29] FRCP 65(a).

Garnishment is a court order that allows a creditor to seize money or property of a debtor that is being held by a third party. A garnishment order is often directed at a bank where the debtor has an account or at an employer who pays the debtor's wages. Under a garnishment order, the bank or employer takes part of the debtor's savings or wages and pays the creditor directly. A garnishment order may be obtained as a prejudgment or post-judgment remedy. Both federal and state laws restrict the amount of money that can be garnished. Only one wage garnishment is permissible at a time.

A person or business entity who claims that he is lawfully entitled to possession of personal property and that another entity wrongfully has possession can file an action in replevin. This action is based on an unlawful detention of personal property. The item of personal property has to be specifically identifiable. Often the plaintiff can recover the personal property before a judgment is rendered in the case by filing a bond or cash deposit with the court.

Appeals

An appeal is the procedure for obtaining a review by a higher court. The purpose of an appeal is to make sure that litigation has occurred in a proper manner. A case is not retried in an appeal. In the federal court system, 13 courts of appeal exist. Twelve possess territorial jurisdiction and the Federal Circuit Court handles patent cases and tort and contract claims involving the United States.

Usually, the party who hopes to raise an issue on appeal must make a timely objection to the trial court's handling of that issue. The party must state on the record the grounds for an objection (FRCP 46). The statutory right of appeal may be lost by express waiver, untimely assertion, voluntarily compliance with judgment, or acceptance of benefits. An appeal is started by filing a notice of appeal. A notice of appeal in a civil case must be filed within 30 days.

The appellate court usually closely scrutinizes decisions of law compared to findings of fact. If an issue is a pure question of law, the appellate court decides the issue from scratch. Findings of fact, whether based on oral or other evidence, must not be set aside unless clearly erroneous, even in bench trials (FRCP 52).

Appellate courts apply some version of the **harmless error** doctrine. Under this rule, trial court results will be reversed only if the appeals court concludes there is a substantial likelihood that the error made a difference in the outcome.

Federal courts apply some form of the final judgment rule. The idea is that an appeal is allowed only after all the issues have been finally decided by the trial court. This rule means that usually, with some exceptions, the loser on one or more issues cannot appeal until the entire case has been finished at the trial court level. An appeal that is taken when no final judgment has been entered is an interlocutory appeal.

Res Judicata

The doctrine of **res judicata** is meant to preclude re-litigation of cases between the same parties regarding the same issues and to preserve the binding nature of a court's decision. Res judicata does not prevent appeals to a higher court. Also, there are limited exceptions to res judicata that permit a party to attack the validity of the original judgment in the same court. These exceptions are based mostly on procedural or jurisdictional issues. The doctrine of res judicata has two elements: (1) claim preclusion and (2) issue preclusion.

Claim preclusion prevents reassertion of that claim in a subsequent suit. Preclusion not only prevents re-litigation of a claim, but sometimes re-litigation of issues of fact resolved in a prior proceeding. Before any judgment has preclusive effect it must be final, on the merits or substance, and valid. Claim preclusion applies to all or any part of a transaction, or series of connected transactions, out of which the legal action arose. In federal courts, once a judgment is entered it is considered to be final even though an appeal is pending. The judgment remains final until reversed or modified by an appellate court. A judgment is on the merits or substance if the claim has been tried and determined. This would include a decision by a judgment on the pleadings, summary judgment, and directed verdict. A judgment is deemed valid unless the court lacked subject matter jurisdiction, the defendant was not accorded due process, or the court lacked personal jurisdiction.

Issue preclusion means that issues actually litigated and decided between the parties are binding in later actions that involve the same claim. An issue is essential or vital to a court's decision in a former action only if it seems that the judgment could not have been reached without deciding the issue. An issue decided in a prior judgment or adjudication must be identical, not just similar, to the one in the case at bar.

Steps in a Criminal Proceeding

Criminal Litigation

In the federal justice system, the Federal Rules of Criminal Procedure (FRCrP) play an important role in the regulation of the criminal process. The FRCrP deal mostly with court procedures. The FRCrP provide rules only for the facets of the investigative process that directly involve the courts (that is, issuance of warrants). The rules also address procedures for challenging the legality of investigative practices, such as motions to suppress. However, the supervisory power of the U.S. Supreme Court has become involved in the process of criminal procedure.

The supervisory power was relied upon to establish general procedural standards for such items as discovery and disclosure, jury selection, contempt proceedings, and allowable scope of cross examination. In some decisions, the Supreme Court's reasoning has constitutional overtones. Federal court decisions that address such matters as search and seizure, the privilege against self-incrimination, and the right to counsel emanate from the Bill of Rights (the first 10 amendments to the U.S. Constitution) but are part of criminal procedure.

Hence, rules or principles of federal criminal procedure consist of the FRCrP and court decisions involving defendants' constitutional rights that determine acceptable law enforcement practices. We shall make reference to both sources in our discussion of federal criminal procedure.

Arrest

When a police officer has **probable cause** to believe that a suspect has committed a crime, the officer may make an arrest. The issue is whether the defendant has been taken into custody by a physical application of force by a police officer or submission to an officer's show of force. Because an arrest is a seizure, all arrests must satisfy the requirements of the Fourth Amendment.

The Constitution requires that an arrest (with or without a warrant) be based upon probable cause. This requirement is satisfied when, at the time of arrest, the facts and circumstances within the officer's knowledge are sufficient to warrant a prudent person to believe that the suspect had committed or was committing an offense. However, an unlawful arrest, by itself, has no impact on a subsequent criminal prosecution. Of course, evidence found during a search incident to an unconstitutional arrest will be suppressed.

Police need not obtain a **warrant** before arresting a person in a public place even though one could have been obtained,[30] as long as probable cause exists. A presumption exists in the law, however, that warrantless in-home arrests are unreasonable unless the arrestee consents or the government demonstrates exigent circumstances (for example, fleeing suspect or destruction of evidence).[31]

The law recognizes that not all arrests (or seizures) require probable cause. Limited stops and detentions (known as stop and frisk) may be justified by three factors: (1) observation of unusual conduct; (2) reasonable suspicion that criminal activity may be afoot; and (3) the ability to point to specific and articulable facts to justify that suspicion.[32] An investigatory stop must be temporary and no longer than necessary to effectuate its purpose.

Booking

At the police station, the arrestee is entered into the police blotter. A police officer does the following involving the suspect:

- Takes the arrestee's personal information
- Records information about the suspect's alleged crimes
- Does a search of the suspect's criminal background, fingerprints, and photographs
- Searches the suspect
- Confiscates any personal property on the arrestee
- Places the suspect in a holding cell, if necessary

[30] *U.S. v. Watson*, 423 U.S. 411 (1976).
[31] *Payton v. New York*, 445 U.S. 573 (1980).
[32] *Terry v. Ohio*, 392 U.S. 1 (1968).

First Appearance

An arrestee is taken before a judicial officer for an initial or first appearance. The judicial officer will inform the accused about the charges, apprise him of his right to refrain from self-incrimination, and appoint counsel, if necessary. The official may set **bail** or release the accused without bail.

At a bail hearing, a judicial officer decides what conditions, if any, to set for the arrestee. When a warrantless arrest is made, the Supreme Court decision in *Gerstein v. Pugh*[33] requires a judicial determination of probable cause, presumptively within 48 hours. A probable cause analysis is required only when an arrestee faces a significant pretrial restraint on liberty.

Preliminary Hearing

The preliminary hearing is distinct from an initial appearance, bail hearing, or Gerstein decision. The preliminary hearing usually occurs after these other proceedings, is aimed at evaluating the prosecutor's charging decision, and is adversarial in nature. Such a hearing, however, is not constitutionally required. In the federal criminal system, the arrestee is entitled to a preliminary hearing to decide whether to take the case to a **grand jury**, unless an **indictment** is first obtained. FRCrP 5.1(a)(2) states that the preliminary hearing must be held no later than 10 days after the first appearance if the arrestee is in custody and no later than 20 days if not in custody (unless already indicted).

The arrestee has a right to counsel and a chance to challenge the prosecution's case at the preliminary hearing. FRCrP 5.1(e) states that the defendant may not object to evidence here on the ground that it was unlawfully acquired. Also, the FRCrP permit cross-examination of adverse witnesses but do not authorize any further defense presentation of evidence.

Grand Jury Indictment or Information

The Fifth Amendment provides that anyone charged with a federal felony may only be tried following issuance of a grand jury indictment. The latter is a written accusation submitted to a grand jury by a prosecutor that charges a person with a crime. The indictment must contain the elements of the offense. One that follows the language of the statute is sufficient as long as the statute is written clearly. Also, FRCrP 8(a) indicates that an indictment (or **information**) can charge two or more offenses that are connected together in their commission or are of the same or similar character. FRCrP 8(b) states that two or more defendants may be charged in the same indictment (or information) if they participated in the same transaction or series of transactions charged.

A federal grand jury can range in size from 16 to 23 members. The grand jury decides whether or not probable cause exists to issue an indictment against a defendant. A simple majority vote is sufficient for an indictment to issue. A putative defendant has no right to appear in front of the grand jury or to be represented by counsel in the grand jury room.

Grand juries serve both an investigatory function and a screening function. For investigatory purposes, grand juries gather evidence actively by summoning witnesses and compelling production of tangible evidence in order to determine whether there are grounds for charging someone with a crime. Unlike courts, a grand jury defines its own inquiry and can initiate an investigation on mere suspicion of illegal activity or even because the grand jury wants assurance that the law is not being violated. The grand jury need not identify the person it suspects or even the nature of the offense it is investigating. In doing its screening function, the grand jury hears the prosecutor's evidence and then decides whether to return or not return an indictment. A grand jury has investigatory powers not available to law enforcement.

The grand jury can exercise the subpoena power to compel the appearance of witnesses and the production of documents and other tangible evidence (a subpoena duces tecum). A grand jury using the subpoena power can be more effective than requesting the information be supplied voluntarily. A grand jury subpoena is backed by the contempt power. The use of a grand jury subpoena to obtain tangible evidence or compel testimony of a witness does not have to be based upon probable cause.

[33] 420 U.S. 103 (1975).

Another advantage of a grand jury investigation is that it allows a prosecutor to grant immunity to obtain testimony or evidence. A grant of immunity, given before a witness testifies, protects the witness from being prosecuted in certain instances. Usually a prosecutor must obtain a court order to immunize a witness. Two types of immunity exist: transactional and use and derivative use immunity. Transactional immunity means that a witness may not be prosecuted for any transaction about which he or she has given immunized testimony. One who testifies under a grant of use and derivative use immunity can be prosecuted for events that were the subject of testimony, but the prosecution must show that its evidence was obtained independently from any lead from the protected testimony.

The grand jury can insist on the production of witnesses not put forth by the prosecutor. Grand jurors can use their own personal knowledge in deciding whether to issue an indictment. Grand jurors can also ask their own questions. Furthermore, grand jury witnesses may not bring their attorneys into the grand jury room. Such attorneys can be stationed outside the grand jury room and consulted during grand jury testimony.

Grand jury proceedings are not open to the public and most participants in the grand jury process are sworn to secrecy. FRCrP 6(e)(3), however, contains some limited exceptions to this secrecy requirement. This rule authorizes disclosure to members of the prosecutorial team for the purpose of enforcing the criminal law. FRCrP 26.2 mandates disclosure to the defendant of the grand jury testimony of witnesses who testify at trial.

The principles that regulate a challenge to an indictment based on grand jury testimony were laid down in *Costello v. U.S.* (350 U.S. 359 [1956]). The U.S. Supreme Court ruled that an indictment based entirely on inadmissible evidence did not violate the Constitution or standards governing the grand jury. A justification for this holding is that the grand jury needs to hear the same evidence that is available to the prosecutor.

Arraignment

After the indictment has been filed, the accused is arraigned. He or she is brought before the trial court and asked to enter a plea.

Pretrial Motions

Defense counsel has the opportunity to file various pretrial motions. An example is a motion for change of venue. In cases where extensive pretrial publicity has made it almost impossible to find an impartial jury, a change of venue may be granted. Often the most important pretrial motion, however, is a motion to suppress. See box 3.4 for a summary of pretrial hearings.

Box 3.4 Summary of Pretrial Hearings

	Gerstein Hearing	Initial Appearance	Preliminary Hearing	Arraignment
Purpose	To determine the existence of probable cause, if necessary	To inform the accused of criminal charges; to appoint counsel, if required; and to set bail	To evaluate the prosecutor's charging decision	To enter a plea
Adversarial	No	No	Yes	No
Timing	Right after or within 48 hours of arrest	Set by statute	After Gerstein hearing, initial appearance, but no later than 10 days after first appearance	Set by statute, but after indictment

In many cases, an accused seeks to suppress or prevent the admission of evidence at trial on the grounds that the accused's constitutional rights have been violated. If a trial court determines that an accused's constitutional right has been violated, the evidence involved is excluded (in other words, the evidence may not be admitted at trial). More specifically, the **exclusionary rule** states that evidence obtained by an unconstitutional search or seizure (the most frequently litigated right) is not admissible in a criminal proceeding against the victim of the search or seizure as proof of guilt. Also, other evidence that has been acquired, directly or indirectly, as a result of an unconstitutional search or arrest (called fruit of the poisonous tree) must be excluded from admission as well (unless the government can break the link between the unconstitutionally obtained evidence and the other or indirect evidence).

The Fourth Amendment forbids the government from performing unreasonable searches (intrusion upon one's privacy) and seizures (government control over a person or item of property). The Fourth Amendment offers protection only against government conduct (state action) and not against acts by private persons. Reasonable searches and seizures may be performed by the police for instrumentalities of crime, fruits of crime, contraband, and the mere evidence of crime.

The Fourth Amendment protects only those who possess standing. This refers to a person with an expectation of privacy in the place searched or the item seized. One who does not have standing may not challenge a search or seizure. A person has standing whenever that person owned or had a right to possession of the place searched, the place searched was the person's home, or the person was an overnight guest of the owner of the place searched. In sum, an assessment of the totality of the circumstances must be done to ascertain whether one has standing.

Case in Point

Donald placed drugs in a friend's handbag. The friend had to empty the handbag's contents onto a table and drugs fell out among other items. Donald took the drugs and they were later admitted against him in a drug case. Donald asserted standing based on ownership of the seized property. The U.S. Supreme Court ruled that mere ownership of the seized property is not dispositive of the issue of standing. A court must consider the totality of the circumstances.[34]

A warrant is required before a search or seizure may be undertaken. Searches performed without a warrant are not constitutional unless they meet one of the six exceptions to this requirement, as show in box 3.5.

Box 3.5 Exceptions to Search Warrant Requirement

Search warrants are not required in the following situations:

- A search incident to a valid arrest
- Exigent circumstances, such as hot pursuit of a suspect
- Consent to a search
- Items in plain view (to the naked eye) when police are legitimately on the premises
- Stop and frisk
- Searches of vehicles when the occupant(s) was validly arrested, police have probable cause, or the vehicle contains fruits or instrumentalities of crime

[34] *Rawlings v. Kentucky*, 448 U.S. 98 (1980).

Case in Point

The police enter Dexter's house under a valid search warrant to look for documents that demonstrate political bribes, and while in the house they observe illegal automatic weapons on the kitchen counter. The weapons may be seized under the plain view exception.

Searches and seizures are one of the most highly litigated areas of criminal procedure because they are so fact specific.

Trial

Criminal defendants have a right to a jury trial. The Sixth Amendment right to jury trial applies only to criminal prosecutions for serious crimes (that is, a potential sentence of six months or more). Once the right to jury trial applies to an offense, the defendant has the right to have the jury decide each element of the offense. The jury must find each element to exist **beyond a reasonable doubt**. The right to a jury trial does not extend to the area of sentencing.

In federal criminal trials, usually a 12-member jury is required. The jury's verdict must be unanimous except in certain circumstances. FRCrP 23(b) permits a jury of 11 persons to return a verdict (after the jury retires to deliberate) if the court finds good cause to excuse a juror.

The Sixth Amendment also provides that the accused enjoys a right to a public trial. This means that there must be some access by members of the public. The defendant has a constitutional right to be present at his or her trial. The confrontation clause of the Sixth Amendment includes both the right to compulsory process and the right to cross-examine hostile witnesses. Compulsory process means that the defendant has the right to have the court issue a subpoena to compel the testimony of any witness who may have information that would be useful to a defense. Occasionally, this right means that the prosecution must assist the defense in finding witnesses. The confrontation clause puts limits on the government's ability to restrict the defendant's right of cross examination.

The accused also has a right to a speedy trial to promote society's interest in promptly disposing of charges and to relieve the defendant of unnecessary consequences of being accused of a crime. The right to a speedy trial attaches only after indictment, information, or the actual restraint imposed by arrest. The speedy trial clause is not violated by a delay between dismissal of charges and re-indictment for the same offense. If a delay is attributable to the willful tactics of the defendant, then he or she is deemed to have waived the right to a speedy trial. A federal statute sets out specific time limits for the prosecution of federal criminal cases and remedies for violations of the statute.

The Sixth Amendment also provides that in all criminal prosecutions the defendant has a right to the assistance of counsel. A defendant is entitled to the appointment of a lawyer at trial regardless of the ability to pay. The right to counsel arises upon the initiation of an adversary criminal prosecution. The defendant is entitled to counsel in the following situations:

1. Post-adversary proceeding lineups
2. Custodial interrogation
3. Psychiatric examinations
4. Pretrial arraignments
5. Preliminary hearing (to determine the existence of probable cause)
6. At all sentencing hearings.

The Fifth Amendment provides that no person shall be compelled in any criminal case to be a witness against himself. The privilege against self-incrimination not only means that the defendant may refuse to answer the prosecution's questions but he or she does not even have to take the witness stand. A defendant who does take the witness stand, however, has waived the privilege against self-incrimination as to any matters within the scope of cross-examination. The privilege against self-incrimination only applies to testimonial evidence, oral or written. It does not apply to non-testimonial evidence such as blood and DNA samples, fingerprints, fingernail scrapings, and so on.

Sentencing

The Eighth Amendment forbids excessive fines and cruel and unusual punishment. The Supreme Court has considered sentences to violate the Eighth Amendment in three situations: (1) when the length or nature of the sentence is deemed shocking, (2) imposition of the death penalty for a crime other than murder, and (3) when a statute makes a certain status a crime (for example, conviction of a crime for being addicted to drugs). In imposing a sentence, the trial judge may consider out-of-court information concerning circumstances surrounding the crime and the defendant's personal life. Federal trial judges follow U.S. Federal Sentencing Guidelines.

Appeals

No federal constitutional right exists to appeal a federal criminal conviction. Claims of error must be preserved at trial for appellate review. However, there are exceptions to the requirement that objections be raised at trial. When plain error occurs, an appellate court may reverse a conviction even though the error was not brought up at trial.

If an error at trial is harmless beyond a reasonable doubt (that is, there is no reasonable possibility that the error contributed to the accused's conviction), then the conviction may stand. The following issues can be deemed **harmless error** under some circumstances: admission of illegally acquired evidence, use of a coerced confession, a jury instruction that omits an element of the offense charged, a prosecutor's comment about the accused not testifying at trial, and the denial of the right to counsel at nontrial stages. The denial of the right to counsel at trial is never harmless error and mandates automatic reversal on appeal.

Post-Conviction Remedies

Federal prisoners may challenge their convictions through habeas corpus proceedings. The writ of habeas corpus is a civil action that requests a court to demand that a government agency that is confining a person release him because that person is being held contrary to law. Habeas corpus is a collateral attack, not a direct appeal of a criminal conviction. It is a separate civil proceeding that challenges the lawfulness of a person's detention.

The prisoner bears the burden of proving by a preponderance of the evidence that the detention is unlawful. A petition for a writ of habeas corpus is always timely because the defendant is challenging the lawfulness of detention. No matter how late a first habeas petition is filed, its merits must be considered. The federal courts may reconsider almost any type of claim in a habeas petition. Only Fourth Amendment search and seizure issues cannot be re-litigated on habeas petitions.

Summary

Before a lawsuit can be filed in federal or state court, certain judicial criteria have to be met: jurisdiction, standing to sue, and venue. The federal court system has exclusive jurisdiction over a few types of cases: patent, trademark, and copyright cases; admiralty cases; bankruptcy cases; federal criminal cases; claims against the United States; lawsuits in which one state sues another state; cases involving treaties with foreign countries; cases based on the U.S. Constitution, a treaty, or a federal statute; and cases involving diversity of citizenship. A party must have a legally protected interest at stake in the litigation to have standing (or standing to sue). Venue determines which trial court in the system will hear the dispute.

The federal court system is a three-tiered model consisting of U.S. district courts or trial courts at the lowest level, circuit courts of appeal or intermediate appellate courts, and the U.S. Supreme Court. There is at least one federal district court in each state. Appellate courts handle mostly questions of law, not questions of fact. Appellate courts do not conduct trials, do not hear witnesses, and do not consider new evidence. The U.S Supreme Court can review any case decided by any of the federal courts of appeal and it also has appellate authority over some cases decided in state courts.

Many states have a court structure similar to the federal system. A state's highest court can only be overruled by the U.S. Supreme Court when a federal issue or question is involved.

The plaintiff commences a civil suit by filing a complaint in the appropriate court. After the complaint has been filed, a process server serves a summons and a copy of the complaint on the defendant. The summons notifies the defendant that he or she must answer the complaint within a set time period. All motions and other pleadings, discovery requests, and other papers filed with the court must be served on each party subsequent to the complaint by mailing them to the party's attorney.

The defendant's response to the complaint is an answer. In the answer, the defendant states in short and plain terms defenses to each claim asserted and admits or denies each count of the complaint.

A civil trial can be held in federal court with or without a jury. In certain types of cases, such as a tort action seeking an injunction, no right to a jury trial exists. One of the litigants must request a jury or the right is waived.

The usual sequence of a civil trial is as follows: opening statement of the plaintiff, opening statement of the defendant, presentation of evidence by the plaintiff (with cross examination of each witness by the defendant), presentation of evidence by the defendant (with cross examination of each witness by the plaintiff), presentation of rebuttal evidence by the plaintiff and then the defendant, closing argument by the plaintiff, closing argument by the defendant, instructions by the judge to the jury, and jury verdict. In a civil case, the trier of fact must be convinced that a fact is more probable than not to resolve an issue in favor of that party (that is, preponderance of the evidence).

In civil actions, the main form of legal relief is money damages. The two main forms of equitable relief are injunctions and orders for specific performance. Three types of damages are available in tort cases: compensatory, nominal, and punitive. Three other types of provisional remedies permitted under FRCP 64 are attachment, garnishment, and replevin.

An appeal is the procedure for obtaining a review by a higher court. The doctrine of res judicata is meant to preclude re-litigation of cases between the same parties regarding the same issues and to preserve the binding nature of a court's decision. Res judicata does not prevent appeals to a higher court.

In the federal justice system, the FRCrP play an important role in the regulation of the criminal process. When a police officer has probable cause to believe that a suspect has committed a crime, the officer may make an arrest. At the police station, the arrestee is entered into the police blotter. An arrestee is taken before a judicial officer for an initial or first appearance. The judicial officer will inform the accused about the charges, apprise him of his right to refrain from self-incrimination, and appoint counsel, if necessary.

The preliminary hearing, which usually occurs after an initial appearance, bail hearing, or Gerstein decision, is aimed at evaluating the prosecutor's charging decision, and is adversarial in nature. The arrestee has a right to counsel and a chance to challenge the prosecution's case at the preliminary hearing. The Fifth Amendment provides that anyone charged with a federal felony may only be tried following issuance of a grand jury indictment.

After the indictment has been filed, the accused is arraigned. He or she is brought before the trial court and asked to enter a plea. Defense counsel has the opportunity to file various pretrial motions.

Criminal defendants have a right to a jury trial. The jury must find each element to exist beyond a reasonable doubt. In federal criminal trials, usually a 12-member jury is required. The jury's verdict must be unanimous except in certain circumstances.

No federal constitutional right exists to appeal a federal criminal conviction. If an error at trial is harmless beyond a reasonable doubt (that is, there is no reasonable possibility that the error contributed to the accused's conviction), then the conviction may stand. Federal prisoners may challenge their convictions through habeas corpus proceedings.

Review Questions

1. Which of the following is not a major title in the Federal Rules of Civil Procedure?
   a. Trials.
   b. Pleadings and Motions.
   c. Evidence.
   d. All of the above are major titles in the federal rules of procedure.

2. Under the Federal Rules of Civil Procedure, a civil action in a federal court begins with the plaintiff filing a _____.
   a. General writ.
   b. Prothonotary's writ.
   c. Summons.
   d. None of the above.

3. Which of the following is not required to be filed by a defendant in a civil lawsuit?
   a. An answer to the plaintiff's complaint.
   b. An admission or denial of every element of the plaintiff's complaint.
   c. Any affirmative defenses.
   d. All of the above are required.

4. In federal lawsuits, _____ can be pursued against a defendant.
   a. Only related claims.
   b. Unrelated claims.
   c. Court designated claims.
   d. Discoverable claims.

5. In federal courts, discovery requests may be directed to _____.
   a. Only parties to the lawsuit.
   b. Only parties joined to the lawsuit, as approved by the court.
   c. Parties and nonparties to the lawsuit.
   d. None of the above.

6. Which of the following is not one of the four major types of discovery tools?
   a. Requests for admissions.
   b. Interrogatories.
   c. Depositions.
   d. All of the above are major types of discovery tools.

7. Which of the following statements is true regarding witness lists?
   a. Their production does not require a discovery request.
   b. Their production requires a subpoena.
   c. Their production requires court approval.
   d. None of the above.

8. Which of the following may not be commanded by a subpoena?
   a. Testimony.
   b. The production of documents.
   c. Seizing of documents.
   d. All of the above may be commanded by a subpoena.

9. Which of the following is not the formal name of a major title in the Federal Rules of Civil Procedure?
   a. Trial.
   b. Parties.
   c. Sentencing.
   d. Special proceedings.

10. If a federal arrest is made with a summons or warrant, _____ must be filed with the initial criminal complaint.
    a. An indictment.
    b. The information.
    c. An affidavit.
    d. None of the above.

11. The criminal defendant's initial appearance in court is called _____.
    a. The arraignment.
    b. The preliminary hearing.
    c. The pleading.
    d. None of the above.

12. A hearing in which a magistrate judge decides whether there is sufficient probable cause to require the defendant to appear for further proceedings is called _____.
    a. The arraignment.
    b. The preliminary hearing.
    c. The pleading.
    d. None of the above.

13. The defendant is advised in court of his or her rights to bail _____.
    a. Before the arraignment.
    b. At the preliminary hearing.
    c. At the arraignment.
    d. None of the above.

14. If the defendant is charged by a grand jury indictment, the preliminary hearing is generally _____.
    a. Very important.
    b. Unnecessary.
    c. Waived by the prosecutor.
    d. Replaced with a mini-trial.

15. Grand juries include _____ members.
    a. 12.
    b. 12–16.
    c. 16–23.
    d. Any number of.

16. For an indictment, _____ jurors must vote to indict.
    a. A simple majority of.
    b. A two-thirds majority of.
    c. At least 12.
    d. All.

17. In federal courts, prosecution takes place in the district in which _____.
    a. The victim lives.
    b. The defendant lives.
    c. The offense took place.
    d. The prosecutor requests.

18. In the normal order, the _____ first presents its opening arguments.
    a. Prosecution.
    b. Defense.
    c. Prosecution or defense, depending on the court's order.
    d. Prosecution in some districts and the defense in other districts.

19. Which side presents its case first?
    a. The prosecution.
    b. The defense.
    c. The prosecution or defense, depending on the court's order.
    d. The prosecution in some districts and the defense in other districts.

20. If the prosecution is presenting its case and calls a witness, the defendant's questioning of that witness is called _____.
    a. Direct examination.
    b. Cross-examination.
    c. Redirect examination.
    d. None of the above.

21. After the defense rests its case, the prosecution presents its closing arguments, which are followed by the defense's closing arguments, which are then followed by _____.
    a. A possible motion to dismiss.
    b. Rebuttal arguments by the prosecution.
    c. Jury instructions.
    d. None of the above.

Short Answers

1. To give effect to the exclusionary rule, the courts have applied the rule to evidence obtained directly or indirectly through illegally obtained evidence. True or False?

2. The police enter David's home pursuant to a valid arrest warrant to arrest Jennifer. Is this entry lawful?

3. Under present law, the police may seize mere evidence if they have probable cause for believing that it is related to criminal behavior. True or False?

4. Jordan, a private citizen, suspects Amos of purloining his tools. When Amos is not home, Jordan breaks into Amos's locked garage and finds a stash of illegal drugs, but no tools. Jordan turns the drugs over to law enforcement officials who arrest Amos on a drug charge. Will Amos succeed on a motion to suppress the drugs?

5. Darla admits Detective Vince into her apartment and consents to a search of the premises. Vincent, who has no search warrant, discovers drugs belonging to Darla's roommate, Lisa. Is the search proper?

6. Joshua is arrested for accepting a bribe as a public official. Will his right to a preliminary hearing depend on whether the arrest was made before or after a grand jury indictment?

7. Oscar is arrested for selling illegal narcotics. At the preliminary hearing, the magistrate finds no probable cause. Is Oscar acquitted of the charge?

8. An accused has no constitutional right to discovery of the prosecution's case other than the right to exculpatory evidence. True or False?

9. Grover files a civil suit in federal court against James, claiming $155,000 damages for a battery. In one count of a verified complaint, Grover avers that James struck and battered him. In a later count Grover avers that James did not do it personally, but rather paid Richard to batter Grover. James files a motion to dismiss for a failure to state a claim upon which relief can be granted. Should the court grant the motion?

10. Lucy sues Chris for nonpayment of a promissory note of $100,000. Chris's answer contains only this averment: Defendant neither admits nor denies Plaintiff Lucy's claim, and puts Lucy to her proof at trial. Lucy moves for judgment on the pleadings arguing that Chris has admitted liability. Should the motion be granted?

11. Dan files a lawsuit to rescind a deed of trust for fraudulent misstatements made by Todd. Todd files a motion for summary judgment with an affidavit stating that he believed the statements were true at the time made. Dan does not file an affidavit in opposition. Should Todd's motion be granted?

12. Gary brings an action in federal court against Carl for breach of contract. Gary serves Carl by having a copy of the complaint delivered to Carl personally at his summer home in Bar Harbor, Maine. Is service proper?

13. Sir James sues Maling for personal injuries stemming from an accident while visiting Maling's car repair garage in Dunedin, Florida. The action is brought in federal court. Sir James serves copies of the summons and complaint by having them hand delivered to John, Maling's service manager, at the garage. Is service proper?

14. Why may the defendant, but not the plaintiff, move for judgment as a matter of law at the close of the plaintiff's case?

15. George brings an action against Som for infringement of a copyright George holds on a book about forensic accounting. The case is tried to a jury. Som moves for judgment as a matter of law at the close of George's evidence. The motion is denied. Som renews the motion after presenting his own evidence. The motion is denied again. The jury is instructed, deliberates, and returns a verdict for George. May Som now move again for judgment as a matter of law?

Brief Cases

1. Castle files a complaint in federal court against Beckett, a restaurant owner, alleging that he suffered food poisoning as the result of consuming improperly prepared food in Beckett's seaside restaurant. Is this sufficient to state a claim for relief in federal court?

2. Consider the following possible outcomes at the trial and appellate level. Assume in each case that the plaintiff won the verdict and that the defendant seeks judgment as a matter of law on the grounds that the evidence was too weak. In the alternative, the defendant seeks a new trial on the basis that the judge excluded important evidence.

   Assume in each of the following situations that the losing party appeals. What should be done by the appellate court?

	Trial Court	**Appellate Court**
a.	Grants D's motion for judgment as a matter of law and motion for a new trial	Rules that judgment as a matter of law is proper, but no new trial
b.	Grants D's motion for judgment as a matter of law and grants a conditional motion for a new trial	Agrees with both decisions
c.	Grants judgment as a matter of law and denies D's conditional motion for a new trial	Appellate court disagrees on both

3. On July 1, Fred served Barney with a summons and complaint for a federal district court action alleging breach of contract. On July 15, Barney served an answer to Fred. There were no pleadings after the answer. At no time did Fred make a demand for a jury trial. On September 1, shortly before the case was to be tried, Barney served upon Fred a demand that the case be tried before a jury. Is Barney entitled to a jury trial?

4. David files a complaint for assault against Goliath. Goliath timely files a motion to dismiss for insufficient service of process. Several months later, the judge denies the motion to dismiss and notifies the parties. May Goliath, after being notified of the denial of his motion
   a. answer the complaint and respond on the merits to its allegations?
   b. move to dismiss for lack of personal jurisdiction?
   c. move to dismiss for failure to state a claim upon which relief can be granted?
   d. answer and include the defense that the complaint fails to state a claim upon which relief can be granted in the answer?
   e. move to dismiss for lack of subject matter jurisdiction?

5. The police had probable cause to believe that a certain recent burglary had been carried out by Sam Trout, who lived at a known address. The police considered obtaining a warrant for Trout's arrest. Before a warrant was obtained, Officer Simon saw Trout walking down the street. Simon approached Trout and arrested him for robbery. Simon searched Trout incident to the arrest and found some uncut diamonds (from the robbery). At Trout's trial, he tried to suppress the uncut diamonds claiming that they were the fruit of a warrantless arrest. Should Trout's suppression motion be granted (that is, was the arrest illegal)?

Cases

1. The Heights was a poor section in the City of Tampa. Because many of the residents of The Heights had been complaining about exploitation of tenants by absentee landlords and about the lack of law enforcement in their neighborhood, the city attorney started a campaign of neighborhood reform. The city attorney obtained a series of warrants for inspection of buildings in The Heights. She accomplished this by presenting an affidavit which stated that many health and safety violations had been observed in buildings in The Heights. Under the warrants, police officers were ordered to inspect certain buildings. As a result, an apartment building owned by Derrick was found to have more than 20 building code violations. Derrick was prosecuted under a state law which made it a felony to willfully fail to correct health and safety violations in a building which he or she owns.

   What should happen to Derrick's motion to suppress evidence obtained from the inspection of his building?

2. A small but valuable piece of jewel-encrusted statuary was stolen from an antique shop, and all foot patrol officers in the area were notified by radio to look for the thief. When an officer saw Gary running down the street away from the direction of the antique shop, she became suspicious of him. The officer stopped Gary and asked him his name and his reason for running down the street. When Gary said, "Just trying to get away from some Seminole fans," the officer ordered him to raise his hands and then frisked him to see if he was in possession of the stolen statue. She felt a hard object in his pocket and reached inside. The object which she felt turned out to be a handgun for which Gary did not have a permit.

   Before Gary's trial on the charge of unlawfully possessing a concealed weapon, he moved to suppress the use of the handgun. Should his motion be granted?

3. As part of a plan to market a new line of investment securities, Merchant's Bank assigned Mike to study the accounts of some of its major depositors. Mike performed a computer analysis to determine at what times of the year the accounts of the depositors reflected the most activity. Mike had been reading in the newspaper about a series of unsolved bank robberies in the area. In examining the reports, Mike noticed that Dustin had made a substantial deposit on the day following each of the unsolved robberies. Mike phoned the police to report his discovery. After the conversation, two police officers went to Merchant to examine with Mike the records of Dustin's account. The police then investigated Dustin's activities on the days of the robberies and eventually obtained more evidence that Dustin was involved in the robberies. Dustin was arrested and prosecuted for the bank robberies. Should Dustin's motion to suppress the evidence of his involvement in the robberies be granted?

4. The initial stage of a civil lawsuit involves the filing of pleadings by the respective parties. The purpose of pleadings is to give notice to the parties and to the court of the assertions of each side and to assist in the determination of the issues. The complaint is the first pleading filed and has the effect of initiating the lawsuit. What should be included in the complaint?

5. Del Defendant was charged with violation of a federal criminal statute. The trial by a 12-member jury ended in a mistrial. The case was subsequently postponed for 2 terms of court. After Del moved to determine when he would be brought to trial, the federal government moved to release him from custody while retaining the right to prosecute in its discretion. This motion was granted. Will Del win on appeal of the motion by the feds?

Internet Research Assignments

1. Read the decision in *Bell Atlantic Corp. v. Twombly*, 127 S. Ct. 1955 (2007), in which the U.S. Supreme Court changed the analysis for federal courts to use in deciding a motion to dismiss under FRCP 12(b)(6). What is the essence of the court's decision?

2. Is an award of sanctions permissible (or possible) under FRCP 11 against an attorney for filing a complaint that is not frivolous but was pursued ineffectively?

3. Can a defendant's assertion of a generalized affirmative defense of good faith be struck by a federal court under FRCP 8 as factually insufficient?

4. Is it permissible for the government to employ special high-tech devices, not in general civilian use, from public places to gain views not available with the naked eye? Does such a situation fall under the plain view exception?

5. The search-incident-to-arrest rule applied to vehicle passenger compartments during traffic violation arrests is now more restrictive. In what two situations is a warrantless search of a passenger compartment permitted (incident to an arrest)?

Chapter 4
Evidence

Learning Objectives

- Obtain an overview of the Federal Rules of Evidence
- Understand the rules of evidence that are pertinent to a forensic accountant
- Know how communications between forensic accountants and their clients, especially lawyers, can be protected by a privilege
- Be aware of the concepts of relevance, authentication, burden of proof, and presumptions
- Understand the concept of hearsay and some of its exceptions
- Grasp the Federal Rules of Evidence applicable to expert witness testimony
- Understand the best evidence or original documents rule
- Be aware of how federal courts apply the concept of authentication to electronically stored information, including social media

Introduction

The law of evidence is a set of rules and principles that govern the **admission** of **evidence** into various types of judicial and administrative proceedings. Evidence is any matter, verbal, physical, or electronic, that can be used to support the existence of a factual proposition. The most basic rule of evidence is that whether a case is held before a judge or a jury, the trier of fact must decide the case based solely on what is presented in court. In this chapter, we assume (unless otherwise noted) that a case is being decided by a jury. The rules of evidence are with very few exceptions, exactly the same whether the case is tried to a judge or a jury. The role of a judge is to determine whether evidence is admissible (question of law). The jury's role is to determine how much weight evidence should be given (question of fact).

Categories of Evidence

The two categories of evidence are **direct** and **circumstantial**, as shown in box 4.1. Within these two categories, three types of evidence exist: testimonial, physical or real, and demonstrative. Direct evidence tends to show the existence

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

of a fact in question without the intervention of proving any other fact: Is the evidence to be believed without inferences or conclusions from it? Direct evidence depends on the credibility of the witness.

Case in Point

Nancy testifies that she saw Mark stab Lorie with a knife. Nancy's testimony is direct evidence on the issue of whether Nancy saw Mark stab Lorie with a knife. If that testimony is believed, the issue is resolved.

Circumstantial evidence depends on both the credibility of and inferences from the witness. Even if believed, circumstantial evidence is evidence which does not resolve a matter at issue unless additional reasoning is used to reach the proposition at which the evidence is aimed.

Case in Point

Consider the trial of Anthony for assaulting Victor with a lead pipe. John, a pedestrian, recounts that after hearing Victor's screams, he witnessed Anthony running from the scene holding a lead pipe in his left hand. John's testimony is direct evidence on the issue of whether Anthony was at the scene, was running, and carried a lead pipe. The testimony is circumstantial on whether Anthony assaulted Victor.

In the previous case in point, John's testimony remains circumstantial without the application of additional reasoning.

Box 4.1 Categories of Evidence

Categories	Descriptions
Direct	Evidence that involves no inferences. Is the evidence to be believed without inferences?
Circumstantial	Evidence that requires an inference based on indirect evidence.

Testimonial, Physical, and Demonstrative Evidence

Evidence may be testimonial (witness), physical (real or tangible items), or demonstrative, as depicted in box 4.2. Testimonial evidence comes from a live witness who makes assertions about facts. A trier of fact (judge or jury) must rely on the witness's own memory and senses. The trier of fact must evaluate the credibility of the witness.

Physical evidence is considered indisputable, scientifically sound, and neutral. Physical evidence is the silent, definitive witness that is often equated with certainty. Physical evidence cannot perjure itself. Its value is diminished only by human failure to find, study, and comprehend the evidence. Physical evidence, however, sometimes must be sponsored by a live witness whose credibility may matter for the trier of fact.

Forensic science is the means by which physical evidence becomes proof. The process involves submission of some tangible object that was involved in a situation or incident (tax return, document, jump drive, electronic device, weapon, blood, hair, scrapings, vehicle, plant, passport, and so on).

Demonstrative evidence is tangible evidence that illustrates a matter of significance in litigation. It often serves as an audio-visual aid and is designed to assist the trier of fact in understanding a witness's testimony. Demonstrative evidence includes maps, models, x-rays, diagrams, tables, computer graphics, statistics, and so on.

Box 4.2 Types of Evidence

Types	Description
Testimonial	Testimony by a witness who makes assertions; facts.
Real or Physical	Real or tangible items that are considered indisputable, scientifically sound, and neutral.
Demonstrative	Tangible evidence that illustrates a matter of significance in litigation. Includes such items as maps, models, x-rays, tables, statistics, graphics, and so on.

Federal Rules of Evidence

The **Federal Rules of Evidence** (FRE) govern the **admissibility** of evidence at civil and criminal trials in federal courts. The overwhelming majority of states have adopted evidence rules patterned after the FRE for use in state courts. The purpose of the rules is to provide a system for speedy and fair trials. The rules require evidence to be presented in a manner best designed to reach the truth.

The FRE are organized into eleven articles:

I. General Provisions
II. **Judicial Notice**
III. Presumptions in Civil Actions and Proceedings
IV. Relevancy and Its Limits
V. **Privileges**
VI. Witnesses
VII. Opinions
VIII. Hearsay
IX. Authentication and Identification
X. Contents of Writings, Recordings, and Photographs
XI. Miscellaneous Rules

We focus on the articles and rules most important for forensic accountants and the Certified in Financial Forensics (CFF) exam.

Relevance

Before an item can be considered evidence, a proper legal **foundation** must be laid for its admission. A proper foundation often consists of establishing the competency of a witness and evidence **authentication**. Admissibility is premised upon relevance and materiality. Relevance is the unifying principle underlying evidentiary issues. Relevance involves analysis of the relationship between a factual proposition and substantive law. Evidence is relevant only if it tends to prove or disprove a proposition of fact (that is, probative value).[1]

[1] Federal Rules of Evidence (FRE) 401.

Case in Point

Art is hurt when he is hit by Marisa's car. In a negligence suit against Marisa, he offers testimony by Michael that he saw Marisa driving at what he believed to be around 60 miles per hour. There is a connection between Michael's testimony and a factual proposition claimed by Art (that Marisa was traveling around 60 miles per hour).

Evidence is also relevant only if it is material to a claim, charge, or defense. A link must exist between the factual proposition which the evidence tends to establish and the substantive law.

Evidence that is not relevant is not admissible.[2] The most common scenario where evidence is irrelevant involves legal irrelevance. In other words, if the item in question does not tie in with the legal elements of a claim or defense, it will be irrelevant.

Case in Point

Monica is in a car wreck and is convicted of the offense of operating an unregistered vehicle. In a later civil suit, the sole issue is whether Monica acted negligently during the accident. The conviction is irrelevant, because driving an unregistered vehicle does not make it more likely that Monica drove negligently.

Testimony must be limited to facts to be admissible as evidence, not speculation or opinion (unless the witness is testifying as an expert), and must be based on the direct knowledge of the witness. In general, a witness has direct knowledge if the witness participated in the act, saw or heard it done, or heard it directly from a third party to the action.

Although relevant evidence is generally admissible, such evidence may be excluded if it is unduly prejudicial, threatens to confuse the jury, causes an unnecessary delay, wastes time, or is needlessly repetitive.[3] When a court is weighing an item's probative value against its prejudicial effect, the court should normally compare the proffered item against other possible evidence on the same point. If the alternative evidence has the same or nearly the same probative effect, and less prejudicial value, the court should rule that the less prejudicial item be admitted. See box 4.3 for more information on admissibility.

Box 4.3 Admissibility

Activity	Requirements
Admitting evidence	1. It must be relevant 2. There must be a proper foundation 3. The evidence must be in proper form 4. No exceptions can apply

Privilege(s)

According to FRE 501, the privilege of a witness, person, government, state, or political subdivision is governed by the principles of the common law. In civil actions and proceedings, however, with regard to the element of a claim or defense as to which state law provides the rule of decision, the privilege of a witness, person, government, state, or political subdivision is determined in accordance with state law. Otherwise, relevant evidence may be excluded if its admission would violate a recognized privilege.

[2] FRE 402.
[3] FRE 403.

The most important privileges (for forensic accountants) are explained in the sections that follow and are summarized in box 4.4.

Box 4.4 Privileges

Basics	Detail
The Federal Rules of Evidence contain no specific provisions regarding privileges. Privileges recognized in federal courts originate in the common or state statutory law. A privilege allows a party to refuse to reveal and prohibit others from disclosing certain confidential communications.	Any recognized privilege is waived by a failure to claim the privilege, disclosure of the privileged information to a third party, or a written waiver.
The attorney-client privilege includes confidential communications between attorney and client made during the rendition of legal services that are privileged from disclosure.	This privilege does not apply to the physical evidence given to the attorney, to preexisting documents, to communications relating to a breach of duty by the client or attorney, or if the attorney's services were sought to help in planning a crime or fraud.
The physician-patient privilege provides that the patient holds a privilege against the disclosure of confidential information acquired by a physician in a professional, medical relationship.	The privilege is waived if the patient puts his or her mental or physical condition at issue.
The marital privilege includes two types of marital privileges: spousal immunity and confidential communications.	In a criminal case, a spouse cannot be forced to testify against the other spouse. A valid marriage must exist at the time of trial. Only the witness spouse holds the privilege. A spouse shall not be required to disclose confidential communications made by one to the other during marriage. A valid marriage must exist at the time of the communication. Both spouses hold the privilege and it applies to civil and criminal cases (confidential communications privilege).

Attorney-Client Privilege

From a forensic accountant's perspective, the inability to protect or insulate communications and work product from disclosure threatens client openness and the ability to deliver quality services. Despite the existence of accountant-client privilege statutes in some states, such statutes are of dubious value to the forensic accountant-client relationship. The accountant-client privilege is not recognized under federal common law and does not attach to communications between the client and accountant. State accountant-client privilege statutes may not be applied in most federal cases.

Despite the difficulties associated with the accountant-client privilege and the forensic accountant-client communications, work product may still be insulated from disclosure when a forensic accountant works as an agent of an attorney rendering legal services. Under certain conditions, such communications and work product are protected by the attorney-client privilege.

FRE 501 is the basis for the attorney-client privilege in federal courts. The rule provides that the privilege of a witness shall be governed by the principles of the common law as they may be interpreted by the courts of the United States in light of reason and experience. The privilege developed to preclude an attorney from having to testify against his client. Originally, the privilege attached or belonged to the attorney, but today is considered to belong to the client. The attorney can raise the privilege on behalf of the client.

The privilege must be claimed with regard to a particular communication and extends only to a communication and not to facts. A client may not refuse to disclose a relevant fact within his knowledge merely because he incorporated a statement of such fact into a communication with his attorney.[4] An attorney's communication to a client reporting facts learned by the attorney from a third party is not within the attorney-client privilege unless the

[4] *Upjohn v. U.S.*,449 U.S. 383 (1981).

information is included in legal analysis or advice communicated to the client. The critical inquiry is, viewing the lawyer's communication in its full content and context, whether it was made in order to render legal advice or services to the client.[5] The privilege may be waived unless it is claimed before any disclosure of the communication sought to be protected. If a client communicates a matter to his lawyer in the presence of a third party who is not an agent of the lawyer, the communication is not confidential. The assumption is that the nature of the communication demonstrates that the client did not intend for the communication to be kept confidential.[6] Various tests have been set forth by courts to determine whether the attorney-client privilege applies to a given case. Each test requires the party claiming the privilege to prove the existence of each of the following elements:

1. The holder of the privilege is or sought to become a client.
2. The person to whom a communication is made is a licensed attorney or his agent.
3. The attorney is acting as the client's lawyer with regard to the communication.
4. The communication relates to a matter of which the attorney was informed by his client, without the presence of third parties, for the purpose of securing legal services and not for the purpose of committing a crime or a tort.[7]

The attorney-client privilege may also be asserted by a corporation or other business organization not just an individual. Application of the privilege to corporations, including situations involving in-house counsel, has been problematic because corporations can act only through their agents. A communication is privileged when an employee or former employee speaks at the direction of management with an attorney regarding conduct or proposed conduct within the scope of employment. The attorney must be one authorized by management to inquire into the subject and must be seeking information to assist counsel in (1) evaluating whether the employee's conduct has bound or would bind the corporation; (2) assessing the legal consequences, if any, of that conduct; and (3) formulating appropriate legal responses to actions that have been taken or may be taken.[8] The protection afforded by the attorney-client privilege is limited to those situations where the communication would not have been made but for the client's need for legal advice or services.

A lawyer may cloak a non-testifying expert or consultant with the protection of the attorney-client privilege. The landmark decision in *U.S. v. Kovel*[9] extended the attorney-client privilege to communications between a client and an accountant hired by an attorney to assist in providing legal services. The Second Circuit noted that because of the complexities of modern existence that few lawyers could operate without the aid of secretaries, clerks, law clerks, and others. The court ruled that the privilege shields communications with an accountant retained by the lawyer or client to assist in providing legal services to the attorney's client.

The *Kovel* court acknowledged that an arbitrary line was being drawn between a case in which the client communicates first with his own accountant and then later consults with his lawyer (no privilege) and one in which the client initially retains the attorney who then hires an accountant or the client first consults with both the lawyer and accountant simultaneously (privilege exists). In *U.S. v. Cote*[10] the appellate court made clear that communications from client to accountant made prior to the accountant being hired by an attorney are not privileged.

It is paramount to the privilege that the communication be made in confidence for the purpose of obtaining legal advice from the attorney. If the accountant's advice is what is pursued rather than legal advice, no privilege attaches. Even legal advice is unprivileged if it is merely incidental to business advice.[11] Moreover, in *U.S. v. Adlman*, 68 F. 3d 495 (2nd Cir. 1995), the Second Circuit held that attorney-client privilege did not apply because evidence indicated the corporate plaintiff consulted an accounting firm for tax advice rather than in-house counsel receiving accounting advice to assist in rendering legal advice. The appellate court noted that the corporate plaintiff had not produced adequate documentation, such as a separate retainer agreement or itemized billings, for the tax advice from Arthur

[5] *ECDC Environmental L.C. v. New York Maritime and General Ins. Co.*, 1998 U.S. Dist. LEXIS 8808 (S.D.N.Y. 1998).
[6] *In re John Doe Corporation*, 675 F. 2d 482 (2nd Cir. 1982).
[7] *Colton v. U.S.*, 306 F. 2d 633 (2nd Cir. 1962), *cert. den.*, 371 U.S. 951 (1963).
[8] *Upjohn v. U.S.*, 449 U.S. 383 (1981).
[9] 296 F. 2d 918 (2nd Cir. 1961).
[10] 456 F. 2d 142 (8th Cir. 1972).
[11] *Durham Industries Inc. v. North River Ins. Co.*, 1980 U.S. District LEXIS 15154 (S.D.N.Y. 1980).

Andersen, to support a claim of privilege. The only evidence offered to uphold privilege was a series of affidavits prepared by interested parties four years after the transaction at issue. Thus, it is incumbent upon those claiming attorney-client privilege to prepare and produce adequate documentation to show that the main purpose in hiring the non-testifying expert was to assist the attorney in providing legal services to support any claim of privilege.

A carelessly structured Kovel relationship can leave the attorney-client privilege vulnerable to attack. Various common sense safeguards are essential in preserving the extension of the privilege to forensic accountants. First, the attorney, not the client, should hire the forensic accountant. Preferably, the client's existing accountant should not be hired to perform forensic accounting services. Use of the client's current accountant makes it more difficult to establish that he or she served as a litigation or legal assistant rather than as a financial advisor with regard to a particular communication. In the event counsel hires the client's present accountant, matters covered by the Kovel privilege should be adequately segregated to make plausible the argument that the Kovel engagement was not part of an overall package of services. In the case of a corporation or other business entity, outside or in-house counsel, not corporate management, should hire the forensic accountant.

The next step is that the attorney should document the relationship with the forensic accountant using a written engagement agreement that defines precisely the terms of the arrangement. The engagement agreement should set forth the legal purpose of the forensic accounting services. If appropriate, the engagement agreement should state that the forensic accountant is being hired in anticipation of litigation. The retainer agreement should also identify the likelihood of hiring one or more consultants or experts.

The third step is that the engagement agreement should state that all communications among the attorney, client, and forensic accountant are incidental to rendering legal services and are intended to remain confidential. The Kovel decision demonstrates that the forensic accountant and client may communicate outside the attorney's presence as long as they do so at counsel's direction. See box 4.5 on the following page for a list of recommended safeguards to protect Kovel privileges.

In the case of a corporation or other business entity, a written directive from top management or a board resolution should indicate that any communication between employees and agents and the lawyer or consultants hired by the lawyer is made at the direction of top management. Also, the attorney-forensic accountant engagement agreement should state that all documents, including workpapers, are the property of the lawyer and are to be returned at the lawyer's request. Any work product prepared by the forensic accountant should be furnished directly to counsel and not the client. Document prepared by the non-testifying forensic accountant should be labeled "protected by the attorney-client privilege." Any written work product should clearly state that it is being produced pursuant to requests of the law firm or in-house counsel. One last step is that the forensic accountant should directly bill the law firm for whom he or she works. Neither invoices nor copies of any invoices should be sent to the law firm's client. Payments to the forensic accounting firm should be made by the law firm.

Forensic accountants and attorneys should be aware of the risks posed to the attorney-client privilege and use of the Kovel rule by the use of electronic communications. The widespread use of e-mail, faxes, cellular phones, smart phones, and tablets has created new opportunities for eavesdropping and inadvertent disclosure of privileged information. Inadvertent disclosure can take many forms, ranging from unintentionally faxing a document to an opposing attorney to unintentionally including privileged material in providing electronically stored information (ESI) in response to a discovery request to the employment of sophisticated espionage methods by adversarial parties. Sometimes inadvertent disclosure leads to the loss of protection provided by attorney-client privilege (and the Kovel rule).

Under federal and state laws, attorney-client privilege can be waived. FRE 502 (adopted in 2006) determines whether attorney-client privilege has been waived when disclosure of information subject to the privilege has been made in a federal proceeding or to a federal office or agency. FRE 502 applies with regard to the issue of waiver not with regard to the scope of the attorney-client privilege or the Kovel rule. The Statement of Congressional Intent with respect to FRE 502 indicates that the rule does not alter substantive law concerning attorney-client privilege (or work product rule protection) including the burden on the party invoking the privilege (or protection) to show that particular information (or communication) qualifies for it.

Box 4.5 Recommended Safeguards to Preserve the Kovel Privilege (Non-Testifying Expert or Consultant)

Safeguard	Description/Reason
Client retains attorney who then hires forensic accountant (or client first consults with both the lawyer and forensic accountant simultaneously).	The Kovel privilege does not apply to those cases in which the client communicates first with his or her own accountant and then with his or her lawyer. This distinction prevents the privilege from being unduly expanded.
The privilege requires that the communication must be made for the purpose of assisting in giving legal advice to the client.	If the forensic accountant's advice is sought instead of legal advice, then the Kovel privilege does not apply. Even legal advice is unprivileged if it is incidental to business advice.
The party that claims the Kovel privilege must prepare and retain adequate documentation to support the claim. The documentation must show that the main purpose in hiring the forensic accountant or other expert was to assist an attorney in providing legal advice.	The burden is on the party that claims the Kovel privilege to justify its application in a given case. The reason is that the common law favors disclosure and does not promote policies or privileges that hinder it.
The Kovel privilege even applies to independent contractors hired to assist an attorney in rendering legal services. Any privileged communication must be within the scope of the consultant's duties and may not be disseminated beyond those who need to know.	It is inappropriate to distinguish between third parties on the client's payroll and those hired as independent contractors.
The client's existing accountant should not be hired to perform forensic accounting services (unless absolutely necessary).	Use of an existing accountant makes it more difficult to establish that he or she was hired primarily to help the attorney render legal advice.
If the client's existing accountant is hired, matters covered by the Kovel privilege should be segregated.	This step is necessary to dispel the argument that the Kovel engagement was part of an overall package of services.
In the case of a corporation, outside or in-house counsel, not management, should hire the forensic accountant.	A higher standard to invoke the attorney-client privilege is applied to in-house counsel.
The attorney-forensic accountant arrangement should be documented by a well-drafted engagement letter. The agreement should state that the forensic accountant is being hired in anticipation of litigation and that all communications are incidental to rendering legal services. Forensic accountants should bill or invoice the law firm directly.	An engagement letter minimizes the likelihood of a misunderstanding among the parties and serves as a foundation for claiming Kovel rule protection. Direct billing creates a paper audit trail that shows compliance with recommended safeguards to preserve the attorney-client privilege.
The forensic accountant and client may communicate outside counsel's presence, but may only do so at counsel's direction.	In *U.S. V. Bein*, a federal appeals court ruled that the Kovel rule did not apply to a conversation between an accountant and a client outside the client's presence.
In the case of a corporation, a top management-written directive should state that any communications between employees and a forensic accountant hired are made pursuant to management's instructions and should not be disclosed to any third party.	Intentional disclosure of any communication(s) or work product may result in a waiver of the Kovel privilege. Inadvertent disclosure may or may not result in a waiver of the Kovel privilege; it depends on application of Federal Rules of Evidence (FRE) 502.
The attorney-forensic accountant engagement agreement should state that all documents, including working papers, are the property of the lawyer and are to be returned at the lawyer's request. Forensic accountant work product should be furnished to counsel.	Attorney-client privilege (Kovel rule) may be waived involuntarily if these three factors under FRE 502 are not met: the disclosure is inadvertent, the holder of the privilege or protection took reasonable steps to prevent disclosure, and the holder promptly took reasonable steps to rectify the error, including following FRCP 26(b)(5)(B).
Forensic accountant work product should be labeled "protected by the attorney-client and work product privileges."	Use of such a label does not guarantee protection under the attorney-client privilege, but serves as notice.

FRE 502 is divided into seven subsections. The first subsection addresses subject matter waiver (that is, when a waiver of the attorney-client privilege, or work product protection, for a disclosed communication applies to other undisclosed communications). FRE 502(a) indicates that subject matter waiver occurs only when the waiver of the disclosed communication was intentional, the disclosed and undisclosed communications or information concerns the same subject matter, and when the communications should be considered together. The rule does not define the term *intentional*. Subsection b addresses inadvertent disclosure. According to FRE 502(b), a disclosure in a federal proceeding does not operate as a waiver of attorney-client privilege (or work product protection) under three conditions:

1. The disclosure is inadvertent.
2. The holder of the privilege (or protection) took reasonable steps to prevent disclosure.
3. The holder promptly takes reasonable steps to rectify the error, including following FRCP 26(b)(5)(B).

Presently, courts are divided over the meaning of *inadvertent*. Comment 2 to the American Bar Association Model Rule 4.4(b) states that "a document or electronically stored information is inadvertently sent when it is accidentally transmitted, such as when an e-mail or letter is addressed or a document or electronically stored information is accidentally included with information that was intentionally transmitted." In *Amobi v. D.C. Department of Corrections*,[12] the argument was made that involvement of a lawyer in the attorney-client privilege review prevented any disclosure from being inadvertent. The federal district court rejected the argument stating that "to find that a document disclosed by a lawyer is never inadvertent would vitiate the entire point of FRE 502(b)." The court indicated that *inadvertent* should be construed to mean unintended or mistaken. Other cases have also adopted a broad interpretation of inadvertent. In *Barnett v. Aultman Hospital*,[13] the court noted that "disclosure is unintentional even if a document is deliberately produced, where the producing party fails to recognize its privileged nature at the time of production."

The second condition under FRE 502(b) is that the privilege holder took reasonable steps to prevent disclosure. Examining the reasonableness of precautions taken under a given set of circumstances can be difficult. Courts consider the mechanics of disclosure, such as whether the disclosing party had a screening process in place, how it was implemented, and what kind of legal expertise was possessed by those implementing the screening process. Also, some courts find that failure to take any action to protect the privilege is indicative of the client's lack of intent to preserve confidentiality.[14] The Advisory Committee's Note (following FRE 502) names the following factors to consider in deciding whether reasonable steps were taken:

- The time taken to rectify an error
- The scope of discovery
- The extent of disclosure
- The overriding issue of fairness
- The number of documents to be reviewed
- The time constraints for production
- The use of advanced analytical software and analytical tools in screening for privileged material
- The implementation of an efficient system of records management prior to litigation

The third requirement of FRE 502(b) states that the holder of the privilege take reasonable steps to rectify the error, including following FRCP 26(b)(5)(B). The holder of the privilege has the burden of proving the elements necessary to avoid disclosure.[15] When privileged material is identified, a privilege claim mandates that the holder prepare a privilege log. In one case, *In re Denture Cream Products Liability Litigation*, 2012 U.S. Dist. LEXIS 151014 (S.D. Fla. Oct. 18, 2012), the trial court highlighted various elements for an adequate privilege log:

[12] 262 F.R.D. 45 (D.D.C. 2009).

[13] 2012 U.S. Dist. LEXIS 53733 (N.D. Ohio Apr. 17, 2012)];*Valentin v. Bank of N.Y. Mellon Corp.*, 2011 WL 1466122 (S.D.N.Y. Apr. 14, 2012).

[14] *Remington Arms Co. v. Liberty Mut. Ins. Co.* 142 F.R.D. 408 (D. Del. 1992).

[15] *Callan v. Christian Audigier Inc.*, 263 F.R.D. 564 (C.D. Cal. 2009); *Victor Stanley Inc. v. Creative Pipe Inc.*, 250 F.R.D. 251 (D. Md. 2008).

1. The name and job title or capacity of the author of the document
2. The name and job title or capacity of each recipient of the document
3. The date the document was prepared and if different, the date(s) on which it was sent to or shared subject matter addressed in the document
4. The title and description of the document
5. The subject matter addressed in the document
6. The purpose for which it was prepared or communicated
7. The specific basis for the claim that it is privileged

The failure to prepare an adequate privilege log can translate into a waiver of privilege as to the materials not included in the privilege log.[16]

The law governing attorney-client relationships requires communications between the attorney and client (and/or some third-party experts) to be surrounded by a reasonable expectation of privacy. The attorney-client and Kovel privileges are limited to those communications which the client either expressly made confidential or which the client could reasonably assume under the circumstances would be understood by the attorney as so intended. The lack of a reasonable expectation of privacy may prevent the attorney-client or Kovel privilege from attaching. FRE 104(a) is critical here, as the rule establishes the responsibility of the federal trial judge to make decisions about whether the attorney-client or Kovel privilege applies to a given situation. Hence, it falls to the attorney, forensic accountant, and client to take all steps necessary to establish and maintain a reasonable expectation of privacy, especially for electronic communications.

Box 4.6 Recommended Safeguards for Electronic Communications to Preserve the Kovel Privilege

Concern or Safeguard	Description or Reason
Some courts may require parties to take precautionary measures in using e-mail to be protected by the attorney-client privilege. Reasonable precautions include the use of encryption, Internet only e-mail, or secured external systems.	Given Federal Rules of Evidence (FRE) 502, forensic accountants may be well-advised to avoid sending data, documents, or communications via unencrypted e-mail.
Some state bar associations advise against the use of cellular phones for privileged matters. Forensic accountants should not discuss or communicate any privileged matters through the use of a cell or smart phone.	Some courts have held there is no reasonable expectation of privacy when utilizing mobile communications.
Waiver of attorney-client privilege by inadvertent disclosure of privileged matter using a fax machine is subject to FRE 502.	FRE 502 and court decisions made thereunder require that inadvertent disclosure be mistaken or accidental, and that the privilege holder took reasonable steps to prevent disclosure and rectify the error.
Forensic accountants should use fax cover sheets that contain a confidential legend every time a fax is sent that includes privileged matter.	Such a practice will raise the probability that a court will decide against a waiver of the attorney-client privilege in the event of an inadvertent disclosure (that is, help meet the requirements of FRE 502).

Until advancements in cordless and cellular or smart phone technology result in the recognition of a reasonable expectation of privacy, two methods are available to enhance confidentiality. One method is to scramble communications at a fairly high cost. A more expensive technique is to ensure lack of interception by using an encryption device. The expense of both methods is probably a deterrent to widespread acquisition of scrambling and encryption devices by attorneys, forensic accountants, and others. See box 4.6 for concerns and safeguards regarding electronic communications.

Fax machines are less vulnerable to interception than cordless and cellular or smart phones, but still present a risk. One practical means to satisfy the requirement of taking

[16] *Rhoads Indus. v. Bldg. Materials Corp. of Am.*, 254 F.R.D. 216 (E.D. Pa. 2008).

reasonable precautions to prevent disclosure is to place a confidential legend on the fax cover sheet. Such a legend may read as follows:

> Privileged and Confidential—All information transmitted hereby is intended only for the use of the addressee previously named. If the reader of this message is not the intended recipient or is not the employee or the agent responsible for delivering the message to the intended recipient, please note that any distribution or coping of this communication is strictly prohibited. Anyone who receives this communication in error should notify us immediately by telephone and return the original message to us via the U.S. mail.

E-mail is also vulnerable to both interception and inadvertent disclosure. Two reliable methods are available to enhance the confidentiality of e-mail communications themselves and the probability of a successful claim under the Kovel rule and FRE 104(a). One of the most common methods in use is encryption. Encryption software takes a readable message (called plaintext) and processes it with a key through a mathematical algorithm (called a cipher) to scramble the message into unreadable cipher text. The cipher text is transmitted to a receiver, who uses a key to decode the cipher text back into readable plaintext. A second technique is to use an Internet service provider or e-mail provider in which access to e-mail communications is protected by a password.

The vulnerability of some electronic communications demands that attorneys and third parties, such as forensic accountants, exercise vigilance in the use of these mediums. A failure to inform the client of the vulnerabilities of some electronic communications could have serious negative consequences under FRE 104(b) and 502(b), namely the failure of the attachment of the attorney-client privilege or its outright loss in a given situation.

Marital Privilege

Two types of this privilege exist:

1. The confidential communications privilege, which enables either spouse to prevent the other from testifying about a communication between the two during marriage that was intended to be in confidence.
2. The adversary testimony privilege, which protects spouses from being compelled to testify against each other while married. The confidential communications privilege continues after marriage, but the adverse testimony privilege does not.

Physician-Patient Privilege

The majority of states have a statute which permits some form of physician-patient privilege against the disclosure of confidential communications made to a physician if made for the purpose of obtaining treatment or diagnosis. The privilege does not exist under the common law. Disclosures to other health professionals such as dentists, pharmacists, or social workers are not protected under most statutes.

Psychotherapist-Patient Privilege

Nearly all states and federal courts recognize this privilege as separate from the physician-patient privilege. This privilege is more widely accepted than the physician-patient privilege. In most states, the privilege is extended to psychologists and licensed social workers. The privilege is qualified in that it may be overridden to protect a criminal defendant's right of confrontation.

Priest-Penitent Privilege

Almost all states recognize a privilege which covers all confidential communications made by a person to a clergyperson in his or her role as a spiritual advisor. Some statutes are narrowly written to cover only confidences, the taking of which are mandated by church doctrine. Self-designated ministers and ministers of fringe cults would probably not be regarded as clergypersons for this privilege.

Privilege Against Self-Incrimination

A witness who is being questioned may refuse to answer any question put to him or her on the grounds that it may tend to incriminate him or her. The privilege against self-incrimination is the only privilege explicitly required by

the U.S. Constitution. The privilege has two parts or components. The first states that a witness (one giving testimony other than the defendant testifying at his own trial) may refuse to answer on the grounds that it may tend to incriminate him. The witness must take the stand, listen to each question, and assert the privilege question-by-question. The second part states that the defendant in a criminal trial need not take the stand at all.

There are various contexts in which a person may assert or claim the privilege. Those contexts include when he or she is a witness in a grand jury investigation, when he or she is a witness in another person's criminal trial, when he or she is a party or a witness in a civil proceeding, when he or she is a party or witness in pretrial discovery proceedings, and when he or she is questioned by law enforcement, regardless of whether the questioning takes place in custody.

The privilege is personal so business entities do not have the privilege. Also, the privilege does not apply to a person when it comes to a business entity's own records.

Moreover, the privilege applies only to communicative activity. It does not apply to blood samples, fingerprints, handwriting samples, voice recordings, or other non-testimonial items. Some nonverbal actions are, however, communicative and covered by the privilege. For example, a person's gesture, such as shaking one's head in response to a question, is clearly testimonial (and qualifies for the privilege). The communication must not only be testimonial but compulsory.

The privilege is not applicable if one is not incriminated. If the answer to a question will not result in incrimination but may result in disgrace, the privilege does not apply. Also, if a person cannot be prosecuted then the privilege does not apply.

Under some circumstances, a person can waive or partially waive the privilege against self-incrimination. A criminal defendant surrenders a major part of the privilege by just taking the witness stand. At a minimum, a defendant who takes the stand testifies has waived the privilege with regard to questions that are necessary for an effective cross-examination. An ordinary witness, who may not refuse to take the witness stand, has not waived any part of the privilege by answering non-incriminatory questions. If a witness utters an incriminating answer about a matter then he or she may not refuse to answer questions that elicit further details (that really do not add to the incrimination).

The privilege against self-incrimination is implicated sometimes in the case of documentary evidence. If the federal authorities issue a subpoena duces tecum (for production of documents) then compliance, in some instances, may cause the one subpoenaed to incriminate himself or herself. We must distinguish between the contents of the requested documents and the act of complying with the subpoena. The document contents are almost never protected by the privilege against self-incrimination. In most cases, the one subpoenaed generated the documents voluntarily and not through compulsion. In some instances, the act of producing the documents in response to the subpoena may invoke the privilege. By complying with the subpoena, the subpoena recipient is admitting that the records exist, are within his or her control, and the records seem to be what is being subpoenaed. The law here is unclear in terms of whether the recipient may invoke the privilege. The claim of privilege in such a situation was supported by the U.S. Supreme Court in *U.S. v. Doe*, 465 U.S. 605 (1984). On the other hand, the U.S. Supreme Court has ruled that the privilege does not apply in the case of required records. That is, a situation where the law requires keeping and providing records as part of a regulatory scheme, the records are of a kind customarily kept in the business involved, and the records have some of the characteristics of public documents (required records exception).

Law Enforcement Privilege

Law enforcement agencies may legitimately withhold the identity of an informant unless disclosure is necessary to ensure that the defendant receives a fair trial. In such circumstances, the prosecution must decide whether to forego prosecution or disclose the informant's identity.

Competency and Knowledge

According to FRE 601, anyone can serve as a witness if they meet the other requirements of the FRE. Rule 601 does add that state law governs **competency** regarding a claim or defense for which state law supplies the rule of decision. This brings into play what are known as dead man's statutes. These statutes apply to persons having an interest in a

legal action and operate as a bar to their testimony as to transactions and communications between them and the deceased person. More specifically, these statutes provide that a party to a proceeding by or against a personal representative, heir, devisee, distributee, or legatee, in which a judgment or decree may be rendered for or against them, or by or against an incompetent person, may not testify concerning any transaction with or statement made by the dead or incompetent person, personally or through an agent, unless called to testify by the opposite party, or unless the testimony of the dead or incompetent person has already been given in evidence in the same proceeding concerning the same transaction or occurrence. Parties are precluded from testifying by the dead man's statute regarding conversations with the decedent, events taking place in the presence of the decedent, the decedent's competence, or whether the decedent was under any undue influence. The factors considered by the courts in each case are whether the witness has a personal and immediate interest in the issue being litigated and whether the other party to the communication about which testimony is elicited is deceased so that the personal representative is deprived of the decedent's version of the communication. Many courts do not look with favor upon these statutes and therefore strictly interpret their application.

Rule 602 excludes as fact witnesses people who do not have personal knowledge of the matter at issue. Also, if the witness will not solemnly promise to tell the truth, the court will not hear the testimony.

Opinions Including Experts

FRE 701 allows witnesses who are not experts to provide opinion testimony as long as the opinion is based on the witness's rational perceptions and the testimony is helpful in resolving issues. This rule applies to internal auditors or fraud investigators who have been designated as fact witnesses.

FRE 702 states that a witness qualified as an expert by knowledge, skill, experience, training, or education may offer opinion testimony under certain conditions if scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or determine a fact in issue. Those conditions are that

1. the testimony is based upon sufficient facts or data,
2. the testimony is the product of reliable principles and methods, and
3. the witness has applied the principles and methods reliably to the facts of the case.

A key question in the area of scientific evidence is the criteria trial courts use to permit expert witnesses to testify regarding scientific, technical, or other specialized knowledge. The underlying assumption here is that juries tend to believe almost anything an expert says so judges must protect jurors from experts who lack credibility. The Supreme Court has sought to address this question through rulings in three cases. These cases are *Daubert, Joiner, and Kumho Tire*. FRE 702 reflects the rulings in these cases.

In ***Daubert*** *v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993), the Supreme Court ruled that the Frye test no longer applied to expert testimony in federal courts and that trial judges must make a pretrial determination of whether expert testimony should be admitted. The court did not set forth a definitive set of criteria for a trial judge to use when making a decision concerning admissibility of proposed expert testimony, but mentioned various factors a judge may employ:

1. Can the theory or technique be tested?
2. Has the theory or technique been subjected to peer review and publication?
3. What is the technique's known or potential error rate?
4. Do standards exist for controlling the technique's operation and are the standards maintained?
5. Is the theory or technique generally accepted within the expert community?

Daubert created a more stringent test for expert evidence admissibility, especially in civil cases. This decision has made trial judges gatekeepers of science and of expert evidence in courts of law.

Two extraordinary procedures exist to assist judges in problems of expert evidence or complex scientific evidence: court-appointed experts and special masters. Court-appointed experts offer testimony at trial, can educate judges concerning fundamental concepts on which experts differ, and can assess the methodology on which the parties' experts are basing their opinions.

Common and anticipated challenges to expert evidence under Daubert include the following:

1. Is the expert qualified?
2. Is the expert's opinion supported by scientific reasoning or methodology?
3. Is the expert's opinion supported by reliable data?
4. Is the expert's opinion so confusing or prejudicial that it should be excluded pursuant to FRE 403?

In *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999), the Supreme Court held that the general proposition of Daubert's reliability requirement applies to all expert opinions, not just to scientific ones. Thus, accountants hired as expert witnesses are held to Daubert standards and a trial court is not required to hold a Daubert hearing every time expert testimony is challenged. Kumho applies to both civil and criminal cases.

The facts or data in a case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing.[17] The facts or data need not be admissible as evidence for the opinion or inference to be admitted if the facts or data are reasonably relied on in the field (FRE 703). Facts or data that are inadmissible shall not be disclosed to the jury by the proponent of the expert opinion. FRE 703 is not a hearsay exception but there is a danger that a crafty lawyer could provide hearsay to an expert to have him or her use it as a basis for an opinion. FRE 703 regulates the expert's use of inadmissible information while FRE 702 governs the methodology, reliability, adequacy of basis, and helpfulness of the expert opinion and the qualification of the expert witness.

FRE 704 allows experts to offer opinions on the ultimate issues to be decided in a case. FRE 705 allows experts to testify about their opinions or give reasons for their opinions without first testifying about the underlying facts or data.

Hearsay

FRE 802 states that hearsay is not admissible as evidence unless otherwise provided for in the FRE or law. Hearsay is a statement, other than one made by the declarant while testifying at a trial or hearing, offered in evidence to prove the truth of the matter asserted. **Hearsay** is inadmissible for a number of reasons, primarily because the real or live witness is not available to be **cross-examined**, nor can the jury evaluate the witness's credibility or demeanor. The use of hearsay testimony or statements presents four dangers:

1. Ambiguity
2. Insincerity
3. Incorrect memory
4. Inaccurate perception

Case in Point

The plaintiff sues the defendant for negligence, claiming that the defendant drove her car into the back of the plaintiff's tractor. The defendant argues that the cause of the accident was not her negligence, but the plaintiff's contributory negligence in driving a tractor without a rear light. The defendant calls as a witness the insurance adjuster who investigated the accident. The adjuster testifies that the plaintiff's son told him that the rear light on the tractor had been out for some time before the accident occurred. A North Dakota court held that the adjuster's testimony was inadmissible as hearsay because it repeated an out-of-court statement.[18]

The non-lawyer sometimes thinks of hearsay as including only oral declarations or utterances made out of court. The hearsay rule covers any kind of statement, whether oral or written, as long as the statement is offered to show the truth of the matter asserted.

[17] FRE 703.

[18] *Leake v. Hagert*, 175 N.W. 2d 675 (N.D. 1970).

The key to the hearsay concept is to note that an out-of-court utterance or statement is not, by itself, either hearsay or non-hearsay. The purpose for which the declaration is offered is what matters; an out-of-court declaration may be offered into evidence for many purposes other than to prove the truth of the matter asserted in the declaration. If that is the case, no hearsay exists.

Case in Point

The plaintiff slips on a puddle of ketchup and is injured while shopping in a grocery store operated by Safeway, the defendant. The plaintiff sues the defendant for negligence. Safeway claims that the plaintiff failed to maintain a proper lookout and did not heed a warning from the defendant's store manager. The store manager's wife testified that just prior to the accident that her husband yelled to the plaintiff, "Lady, please do not step in that ketchup." A trial court ruled that the statement was not hearsay. The store manager's declaration is germane to whether the plaintiff was on notice of the dangerous condition (that is, the slippery floor) and was not being offered to prove the truth of the matter contained in the statement.[19]

FRE 801 contains definitions applicable to the article on hearsay. Rule 801(d) lists items that are not considered hearsay under the FRE. Subsection 2 of part (d) treats five different kinds of **admissions** by a party as non-hearsay. The clearest kind of admission is a party's own statement offered against him.[20] For instance, statements in a party's pleadings are considered admissions for most purposes. Under FRE 801(d)(2)(B), a statement is non-hearsay if it is offered against a party and is one the party manifested that it adopted or believed to be true. Some refer to this as an *adoptive admission*. A test for this non-hearsay item is, taking into account all circumstances, whether a party's conduct justifies the deduction that he or she knowingly agreed with the statement of another. The most contentious issues arise in connection with adoptive admissions in which the party remained silent in the face of the statement. The last three types of admissions can be thought of as representative admissions. FRE 801(d)(2)(C) addresses a statement that was made by a person whom the party authorized to make a statement on a subject. This is in essence a type of express authority whereby a party authorizes another to make a statement on his or her behalf. FRE 801 (d)(2)(D) addresses a situation involving implied authority. Here an agent of the party makes a statement that arises out of a transaction that is within the agent's authority.

Case in Point

A pizza delivery driver gets in a wreck while delivering a pizza for his employer. The driver makes a damaging statement to the police investigating the accident. The statement would be admissible against his employer.

Keep in mind that the content of the statement itself is not sufficient to show an agency relationship. Other proof of the agency relationship must be forthcoming to demonstrate the existence of such relationship. We learn from Appendix A, "Fraud-Related Laws," that statements made by one co-conspirator are admissible against other co-conspirators as long as the statement was made during the course and in furtherance of the conspiracy. This is the non-hearsay situation contained in FRE 801(d)(2)(E). The three requirements that must exist for the statement to be admissible include

1. the statement must be that of a member of the same conspiracy of which the party against whom it is admitted is a member;

[19] *Safeway Stores Inc. v. Combs*, 273 F. 2d 295 (5th Cir. 1960).
[20] FRE 801(d)(2)(A)

2. the statement must have been made while the conspiracy was still extant; and
3. the statement must have been made to further the goals of the conspiracy. Statements made by one co-conspirator against another may be admitted even if there is no conspiracy charge.

FRE 801(d)(1) provides for other types of non-hearsay not mentioned in FRE 801(d)(2). These types of non-hearsay deal with prior statements of declarants and witnesses. One type (FRE 801[d][1][A]) is where a declarant testifies and is subject to cross-examination about a prior statement and the statement is inconsistent with the declarant's testimony and was made under oath in a prior proceeding or deposition. The FRE allows the prior inconsistent statement into evidence even where there was no cross-examination or opportunity to cross-examine. The FRE allows substantive use of a prior consistent statement if offered to rebut an express or implied charge that the declarant fabricated it or acted from a recent improper influence or motive. The prior consistent statement must have been made before the recent fabrication or improper influence or motive. FRE 801(d)(1)(c) permits identification statements of a declarant made on a prior occasion. Such statements can be deemed hearsay. The declarant must testify at trial and be available for cross-examination. The prior identification need not have been made under oath or have been part of a proceeding. The U.S. Supreme Court has liberally construed the requirement that the declarant be subject to cross-examination.[21] All that is required is that the adversary had the ability to ask questions of the declarant about the prior identification. This applies even though the declarant admits to having a total lack of memory about the event that gave rise to the identification.

Numerous exceptions exist to the hearsay rule. Exceptions fall mainly into two categories:

1. Those that apply if the out-of-court declarant is available to testify
2. Those that apply even if the defendant is unavailable.

Examples of exceptions even if the declarant is available to testify include the following:

- *Recorded recollections.* A memorandum or record about a matter concerning which the witness once had knowledge but now has forgotten. The record was made or adopted by the witness when the matter was fresh in memory and if shown to be accurate may be admissible. Such a record may also be shown to a witness who has temporarily forgotten the relevant events to refresh the witness's recollection and permit more complete testimony.

Case in Point

An employee does an inventory for his employer. He writes down the inventory on several pieces of paper. Three years later, the employee is called to testify as a witness in a trial involving commercial litigation. The papers on which the inventory was written may be shown to the witness to refresh his recollection.

- *Records of regularly conducted business activity.* Business records, including computer printouts, kept in the regular course of business, may be admissible unless the source of information or the method of preparation is untrustworthy. The word *business* includes companies, institutions, associations, and occupations of every type.
- Absence of an entry in business records. Evidence that a matter is not included in the memoranda or reports kept in the regular course of business may be admissible to prove that a certain event did not occur, if the matter was one about which a memorandum or report regularly was made and preserved, unless the source of information or the circumstances indicate a lack of trustworthiness.
- *Public records and reports.* Records of public agencies that relate to their public duties, other than law enforcement reports in criminal cases, may be admissible, unless the circumstances indicate a lack of trustworthiness. The absence of an entry in such public records may be offered to prove that an event did not occur. FRE 803(8)

[21] *U.S. v. Owens*, 484 U.S. 554 (1988).

divides public records and reports into three classes. The first category covers a public agency's records of its own activities. Those records can be used to demonstrate that those activities occurred. For example, records that show an investigation happened. The second category under 803(8) includes records of observations made by public officials that are admissible if (1) the observations were made in the line of duty and (2) the official had a duty to report the observations. This category (or hearsay exception) does not apply in criminal cases to matters observed by law enforcement personnel. The third category permits admission of factual findings of a legally authorized investigation into a civil case or against the government in a criminal case. Such findings may not be admitted under this exception against a criminal defendant. A trial judge may exclude a record, report, or findings in any of the three categories if the sources of information or other circumstances indicate a lack of trustworthiness.

There are a number of other exceptions, including statements and documents affecting an interest in property, statements, and documents more than 20 years old, published market reports and commercial publications, and previous convictions.

Examples of hearsay exceptions that apply if the declarant is unavailable include the following:

- *Former testimony.* Testimony given by the declarant at another hearing is admissible if the party against whom the testimony is offered then had an opportunity and similar motive to cross-examine the witness as in the present trial. The exception is not limited to transcripts of the prior hearing. A first-hand observer may orally recount the testimony either from unaided memory or by refreshing his recollection by use of the transcript. Here are the four requirements that must be satisfied for former testimony to be admissible under FRE 804(b)(1):
  - ○ The declarant is unavailable.
  - ○ The former testimony must have been either in a hearing or a deposition. The hearing or deposition must have occurred during some kind of proceeding.
  - ○ The party against whom the former testimony is now offered (a predecessor in interest in a civil trial) must have an opportunity to cross-examine the declarant in the prior proceeding.
  - ○ The party against whom the prior testimony is now offered must have had a similar motive to develop the testimony in the prior proceeding by direct or cross examination.

  Affidavits are not covered even when they are prepared for use in a trial or other proceeding. Also, statements made to law enforcement during investigations that are not covered as an investigation are not a proceeding. For former testimony to be admissible under this exception it must have been made under oath (according to the Advisory Committee notes).
- *Statements against interests.* A hearsay statement that was against the declarant's interests, or that tended to subject the declarant to civil or criminal liability, is admissible.
- *Admissions.* Out-of-court statements made by a party to the court proceeding are not considered hearsay and are admissible against the party who made them. The term admission is misleading because such statements are admissible if relevant for any purpose and not merely if they constitute a confession.

See box 4.7 on the following page for a summary of hearsay rule exceptions.

Use of Originals

FRE 1001–1008 are based on the concept that the best evidence should be presented. Thus, in proving the terms of a writing, where the terms are material, the original writing must be produced unless it is shown to be unavailable for some reason other than the serious fault of the proponent. FRE 1002 states that originals of writings, recordings, or photographs are generally preferred as evidence and may be required when proving the content of the writings, recordings, or photographs. The "best evidence" or "original writings" rule does not apply if all that is sought to be proved is that a writing exists, was executed, or was delivered.

Box 4.7 Hearsay Rule and Exceptions (FRE 801-806)

Key Points	Details
The hearsay rule precludes out-of-court statements from being offered into evidence to prove the truth of the matter asserted.	The declarant is the person who made the out-of-court statement. The witness is the one who seeks to testify that the statement was made.
The hearsay rule is overcome when a statement is defined as non-hearsay or falls within an exception. A statement that is not directly assertive of a fact is not hearsay.	There are various types of statements that are defined as non-hearsay: 1. Party admission. 2. Prior sworn inconsistent statement. 3. Prior consistent witness statement. 4. Prior witness identification statement. Here are various exceptions to the hearsay rule: 1. Business records are admissible if they are made in the regular course of business, the witness has personal knowledge and the records were made contemporaneously to the event to which they refer. 2. Official records, reports, or data compilations of public agencies. 3. The absence of a record where one would normally exist is admissible to prove nonoccurrence or nonexistence. 4. Documents that are 20 or more years old. 5. Statements of family history kept by religious organizations and in family writings. 6. Market data contained in reports or publications. 7. Recorded recollections or writing made by the witness prior to testifying (if the witness cannot remember the facts contained therein). 8. The declarant is unavailable for reasonable grounds. 9. Statements contained in treatises may be read into evidence to the extent they are relied upon by an expert witness. 10. Party admission.

FRE 1001(1) defines writings and recordings as letters, words, or numbers, or their equivalent, set down by handwriting, typewriting, printing, photostating, photographing, magnetic impulse, mechanical or electronic recording, or other form of data compilation. FRE 1001(2) indicates that photographs include still photographs, x-rays, video tapes, and motion pictures. In a fraud case, the **original documents (best evidence)** must be presented if it is claimed they were forged or altered. See box 4.8 for a summary of the rules for original documents.

FRE 1003 states that copies or duplicates of routine documents and exhibits generally will be allowed in civil trials. However, originals must be used if (1) a question is raised as to the authenticity of the original and (2) it would be unfair to admit the duplicate in lieu of the original. FRE 1004 allows evidence other than the original to be submitted in certain cases when the original is not available. These situations include when

1. the original has been lost or destroyed;
2. the original cannot be obtained by any available judicial process or procedure;

3. the original is located outside the court's jurisdiction; and
4. the information contained in the original is expected to harm the party's case and is withheld by the other party (for example, the party has been told to bring the original to a hearing but does not do so).

FRE 1005 allows the use of certified or conformed copies of public records to reduce the burden on public agencies for producing original records. FRE 1006 permits the use of summaries, graphs, charts, or calculations of voluminous and tedious detail as long as the originals or duplicates are available for examination or copying.

Box 4.8 Best Evidence Rule (FRE 1001-1008)

General Statement	Description/Detail
The Best Evidence Rule (BER): To prove the contents or a writing (or film, recording, picture, and so on), the original writing must be produced or a satisfactory explanation given for its absence.	An original document can be any duplicate of a document that accurately reproduces the document.
The BER or original document rule applies only in certain situations.	The BER applies when • the writing is a legally operative document. • the writing is offered to prove an event. • the witness's sole knowledge of the facts about which he or she is testifying comes from the writing.
The BER does not apply in some circumstances.	Copies may be used as evidence (the BER does not apply) when • the event or facts exist independently of the writing (for example, a marriage license). • the writing is of minor importance, so it is collateral to the ultimate issue.

Documents

Documents are admissible if they are properly authenticated. The authentication requirement is satisfied by proof that a document is in fact what the person offering it says it is.

Case in Point

A letter may be authenticated if it is identified by the author or the person who received it or typed it, or by a person who can identify the signature or handwriting of the author.

FRE 902 states that some documents, such as certain public records, are self-authenticating, or admissible without calling a witness to authenticate them. Other records that are self-authenticating include official publications issued by public authorities, and newspapers and periodicals, trade inscriptions, and business records. FRE 902(4) states that a certified copy of a public record is self-authenticating if the certification is from the custodian or other person authorized to make such certification. Another self-authenticating document is one acknowledged by a notary public.[22] Under 902(11), the original or a copy of a domestic record that meets the requirements of FRE 803(6)—namely, the record of an act, event, condition, opinion or diagnosis that is made and kept in the course of a regularly conducted activity of a business, organization, or other entity—may be admissible without calling a witness

[22] FRE 902(8).

to authenticate it, if it is accompanied by a written declaration of its custodian or other qualified person. The adverse party must be given reasonable written notice of the intent to use such a record and have the record made available for inspection. An adversary may challenge the authenticity of a self-authenticating document.

Witness Examination and Impeachment

When a lawyer calls a witness, the lawyer's questioning of that witness is called the **direct examination**. It is used to establish those facts that are important to a claim or defense of the party calling that witness. The direct examiner may (1) ask specific questions about the facts or (2) ask general questions calling for a narrative response from the witness.

An important rule for direct examination is that usually the examiner cannot ask **leading questions**. A leading question is one that suggests to the witness the answer desired by the examiner. No mechanical formula exists to ascertain whether a question is leading. Questions that begin with "Is it not true" or "Did not" will almost always be considered leading questions. Also, a question that can be answered with a "yes" or "no" is usually leading. Generally the more specific the question the more likely it is to be leading.

Some situations arise in which leading questions are permitted on direct examination. A witness who is biased in favor of the opposing party may be examined with leading questions. If a witness called by an examiner turns out to be hostile to the examiner, then leading questions may be used. Leading questions may be employed to develop preliminary matters or matters that are not in dispute. Also, if a forgetful witness testifies, then leading questions can be used to refresh the witness's memory.

After the lawyer who calls a witness has finished direct examination, the adversary has the opportunity to cross-examine the witness. Cross-examination is considered to be important in order to seek the truth. Leading questions are usually permitted during cross-examination. This rule is suspended if the witness favors the cross-examiner. The FRE limit the scope of cross-examination to matters testified to on direct examination. However, questions that pertain to a witness's credibility are always regarded as within the scope of cross-examination.

Under the FRE (and the Sixth Amendment), an adverse party is entitled to offer evidence to **impeach** the testimony or credibility of a witness. Impeachment means that the examiner tries to show flaws or weaknesses in the witness. Cross-examination is aimed at showing weaknesses or inconsistencies in the witness's testimony. Impeachment is tried by demonstrating that the witness is influenced by bias or self-interest, has a history of prior inconsistent statements, has been convicted of a felony, has a reputation for untruthfulness, or has a sensory or mental defect.

Under FRE 613, when a witness testifies at trial, evidence of a prior inconsistent statement is admissible to impeach credibility. A rigid foundation must be established to bring in the prior inconsistent statement. The witness must be given a chance to deny having made it or to explain away the inconsistency. Under FRE 613, the foundation may be laid either before or after impeachment. These principles apply only when the witness is not a party. If the witness is a party, his or her prior inconsistent statement is admissible as an admission, as admissions do not fall within the hearsay rule.

Under FRE 609, evidence of a prior felony conviction may be admissible if the felony occurred within the last 10 years and the judge finds that the probative value of the evidence outweighs the prejudicial effect on the defendant. Evidence that a witness has been convicted of a crime that involves dishonesty or a false statement may be admissible even if the crime is not a felony. Although evidence that a witness has a reputation for untruthfulness may be admitted to impeach, proof of specific instances of misconduct is inadmissible.

Authentication

FRE 901 provides that "the requirement of authentication or identification as a condition precedent to admissibility is satisfied by evidence to support a finding that the matter in question is what its proponents claim." It requires that the evidence be in substantially the same condition it was when it was obtained or seized. The principles of authentication apply to any physical items described in testimony or offered into evidence, including witness statements. The most common form of authentication or identification of tangible objects (for example, letters, memos, documents,

photographs, tools, weapons, and so on) is to simply have the witness identify them on the basis of his or her own personal knowledge.

Evidence is susceptible to tampering, loss, substitution, degradation, or mistake and is not always capable of easy recognition. Hence, the item must be authenticated. A complete independent historical accounting and rendition of the item must be documented to maintain the item's integrity, not just whether the item has been subject to change. Establishing the item's condition is accomplished through testimony of successive custodians, referred to as a chain of custody. This is achieved by having each person (or link in the chain) who has had contact with the item show

1. the circumstances under which custody was taken;
2. the precautions taken to prevent alteration, degradation, contamination, or tampering;
3. that change or tampering has not occurred; and
4. the circumstances under which the person relinquished care, custody, and control of the item.

If real evidence is fungible, not readily identifiable, or is of the type that might change in condition (for example, narcotics), then it must be authenticated through a chain of custody. A short chain of custody significantly reduces the occurrence of problems.

The FRE do not purport to give detailed standards for authenticating each of the many special types of evidence. Instead, FRE 901(b) gives 10 illustrations of authentication. Here are those illustrations:

1. *Testimony of witness with knowledge.* Testimony that an item is what it is claimed to be.
2. *Voice identification.* Identification of a voice, whether heard firsthand or through mechanical or electronic transmission or recording, by opinion based upon hearing the voice at any time under circumstances connecting it with the alleged speaker.
3. *Non-expert opinion on handwriting.* Non-expert opinion as to the genuineness of handwriting, based upon familiarity not acquired for purposes of litigation.
4. *Comparison by an expert witness or trier of fact.* A comparison with an authenticated specimen by an expert or the trier of fact.
5. *Distinctive characteristics and the like.* The appearance, contents, substance, internal patterns, or other distinctive characteristics of an item, together with all the circumstances.
6. *Evidence about a telephone conversation.* Evidence that a call was made to the number assigned at the time to a particular person or a particular business.
7. *Evidence about public records.* Evidence that an item was recorded or filed in public office or a purported public record or statement that is from the office where items of this type are kept.
8. *Evidence about ancient documents or data compilations.* For either item, evidence that it is in a condition that creates no issues about authenticity, was in a place where it would likely be, and is at least 20 years old.
9. *Evidence about a process or system.* Evidence that the process or system produces an accurate result.
10. *Methods provided by statute or rule.* Any method of authentication or identification provided by federal law or Supreme Court rules.

Please note that the methods for authenticating a phone call[23] are different depending on whether the sponsoring witness initiated or received the call. The FRE require a specific authentication protocol to prove an outgoing call.

Many of the 10 examples previously listed from FRE 901(b) lend themselves for use in authenticating ESI and social media evidence. Social media is considered to be forms of electronic communication through which users create online communities to share information, ideas, personal messages, and other content. The more well-known forms of social media include blogs, content communities, social networking sites, and virtual worlds. Social networking includes Facebook, LinkedIn, and other such online communities.

A preliminary determination of admissibility of social media evidence is the responsibility of the trial judge under FRE 104. A court may not consider inadmissible evidence in determinations governed by FRE 104(b). The interaction between FRE 104(a) and (b) can be complicated and tricky.

[23] FRE 901(b)(6).

Authentication of social media and other ESI evidence under FRE 901 may be considered a subset of relevancy. The decision of whether evidence is authentic calls for a factual determination by the finder of fact and of admissibility that is governed by the process in FRE 104(b). This involves two steps. First, the trial judge must ascertain whether the proponent of the ESI or social media evidence has provided a satisfactory foundation from which the jury or other fact finder could find that the evidence is authentic. Second, the jury or other fact finder decides whether the ESI or social media evidence admitted is authentic. For instance, the decision on the authenticity of a Facebook posting offered into evidence belongs to the jury under FRE 104(b). The facts the jury considers in making this decision must be admissible into evidence. Again, this is FRE 104(b) being applied. On the other hand, if the ruling on whether some piece of ESI is a business record involves contested facts, the admissibility of those facts is decided by the judge under FRE 104(a). Presently, court cases are in some disarray over the authenticity and admissibility of social media evidence.

One string of cases sets high the bar of admissibility by not admitting social media evidence unless the court determines that the evidence is authentic. A second line of cases determines the admissibility of ESI and social media evidence based on whether there is adequate evidence of authenticity for a reasonable fact finder to deduce that the evidence is authentic. An example of the approach in the first line of cases is State v. Eleck,[24] in which the defendant offered into evidence printouts of Facebook messages he allegedly received.

The need for authentication arises in this context because an electronic communication, such as a Facebook message, an e-mail, or a text message, could be generated by someone other than the named sender. This is true even with respect to accounts requiring a unique user name and password, given that account holders frequently remain logged in to their accounts while leaving their computers and cell phones unattended. Additionally, passwords and website security are subject to compromise by hackers. Consequently, proving only that a message came from a particular account, without further authenticating evidence, has been held to be inadequate proof of authorship.

An example of the second string or line of cases is *Tienda v. State*,[25] in which the prosecutor offered into evidence in a murder trial several MySpace pages from three MySpace accounts allegedly belonging to the accused. At least two witnesses, including a detective, testified about gang usage of social media. The social media evidence was admitted and the defendant was convicted of murder and appealed the conviction. The Court of Criminal Appeals of Texas affirmed the conviction, stating that there was ample circumstantial evidence taken as a whole with all of the individual, particular details considered in combination to support a finding that the MySpace pages belonged to the defendant and that he created and maintained them. The key to addressing admissibility and authenticity issues regarding ESI and social media evidence is the proper application of FRE 104 and 901.

Most authentication problems arise with regard to writings and other communications. Certain rules have arisen to handle some recurring problems. Here are some of those rules:

1. *Authorship.* Usually authentication of a writing will consist of showing who its author is.
2. *No presumption of authenticity.* The proponent bears the burden of making an affirmative showing that a writing or communication is authentic.
3. *Signature.* The requirement that documents be authenticated means that a writing's own recital regarding its authorship will not be automatically believed.
4. *Distinctive characteristics.* There is an increasing tendency to allow a writing's distinctive characteristics and the circumstances surrounding it to suffice for authentication. This flows from FRE 901(b)(4).

Burden of Proof

Burden of proof refers both to the burden of production and the burden of persuasion. The burden of production is the duty to come forward with evidence supporting the fact or issue sought to be proven. The burden of persuasion is the duty to convince the jury. In most civil cases, the burden of proof (or persuasion) is preponderance of the evidence (that is, more probable than not). In a minority of civil cases (for example, fraud, disbarment, or validity of a legally operative instrument), the standard is clear and convincing evidence (this is a higher standard than

[24] 23 A. 2d 818 (Conn. App. Ct. 2011).
[25] 358 S.W. 3d 633 (Tex. Crim. App. 2012).

preponderance of the evidence). In criminal cases, the burden of proof (or persuasion) is beyond a reasonable doubt. This means the prosecution has the burden of persuasion with respect to every element of the offense alleged.

Presumptions

FRE 301 deals with presumptions in civil cases only. Presumptions in federal criminal cases are dealt with by case law. A presumption requires that an inference be drawn from a fact or set of facts. A presumption will shift the **burden of production** to the party against whom the presumption operates. The burden will require the party to produce evidence to rebut the presumption.

Summary

The law of evidence is a set of rules and principles that govern the admission of evidence into various types of judicial and administrative proceedings. Evidence is any matter, verbal, physical, or electronic, that can be used to support the existence of a factual proposition. The two categories of evidence are direct evidence and circumstantial evidence. Direct evidence tends to show the existence of a fact in question without the intervention of proving any other fact. Circumstantial evidence is that which does not resolve a matter at issue unless additional reasoning is used to reach the proposition at which the evidence is targeted. Evidence may be testimonial, physical, or demonstrative.

The FRE govern the admissibility of evidence at civil and criminal trials in federal courts. The overwhelming majority of state courts have adopted evidence rules patterned after the FRE for use in state courts. The FRE are organized into 11 articles.

Before an item can be considered relevant, a proper legal foundation must be laid for its admission. A proper foundation often consists of establishing the competency of a witness and materiality. Evidence is relevant only if it tends to prove or disprove a proposition of fact. A link must exist between the factual proposition which the evidence tends to establish and the substantive law. Although relevant evidence is generally admissible, such evidence may be excluded if it is unduly prejudicial, threatens to confuse the jury, causes an unnecessary delay, wastes time, or is needlessly repetitive.

According to FRE 501, relevant evidence may be excluded if its admission would violate a recognized privilege. The most important privileges for forensic accountants are attorney-client privilege, marital privilege(s), physician-patient privilege, psychotherapist-patient privilege, priest-penitent privilege, law enforcement privilege, and the privilege against self-incrimination.

FRE 602 excludes as fact witnesses the people who do not have personal knowledge of the matter at issue. If the witness will not solemnly promise to tell the truth, the court will not hear that person's testimony.

FRE 701 allows witnesses who are not experts to provide opinion testimony as long as the opinion is based on the witness's rational perceptions and the testimony helps the trier of fact. FRE 702 states that a witness qualified as an expert by knowledge, skill, experience, training, or education may offer opinion testimony under certain conditions if scientific, technical, or other specialized knowledge will assist the trier of fact. Under the Daubert rule, the following factors may be considered by a judge in making a ruling on expert testimony:

1. Can the theory or technique be tested?
2. Has the theory or technique been subjected to peer review and publication?
3. What is its error rate?
4. Do standards exist for controlling the technique's operation?
5. Is the theory or technique generally accepted in the expert community?

The facts or data in a case upon which an expert bases an opinion may be those perceived by or made known to the expert at or before a hearing. The facts or data need not be admissible for the opinion to be admitted if the facts or data are reasonably relied on in the field.

FRE 802 states that hearsay is not admissible as evidence unless provided for in the law. Hearsay is a statement, other than one made by the declarant while testifying at a hearing or trial, offered in evidence to prove the truth of the matter asserted in the statement. The hearsay rule covers any kind of statement, whether oral or written, as long as the statement is offered to show the truth of the matter asserted. The key to the hearsay concept is that an out-of-court statement is not, by itself, either hearsay or non-hearsay. The purpose for which the statement is offered is what matters. No hearsay exists if the out-of-court declaration is offered for a purpose other than to prove the truth of the matter asserted in the statement.

Numerous exceptions exist to the hearsay rule. Some of these exceptions are recorded recollections, records of regularly conducted business activity, absence of an entry in business records, public records and reports, statements and documents more than 20 years old, published market reports, former testimony, statements against interests, and admissions.

FRE 1002 (the best evidence rule) states that originals of writings, recordings, or photographs are preferred as evidence and may be required when proving the contents of the writings, recordings, or photographs. Copies of routine documents and exhibits generally will be allowed in civil trials unless (1) a question is raised as to the authenticity of the original and (2) it would be unfair to admit the duplicate in lieu of the original.

When a lawyer calls a witness, the lawyer's questioning of that witness is called the direct examination. An examiner usually cannot ask leading questions on direct examination. The adversary in a lawsuit has the opportunity to cross-examine the witness. Impeachment means that the examiner tries to show flaws or weaknesses in the witness while cross-examination is aimed at demonstrating weaknesses in the witness's testimony.

FRE 901 provides that authentication or identification is a condition precedent for admission of evidence. Authentication requires that evidence be in substantially the same condition it was when it was obtained or seized. The FRE do not purport to give detailed standards for authenticating the many special types of evidence. Most authentication problems arise with regard to writings and other communications.

Review Questions

1. The Federal Rules of Evidence determine _____ that courts may rely on in rendering verdicts.
   a. The facts.
   b. The opinions.
   c. The facts and opinions.
   d. None of the above.

2. Which of the following is not one of the main articles of the Federal Rules of Evidence?
   a. Privileges.
   b. Witnesses.
   c. Verdicts.
   d. All of the above are main articles of the federal rules of evidence.

3. The most important article in the Federal Rules of Evidence is probably _____.
   a. Authentication and identification.
   b. Opinions and expert testimony.
   c. Relevance and its limits.
   d. Hearsay.

4. Which of the following does not justify a court excluding evidence because its probative value is substantially outweighed by a danger?
   a. Unfair prejudice.
   b. Confusing delay.
   c. Needlessly presenting cumulative evidence.
   d. All of the above justify a court excluding evidence because its probative value is substantially outweighed by a danger.

5. Generally speaking, ordinary witnesses are permitted to testify based on _____.
   a. Their opinions in conclusory terms.
   b. Their personal knowledge.
   c. Their opinions in conclusory terms that are based on their personal knowledge.
   d. All of the above.

6. Expert witnesses must be qualified by SKEET. The letter "T" in SKEET refers to _____.
   a. Training.
   b. Technical skills.
   c. Training or technical skills.
   d. None of the above.

7. Regarding expert testimony, which of the following is not required by Rule 702?
   a. It must help the trier of fact to understand the evidence or determine a fact in issue.
   b. It must be based on sufficient facts or data.
   c. It must be a product of reliable principles and methods.
   d. It must reliably apply training and expert opinion to the facts of the case.

8. Given that the general qualifications are met, the expert may base an opinion on _____.
   a. Facts or data in the case that the expert has introduced into evidence.
   b. Facts or data in the case from percipient witness testimony.
   c. Facts or data in the case that the expert has been made aware of or has personally observed.
   d. None of the above.

9. The general rule is that hearsay is not admissible. There are _____ exceptions to this rule.
   a. No.
   b. A very small number of.
   c. Nearly a couple of dozen.
   d. Over 50.

10. Normally, the proponent must produce sufficient evidence to support a finding that an item be admitted as evidence. However, an official state signed and sealed document might be admitted without the proponent being required to produce such sufficient evidence. Such a document being admitted would involve an exception to which rule (or title)?
   a. Contents, writings, recordings, and photographs.
   b. Opinions and expert testimony.
   c. Authentication and identification.
   d. None of the above.

11. Which of the following is true?
   a. Many states base their rules, at least in part, on the federal rules of evidence.
   b. Generally speaking, state rules of evidence bear little resemblance to the federal rules of evidence.
   c. All states have codified the federal rules of evidence as their written rules.
   d. None of the above.

12. Smithson took action against the estate of Upton for nonpayment of a promissory note. Smithson filed the action in federal court under its diversity jurisdiction. The estate claims Upton paid the note in full before his death. The state in which the federal court sits has a dead man statute. At trial, Smithson wishes to testify that shortly before his death, Upton acknowledged that the debt remained unpaid. The estate objects. Which of the following statements is true?
   a. The court should sustain the objection because of the dead man statute.
   b. The court should sustain the objection because Smithson's testimony constitutes inadmissible hearsay.
   c. The court should overrule the objection as there is no federal dead man statute and FRE 601 removes such a ground of witness incompetency.
   d. The court should sustain the objection both because of the dead man statute and because of the hearsay rule.
   e. None of the above.

13. Abbott is being prosecuted for the murder of Costello. To prove he did not commit the crime, Abbott wishes to testify that after the murder was committed, Barney, a member of the Coasties, a violent street gang, told him that the Coasties had killed Costello. Abbott is not a member of the Coasties. Which of the following statements is correct?
   a. Since Abbott's testimony concerning Barney's statement would be highly self-serving, the court should exclude it as a waste of time.
   b. Although Barney's statement is relevant to Abbott's innocence, it is hearsay when offered for that purpose.
   c. Barney's statement is not hearsay when offered to prove Abbott's innocence, but it must be excluded because its probative value is substantially outweighed by the danger of unfair prejudice.
   d. Barney's statement is relevant non-hearsay when offered to prove Abbott's innocence.
   e. None of the above.

14. Tom is being prosecuted for conspiring to sell illegal drugs in Miami. Tom denies that he was involved in any conspiracy. The prosecution calls one witness who testifies that she was a part of the conspiracy, but withdrew before any drug sales. To prove Tom's involvement in the conspiracy, the prosecution wishes to call Nat an undercover narc, to testify that he infiltrated the organization which allegedly planned the crime, and that on the day before the deal was going down, George, a member of the organization, said to Nat, "Tom and I need a driver for tomorrow's deal. Can you assist us?" Tom lodges a hearsay objection to Nat's testimony concerning George's statement. What statement is the most accurate?
    a. The existence of a conspiracy is a preliminary fact which must be found for George's statement to be admissible. It is also a fact which the jury must ultimately decide to convict Tom. As a result, the jury should decide the preliminary fact.
    b. The existence of a conspiracy is a preliminary fact which must be found for George's statement to be admissible. It is also a fact which the jury must ultimately decide to convict Tom. Therefore, although the existence of the preliminary fact will be for the court to decide, the court must apply the reasonable doubt standard in making that determination.
    c. Because the statement asserts that a conspiracy existed, which is the very thing the court must decide to determine the admissibility of the statement, it would be improper to permit the court to consider the statement as evidence of the existence of a conspiracy.
    d. Even though the statement asserts that a conspiracy existed, which is the very thing the court must decide to admit the statement, the court may consider the statement as it determines the preliminary fact question.

15. At the trial of Ike, who was accused of receiving stolen property, the prosecution called Jeff to the witness stand. Jeff testified that in a conversation that he had with Ike in jail shortly after Ike's arrest, Ike admitted that he knew that the car he had been driving was stolen. Which of the following facts or inferences would best support Ike's motion to exclude Jeff's testimony?
    a. At the time of their conversation, Jeff told Ike that he was an attorney.
    b. At the time of their conversation, Ike reasonably believed that Jeff was employed as an investigator for Ike's attorney.
    c. Jeff had offered to recommend an attorney to Ike, and had asked Ike to tell him the facts of the case.
    d. Jeff had been charged with a crime and, on the day of Ike's trial, had negotiated a favorable plea bargain in return for his testimony.
    e. None of the above.

16. Berlinda and Sylvia, business partners, are being prosecuted for participating in a fraudulent real estate scheme. Earlier, Sylvia had been sued by Mike, an investor who lost a great deal of money. At that civil trial, Mike testified about the scheme and identified Sylvia as the one who enticed him into investing his son's college fund. Mike died before the criminal trial. At the criminal trial, the prosecution wished to call Wendy, a newspaper reporter who was in the courtroom during Mike's testimony at the civil trial, to testify about Mike's trial testimony. Wendy's testimony concerning Mike's civil trial testimony is _____.
    a. Hearsay and inadmissible against both Berlinda and Sylvia. It does not satisfy the former testimony exception because of the "similar motive" requirement of said exception.
    b. Hearsay and inadmissible against both Berlinda and Sylvia because it is not offered in the form of the trial transcript.
    c. Hearsay and admissible against Sylvia, but not Berlinda.
    d. Hearsay and admissible against both Berlinda and Sylvia.
    e. None of the above.

17. Bill is prosecuted for arson. Bill denies committing the crime. At trial, Bill calls Leonard, a law officer who interviewed Omar, the owner of the torched building. Bill shows Leonard a document, which Leonard identifies as the report he prepared after the interview. The report describes the physical condition of the building and states that Leonard showed Omar a group of photographs, and that Omar identified an individual as the one he saw running from the building just before the fire broke out. That person was not Bill. Bill represents that he will call Omar to testify later at the trial. Bill now offers Leonard's report into evidence. Which of the following statements is most likely correct?
    a. The report is hearsay and inadmissible under the public records exception because it contains matters observed pursuant to duty imposed by law, as well as factual findings resulting from an investigation. Omar's statement is thus also inadmissible.
    b. The report is hearsay and admissible under the public records exception. Omar's statement is admissible non-hearsay if Omar testifies and is subject to cross-examination concerning the statement.
    c. The report is hearsay and the description of the building is admissible under the public records exception. The part of the report describing Omar's identification of the perpetrator is inadmissible because Leonard lacks personal knowledge of who committed the crime.
    d. The report is non-hearsay because it is not offered to prove the truth of the matter asserted.
    e. None of the above.

18. Angie sues Ohio Heating for negligence for injuries suffered when Ohio allegedly failed to fix Angie's heater during a strong cold snap. Angie, who is elderly and housebound, alleges that she phoned Ohio as soon as the heater failed, that Ohio agreed to respond quickly and that Angie waited for an entire night, but Ohio never appeared. While waiting for Ohio, Angie claims she suffered cold-related injuries to her fingers and toes. Angie testifies that she placed her call to the number for Ohio listed in the phone book, and that a voice answered, "Heating Service." Ohio denies ever receiving the call and moves to strike Angie's testimony from the record. How should the court rule?
    a. The court should deny Ohio's motion because there is sufficient evidence to support a finding that the call was actually placed to Ohio.
    b. The court should deny the motion if it finds that the call was not placed to Ohio.
    c. The court should grant the motion because the party answering the phone did not identify itself as Ohio Heating.
    d. The court should deny the motion because Angie has already testified and it is too late to keep the evidence from the jury.
    e. None of the above.

19. Grover initiates a breach of contract action against Todd. Grover claims the contract, which was reduced to writing, called for Todd to deliver 200 crates of peaches by a certain date. At trial, Todd wishes to testify that the contract only called for delivery of 100 crates. Grover makes a best evidence rule objection.
    a. The court should sustain the objection.
    b. The court should overrule the objection because a contract is an agreement brought about by the meeting of two minds, not by writing. The writing is only a memorandum of the agreement, not the contract itself.
    c. The court should overrule the objection because Todd is not testifying about the contents of the writing, but about his understanding of the agreement.
    d. The court should overrule the objection because the central issue in the case concerns the terms of the agreement, and the jury is entitled to hear Todd's interpretation of the terms.
    e. None of the above.

20. Vivian starts a fraud action against Dennis, a used car seller, arising from the sale of a car. Vivian asserts that Dennis advertised the car as new when in fact its odometer had been set back to zero from 10,000 miles. Before trial, Vivian took the deposition of Sam, Dennis's sales manager. During the deposition, Sam admitted that the seller sometimes turned back odometers on vehicles before sale. At trial, Dennis calls Sam, who testifies that he prepares all cars for Dennis and that no odometers were ever turned back while Sam worked for Dennis. On cross-examination, Vivian asks Sam whether he remembers having his deposition taken and stating that odometers sometimes were turned back. Sam admits to having had his deposition taken, but denies making the statement. Vivian wishes to read into evidence a portion of Sam's deposition transcript containing Sam's statement that odometers sometimes were turned back. Which of the following statements is most accurate?
    a. The portion of the transcript is admissible only to impeach Sam's credibility.
    b. The portion of the transcript is admissible both to impeach Sam's credibility and to prove that the odometer was turned back.
    c. The portion of the transcript is inadmissible for either purpose because Sam is not unavailable.
    d. The portion of the transcript is inadmissible for either purpose unless Dennis's lawyer cross-examined Sam at the deposition.
    e. None of the above.

Short Answer Questions

1. Hearsay is an _____ statement offered _____ _____.
2. Relevant evidence is any evidence that _____ _____.
3. Relevant evidence may be excluded if the _____ value of the evidence is substantially outweighed by the danger of unfair prejudice, _____, _____, _____, and _____.
4. Under the best evidence or original document rule, the proponent must produce the original writing, recording or photograph. or a _____. The word "writings" includes _____.
5. There is no need for the originals of voluminous documents that cannot be conveniently examined in court if _____ and _____.
6. Generally, a witness _____ read from a writing in aid of oral testimony.
7. An expert witness opinion is admissible if it _____, the methodology is reliable and the opinion is relevant.
8. Under the spousal immunity privilege, one spouse _____ to give adverse testimony against the other in a criminal case.
9. Under the confidential marital communications privilege, there must be a _____ at the time of _____.
10. On direct examination, an attorney calls and questions _____.
11. Attorneys conduct cross examination to explore weaknesses in the opponent's case and _____ _____.
12. _____evidence requires inference of one fact from a fact that has been proved in court.

13. _____ evidence is a thing involved in an underlying event (for example, a weapon or document).
14. A leading question is one that _____.
15. Generally, the examiner _____ ask leading questions.

Brief Cases

1. In a motor vehicle accident case, the plaintiff offered into evidence a photograph of the intersection where the accident occurred to show the relationship and directions of the streets involved. The plaintiff testified that on the day of the accident the intersection looked exactly as depicted in the photograph except that some of the trees on the street carried small Christmas ornaments. Should the photograph be admitted into evidence?
2. In a legal action by Puff Promotionals against Tracy, Puff alleged that it had entered into a written contract with Tracy for the purchase of stain material which Puff intended to use in manufacturing products. Puff further alleged that Tracy failed to deliver the materials as promised. At trial, Mason testified that he worked in the Puff Promotional legal department and that he negotiated the contract. He stated further that although the original and all copies of the contract had been destroyed in an office fire, he knew the substance of its contents. Is Mason's testimony about the contract admissible at trial?
3. Griffin sued Covenant Inc. for damage which resulted from a collision between Griffin's motorcycle and one of Covenant's trucks. After receiving the summons, Thomas, the president and sole stockholder of Covenant Inc., notified Lottie, the company attorney. Lottie said that she wanted to meet with Thomas and the driver of the truck. At Lottie's request, Thomas went to Lottie's office with David, who had been driving the truck at the time of the accident. While discussing the case with Lottie in the presence of David, Thomas said that on the day before the accident he was aware that the truck's brakes were not working properly, but that because of a heavy workload he postponed making the necessary repairs. Can David testify at trial about the statement which Thomas made to Lottie about the brakes?
4. Di-Di is on trial in federal court for conspiring with Coco to defraud Sally. At Di-Di's trial, the prosecutor calls Di-Di's wife to the stand to testify as to a conversation between Di-Di and Coco that she heard while married to Di-Di. Can Di-Di's wife testify if she so chooses (over Di-Di's objection)?
5. At a federal trial, expert testimony concerning Mayan hieroglyphics is required. One party offers the testimony of Roberto Rinaldo, who speaks several ancient Mayan dialects and was the first to crack the Mayan Rosetta stone. Rinaldo, 20 years old, is lacking in academic credentials and has not published anything. Can he qualify as an expert witness?
6. Olfactory is a dog who searches for drugs for the Miami and Dade Sherriff's office. His territory is the Miami airport. While checking out luggage, Olfactory barks incessantly to indicate drugs in a particular suitcase. When the suitcase owner, Nelson, is arrested and tried on drug charges, Olfactory's handler, Andy testifies for the prosecution that, "Olfactory pointed out the presence of cocaine in the luggage." Is this hearsay?

Cases

1. Mark and Matt were ex-convicts. Matt asked Mark to help him hold up a pet store. When Mark hesitated, Matt promised Mark would get at least $5,000 for his involvement. Mark agreed. They agreed that Mark would drive the getaway vehicle and Matt would purloin the money from the pet store owner. On the appointed day, Mark and Matt drove to the pet store. Matt went inside and pulled a shotgun on the owner and took $15,000 from the cash registers. As Matt was leaving, he was shot in the arm by a security guard. Matt was captured and then arrested.

When the ambulance arrived, Matt said to one paramedic, "Please give Mark this $5,000, or one of his buddies will get me in prison." Matt later confessed and Mark was arrested and charged with conspiracy to commit robbery of a pet store. At Mark's trial, the paramedic is called to testify about Matt's statement. Mark's attorney objects. Is the testimony admissible (assume it is not hearsay)?

2. Sam owned a large house on Worth Street in the City of Palm Beach. He entered into a written contract with Bugs whereby the latter agreed to add a second story onto Sam's house. The specific work that Bugs was to perform was described in detail in the contract. After the work was done, Sam refused to pay the last installment, claiming that some of the work was defective. Sam sued Bugs for the sum of money paid to another contractor to do the work involved "correctly." At trial, Bugs sought to testify about the detailed provisions of the contract to show that his performance satisfied the contract. Is Bugs's testimony admissible?

3. Indiana Jones sued Pollution Company, a Nevada corporation that operates a toxic waste disposal firm. Jones claimed that fumes emitted from the plant had caused him to suffer severe headaches. At trial, Pollution's attorney called Dr. Max, a medical expert, who testified that, in his opinion, Jones's headaches were an innate condition. On cross-examination, Dr. Max acknowledged that Dr. Min was considered an expert with respect to headaches by many in the medical field. Jones's attorney then tried to read into the record a portion of Dr. Min's book which indicated that, based on his extensive research, headaches occasionally resulted from emissions from toxic waste disposal plants. Is this evidence admissible?

4. Dante was arrested for driving under the influence of alcohol. At his trial, the prosecution sought to introduce the written report of Officer Beatrice, one of the arresting officers. Officer Beatrice's report, made at the scene immediately after Dante was handcuffed and placed in the back of the patrol car, stated that the defendant's speech was slurred at the time of the arrest. Officer Beatrice was not present at the trial because she had recently been in an accident. Officer Virgil (Beatrice's partner for seven years) testified that the signature on the report was that of Beatrice. Is the report admissible?

5. Tom is on trial for burglary in a federal district court. While investigating the crime scene, Detective Jerry discovered a piece of cheese left at the scene with teeth marks in it. The U.S. attorney claims that the teeth marks were made by Tom and seeks to offer testimony by Dr. Duck, a dentist who is an expert on dental identification. The prosecution would have Dr. Duck testify that there have been tests of the accuracy of such identifications, that the technique has been written up in peer-reviewed forensic journals, that it has a very low false positive rate, and that it is generally accepted by criminalists as a method of identification. Is Dr. Duck's testimony admissible?

Internet Research Assignments

1. Locate the 2011 federal district court opinion (Middle District of Pennsylvania) involving Eric Lyons, plaintiff. How does the court rule about Mr. Lyons giving his own lay testimony about x-ray results or physical symptoms under FRE 701?

2. Locate the 2010 federal district court opinion involving Master-Halco, Inc., concerning the introduction of charts and summaries as trial exhibits. What does the court opine about an expert's use of inadmissible evidence under FRE 703?

3. Locate the 2012 federal district court decision involving Armstrong Teasdale LLP. Why did the trial court exclude the expert testimony of Stephen Weeks under FRE 702?

4. Locate the 2006 bankruptcy court decision involving Terminal Cash Solutions. What does the court say in this case about the introduction of summaries of receipts, checks, and other documents instead of the originals (FRE 1002)?

5. Locate the 2013 federal district court decision involving Trafon Group Inc. Describe how the court applies FRE 1002 to the introduction of federal income tax returns offered to prove the financial condition of Trafon Group.

Chapter 5
Discovery

Learning Objectives

- Learn the importance of the discovery process in civil litigation
- Understand how the discovery process is abused and used as a tactical weapon by some attorneys
- Learn that some privileges and the work-product doctrine prevent some information from being discovered
- Gain a basic understanding of the use of various discovery devices such as interrogatories, depositions, requests for admissions, and requests for the production of documents, inspections, and mental or physical examinations
- Grasp how various sanctions are used against attorneys who abuse the discovery process
- Become aware of the importance of electronically stored information in the discovery process
- Become aware of pending amendments to the Federal Rules of Civil Procedure that affect the discovery process (should take effect in December 2015 at the earliest)

Introduction

In civil litigation, **discovery** is the formal process that litigants use to obtain information from opposing parties. The discovery process, in theory, enables the parties to know before trial starts what evidence may be presented. This process minimizes surprises, lowers the transaction costs of dispute resolution, increases the percentage of settled cases, improves the accuracy of trials, and filters out frivolous disputes. The discovery process is handled by counsel for the parties with the court acting as referee to adjudicate disputes that sometimes arise. In many cases, it is the use of the discovery process, not the trial, which determines the value and outcome of cases.

The Federal Rules of Civil Procedure (FRCP) allow a litigant to pursue information from the other party through **depositions**, **interrogatories**, document production requests, requests for physical or mental examination, requests for admission, and mandatory discovery. Litigants must even provide their opponents with information that may not be admissible at trial if the information could reasonably lead to the discovery of admissible evidence.

Numerous proposed amendments to the FRCP are presently pending. Many of these proposed amendments would affect discovery practice. A detailed discussion of these proposals is provided near the end of this chapter in the section "Proposed Amendments to the FRCP."

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Discovery Standards

The starting point for determining whether a party can obtain discovery of information is FRCP 26(b)(1). This rule provides that "parties may obtain discovery regarding any nonprivileged matter that is relevant to any party's claim or defense." Often arguments over discovery focus on relevancy. Prior to 2000, FRCP 26(b)(1) permitted discovery relevant to the subject matter. Relevancy to claims or defenses is narrower than relevancy to subject matter. The Advisory Committee (on the FRCP) Notes on this point indicate the following:

> The Committee intends that the parties and the court focus on the actual claims and defenses involved in the action. The dividing line between information relevant to the claims and defenses and that relevant only to the subject matter of the action cannot be defined with precision. A variety of types of information not directly pertinent to the incident in suit could be relevant to the claims or defenses raised in a given action. For example, other incidents of the same type, or involving the same product, could properly be discoverable under the revised standard. Information about organizational arrangements or filing systems of a party could be discoverable if likely to yield or lead to the discovery of admissible information.

Relevant matter relates to a party's claim or defense, not merely the party making the request, and includes information about persons who know of such relevant matters. Discovery may not be had of information about persons who know of the subject matter involved in the action but of matters which relate to any party's claim or defense.[1] Information that is relevant to the subject matter of the action but not to a party's claim or defense can be discovered, but only if the party obtains a court order.

Box 5.1 Mandatory Discovery Disclosure

The following items or matters must be disclosed before formal discovery begins:

1. Insurance policies or agreements that might cover a claim
2. Copies or descriptions of all documents in a party's possession that may be used to support a position
3. Name, address, and phone number of any person a party may use to uphold its case
4. Computation of damages and documents which support that computation

Relevant information need not be admissible at trial if it appears reasonably calculated to lead to the discovery of admissible evidence.[2] The rule does allow a party to discover information that is deemed hearsay.

A plaintiff might pursue information about a defendant's assets and liabilities to evaluate the ability to pay a money judgment in the event of no insurance coverage. Such data is not discoverable with a few exceptions, such as a case involving punitive damages. In the initial mandatory disclosures, a party must disclose to the other side any liability insurance coverage that may cover the claim being litigated. See box 5.1 for a summary of mandatory discovery disclosures.

Even if relevant, information cannot be discovered if it is protected by a privilege. Courts have created privileges where some policy favoring confidentiality is considered more compelling than access to evidence. The classic example is the attorney-client privilege, which prevents inquiry into and disclosure of communications between a client and attorney in the course of rendering legal services. Other privileges which may bar discovery under appropriate circumstances are spousal, doctor-patient, psychotherapist-patient, priest-penitent, and various others as shown in box 5.2. If a party withholds information from discovery on grounds of privilege, it should describe the materials withheld with sufficient specificity to enable other parties to assess the applicability of the privilege.[3]

A second exception to the broad discovery under FRCP 26(b) is the work-product doctrine. Work product refers to the many types of materials in a lawyer's files that are created in the course of investigating a case and preparing for trial. FRCP 26 (b)(3) creates three categories of work product. First, discovery of documents prepared in anticipation of litigation that contain information that can be obtained through other steps is barred. Second, if the

[1] *Marfork Coal Company Inc. v. Smith*, 274 F.R.D. 193 (S.D. W.Va. 2011).
[2] Federal Rules of Civil Procedure (FRCP) 26(b)(1).
[3] FRCP 26(b)(5).

party requesting discovery demonstrates a substantial need for materials developed in anticipation of litigation, and that similar information cannot be obtained through other means without substantial hardship, a court may order production of the materials. Third, opposing counsel's thought process in a case, such as legal theories or litigation strategy (opinion work product) is not discoverable.

Box 5.2 Attorney-Client Privilege and Work Product Exceptions to Discovery

	Attorney-Client Privilege	Work Product Rule
Protected or Not Protected	Communication that relates to legal advice between attorney and client, attorney and third-party agent (non-testifying), or client and third-party agent. The protection is absolute.	Material prepared in anticipation of litigation or for trial may be discovered only if the discovering party shows a substantial need and may not obtain the material by other means. The privilege is qualified.
Requirement(s)	The client must be seeking legal advice. Any agent hired by the attorney must be assisting the lawyer in providing legal advice.	Litigation must be foreseen, even remotely, at the time materials are prepared.
Comments	Any communication must have been made in confidence.	If a showing has been made to justify disclosure, those materials that include the lawyer's mental impressions are given special protection.

Discovery Sequence

FRCP 26(a) indicates that information can be discovered if it is information relating to "any nonprivileged matter that is relevant to any party's claim or defense…." Technically, this requirement does not apply to **mandatory disclosure**. Relevance for discovery purposes is not a high threshold. Relevance for purposes of FRCP 26 is not interpreted or tested the same way the concept is under the Federal Rules of Evidence (FRE). Under FRCP 26, information is relevant if it will assist a party in preparation of his or her case.

FRCP 26(a) requires parties to automatically disclose certain information to their adversaries at the outset of the case without a discovery request. Automatic disclosure is, however, limited to discoverable information and witnesses that the party "may use to support its claims or defenses."[4] Initial or mandatory disclosure must be made within 14 days after the discovery conference unless the parties agree otherwise or the court extends the time.[5] The following information must be disclosed:

- The name and, if known, the address and telephone number of each person whom it may use to support its claims or defenses and the subject of the information known by these people, in any way other than impeachment[6]
- A copy or description by category and location of all documents, electronically stored information (ESI), and tangible things that the disclosing party has in its possession, custody, or control and may use to support its claims or defenses, unless the use would solely be for impeachment
- A computation of each category of damages claimed by the disclosing party and the documents or other evidentiary material on which each computation is based
- Any insurance agreement under which an insurer may be liable to satisfy all or a part of a possible judgment in the action

Various proceedings are exempt from the initial mandatory disclosure:

- An action for review on an administrative record

[4] FRCP 26(a).
[5] FRCP 26(a)(1)(C).
[6] FRCP 26(a)(1)(A).

- A forfeiture action in rem arising from a federal statute
- A petition for habeas corpus or any other proceeding to challenge a criminal conviction or sentence
- An action brought without an attorney by a person in federal, state, or local custody
- An action by the United States to recover benefit payments
- An action by the United States to collect on a student loan guaranteed by the United States
- An action to enforce or quash an administrative summons or subpoena
- An action to enforce an arbitration award

FRCP 26(a)(2) also requires a party to disclose to other parties the identity of any witness it may use at trial to present evidence under FRE 702, 703, or 705. If the person is hired to provide expert testimony, the party must also include a written report prepared and signed by the witness. These disclosures must be made at the time or in the sequence set by the court. Absent a court order, these disclosures must be made at least 90 days before the date set for trial or for the case to be ready for trial. The written expert report must contain the following:

- A complete statement of all opinions the witness will express and the basis and reasons for them
- The facts or data considered by the expert witness
- Any exhibits that will be used to summarize them
- The witness's qualifications, including a list of all publications for the last 10 years
- A list of all other cases in which the witness testified as an expert or by deposition during the last 4 years
- A statement of the compensation to be paid to the expert

A party must also disclose the subject matter to be testified to for those witnesses who will not have to prepare a written report. The party must also identify documents and other tangible evidence that may be used at trial except for items to be used solely for impeachment. Disclosures involving lay witnesses and tangible evidence must be made at least 30 days before trial.

Counsels are to meet and confer as soon as practicable after the suit is filed. The purpose of the **26(f) conference** is to permit the parties to discuss the nature and basis of their claims and defenses in order to lay out issues concerning the preservation of discoverable information and develop a proposed discovery plan. The timing for discovery should also be established. The judge uses the plan to implement the timeline so that discovery is completed by the agreed-upon date.

A litigant is not excused from making disclosures "because it has not yet fully investigated the case or because it challenges the sufficiency of another party's disclosures or because another party has not made its disclosures."[7] Automatic disclosure does not, however, require a party to disclose damaging information if the party does not present it at trial. Hence, limiting disclosure to information the disclosing party may use to support its claims and defenses means automatic disclosure cannot substitute for the use of discovery tools. How the process of discovery proceeds, in practice, is a decision made by the parties to the lawsuit.

Discovery Abuse

Over the years, discovery has been transformed from a tool to gather facts into a tactical weapon. For some attorneys, discovery evolved into an adversarial proceeding referred to as *discovery abuse* or *predatory discovery*. This term originates from *Marrese v. American Academy of Orthopedic Surgeons*,[8] in which it is stated that predatory discovery is "sought not to gather evidence that will help the party seeking discovery to prevail on the merits of his case but to coerce his opposition to settle regardless of the merits…." The practice of discovery abuse manifests itself in two ways: (1) excessive or improper use of discovery devices to harass, cause delay, or wear down an adversary by increased costs, and (2) "stonewalling" or opposing otherwise proper discovery requests for the purpose of frustrating the other party. A third type of predatory discovery is obnoxious behavior by attorneys. A significant number of litigants refuse to comply with discovery requests or court orders or only partially comply with discovery requests or court orders.

[7] FRCP 26(a)(1)(E).
[8] 726 F. 2d 1150 (7th Cir. 1984).

Case in Point

In one case, the plaintiffs were members of a group of investors who alleged that they had been defrauded by a limited partnership scheme to breed rabbits for meat and pelts. Plaintiffs claimed that they were fraudulently induced to invest in the scheme upon misrepresentations by the defendants of the value of the rabbits and the market for such rabbits. The plaintiffs apparently invested more than $3 million in cash and $18 million in promissory notes. The defendants defied 9 court orders compelling the production of documents over 18 months and failed to attend numerous scheduled depositions. The Ninth Circuit Court of Appeals upheld a default judgment against defendants for $25 million.[9]

Case in Point

Waterbury Petroleum Products failed to comply with three different orders of the court in regard to providing discovery in an action for antitrust conspiracy and was warned twice that its antitrust damage claims would be dismissed if it continued to disregard court orders. The trial court dismissed its claims as a sanction, ordering Waterbury to pay the opposition's attorney fees incurred through unsuccessful attempts to secure discovery. Reimbursement of attorney fees was appropriate because Waterbury did not establish that its failure to comply was substantially justified or that other circumstances existed to mitigate the award of expenses.[10]

Abusive tactics are fostered by the court system. First, attorneys know that lawyers are given multiple opportunities to comply with discovery requests before judicial enforcement of discovery obligations is imposed by a court. Second, the generally accepted law firm economic model provides an incentive to increase the costs of discovery as lawyers may use it as a way to increase the number of hours they bill to clients.

Sentiments among the bench and lawyers towards discovery often describe the modern version as a morass, quagmire, and fiasco. In 2008, the American College of Trial Lawyers Task Force on Discovery joined with the Institute for the Advancement of the American Legal System to survey trial lawyers on the justice system. An overwhelming majority of the survey respondents indicated that discovery had become an end in itself—a means to beat the adversary into settlement. A stunning 45 percent believed that discovery is abused in most cases.

ESI (Electronically Stored Information)

Today the majority of documents are stored in electronic form. These documents exist on mainframe computers, server hard drives, backup tapes, CD-ROMs, jump drives, DVDs, and other storage devices. The discovery phase of a suit involving a large business firm may involve hundreds of thousands of pages of stored materials. Instant messaging, cell phone, and voice messaging data systems also preserve data. Some electronic files also include metadata, which is information about when a file was produced, when earlier versions were created, and to whom it was sent.

The process of examining and producing electronic records is complicated and expensive. Under FRCP 33 (interrogatories) and 34 (requests for the production of documents), however, electronic documents are discoverable. Inevitably, disputes may arise between the parties to a lawsuit over e-documents. FRCP 26(b) sets out a process for handling disputes over e-data that is not readily accessible. The producing party may object to producing such information and the requesting party may move to compel production. The court sometimes has to make a decision on the production of e-documents by balancing the arguments of litigants.

[9] *Wanderer v. Johnston*, 910 F. 2d 652 (9th Cir. 1990).
[10] *John B. Hull Inc. v. Waterbury Petroleum Prod.*, 845 F. 2d 1172 (2nd Cir. 1988).

Sometimes e-discovery results in the production of such huge amounts of materials that the producing party may unknowingly turn over privileged information. FRCP 26 (b)(5) permits one litigant to notify the other of an inadvertent disclosure of privileged information. The party notified must return, destroy, or hold such documents pending a ruling by a court on the privilege issue. FRCP 16 permits litigants to make agreements during scheduling conferences to manage inadvertent disclosure of privileged documents without waiving an applicable privilege.

Interrogatories

Interrogatories are a set of written questions directed to the other party to the lawsuit.[11] An interrogatory may relate to any matter that may be inquired into under FRCP 26(b) (addresses scope of discovery). An interrogatory is not objectionable because it asks for an opinion or contention that relates to fact or the application of law to fact.[12]

Interrogatories may be served only after the Rule 26(f) conference on a discovery plan. Questions can either be broad (What happened on February 17, 2014?) or very specific (Is it your position that the defendant did not prepare his own tax return?) FRCP 33(a) allows each party up to 25 interrogatories, including subparts. The limitation applies to each party, so co-parties may each serve up to 25 interrogatories even though they are represented by the same attorney. Objections to questions in interrogatories can be raised and a party need not answer until a court determines their validity.

Interrogatories must be answered by the party to whom they are directed. The responding party must serve its answers and any objections within 30 days after being served under Rule 33(b)(2). Each interrogatory must be answered separately and fully in writing under oath.[13] The grounds for objecting to an interrogatory must be stated with specificity. Any ground not stated in a timely objection is waived unless excused by the court.[14] An interrogatory answer may be used to the extent allowed under the FRE.

If an answer can only be supplied by extensive search of the responding party's records, including ESI, and the burden of determining the answer will be substantially the same for both parties, the responding party may specify the pertinent records and allow the requesting party to examine and copy them.[15] The responding party must specify the records in sufficient detail to enable the interrogating party to locate and identify them as readily as the responding party.[16]

Litigants generally separate interrogatories into two categories: identification interrogatories and contention interrogatories. Identification interrogatories seek facts, such as the names and addresses of potential witnesses and summaries of statistical or technical data.[17] Although some of the information addressed by identification interrogatories may be considered mandatory disclosures under FRCP 26(a), such interrogatories can be used to obtain more information about various subjects than permitted under Rule 26.[18] Contention interrogatories seek to explore what a party is contending and the bases for those contentions. Such interrogatories may ask a party to (1) state what it contends or whether it is making a certain contention; (2) explain the facts underlying its contention; (3) assert a position or explain that position with a focus on how the law applies to the facts; and (4) articulate the legal reason for a contention.[19] Contention interrogatories are more controversial.

For instance, a contention interrogatory in a products liability case might read as follows:

> State the bases for your contention in the complaint that the product in question was unreasonably dangerous due to lack of, or improper, warnings or instructions, including, but not limited to
>
> *a.* any and all warnings or instructions that accompanied the product or were communicated to you;

[11] FRCP 33(a).
[12] FRCP 33(a)(2).
[13] FRCP 33(b)(3).
[14] FRCP 33(b)(4).
[15] FRCP 33(d).
[16] FRCP 33(d).
[17] Iain Johnston & Robert Johnston, *Contention Interrogatories in Federal Court*, 148 F.R.D. 441 (1993); *Ryan v. Mary Immaculate Queen Ctr* 188 F. 3d 857 (7th Cir. 1999).
[18] Rennie 2011.
[19] *In re Conversion Technologies Securities Litigation* 108 F.R.D. 328 (N.D. Cal. 1985).

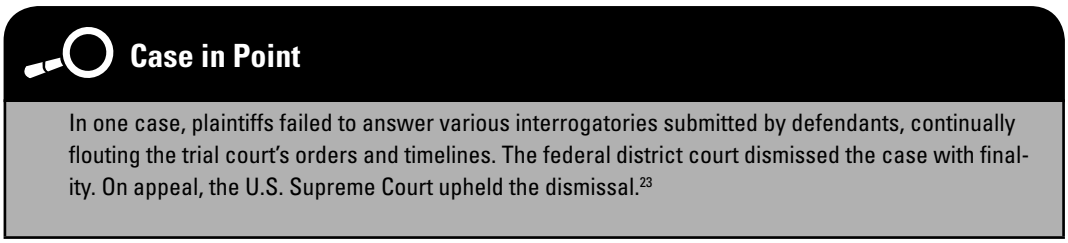
b. the source of any and all warnings or instructions;
c. each and every warning or instruction that was not communicated that rendered the product unreasonably dangerous; and
d. any and all other facts that you contend rendered the warnings or instructions or method of communication unreasonably dangerous.

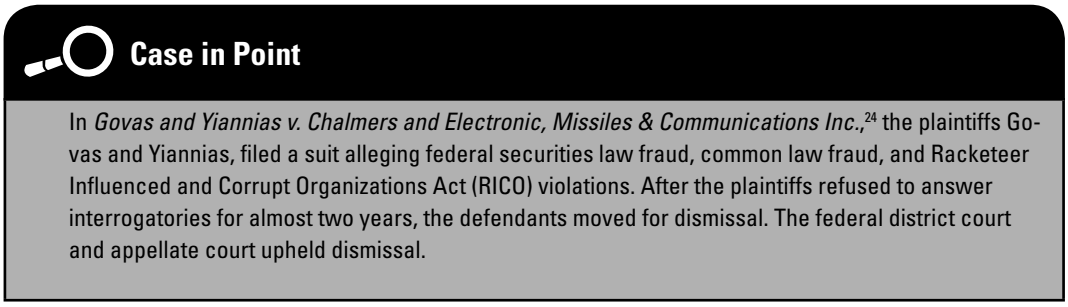
Interrogatories are the most abused discovery device. Attorneys ask questions drawn from a stock reserve and those questions return only objections, vague answers, and little information. The problem with interrogatories is that lawyers believe, and the system reinforces, that the exchange and answer of interrogatories is a chess match.

One abuse involves a broad construction of FRCP 33 that permits parties to file larger numbers of interrogatories and often more than is required for adequate discovery. Some attorneys have exploited judicial conflict about FRCP 33(a), which states that "any party may serve upon any other party written interrogatories, not exceeding 25 in number…." Some courts and legal commentators have interpreted FRCP 33(a) to apply to each and every party of a civil action.[20] According to Yoo, in an article in the *University of Chicago Law Review,* if A, B, and C filed a civil action against D and E, then A, B, and C can each serve D and E with 25 interrogatories (for a total of 150 interrogatories). The same arrangement would apply to any interrogatories filed by D and E upon A, B, and C. This broad interpretation enables parties on the same side in a dispute to file interrogatories upon one another. Such an interpretation of the word "party" has led to inefficiencies and encouraged abuse. An alternate interpretation of Rule 33(a) is that the word "party" may refer to an entire side of a dispute collectively rather than to the individual actors that are members of each side.[21] In the previous example, plaintiffs A, B, and C would be able to collectively file no more than 25 interrogatories upon D and E, and vice-versa.

The choice of interpretation of FRCP 33(a) has implications for discovery abuse. The broad construction permits parties to file larger numbers of interrogatories and often more than is required for adequate discovery. This practice is particularly true for "big ticket cases where the stakes motivate parties to litigate by hook or crook."[22] Interrogatory abuse also can affect smaller cases where wealthy parties can protract discovery beyond the means of less wealthy parties.

A second technique used by litigants is the outright refusal to answer interrogatories (or take excessive time to answer). This conduct can get a defendant a substantial amount of time and wear down the plaintiff as the latter seeks court sanctions.



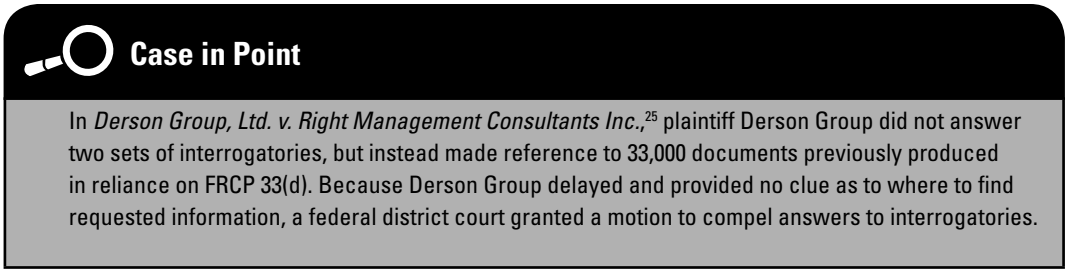


[20] *St. Paul Fire and Marine Insurance Co. v. Birch, Stewart, Kolasch & Birch, LLP*, 217 F.R.D. 288 (D. Mass. 2003).
[21] *Zito v. Leasecomm Corp*, 233 F.R.D. 395 (S.D.N.Y. 2006).
[22] Yoo, D. 2008. Rule 33(a)'s Interrogatory Limitation: By Party or By Side? *University of Chicago Law* Review 75: 911-940.
[23] *National Hockey League v. Metropolitan Hockey League Inc.*, 427 U.S. 639 (1976).
[24] 965 F. 2d 298 (7th Cir. 1992)

A third abuse happens when counsel opts to craft uninformative or inadequate responses to obscure important information. In other situations, a lawyer will intentionally fail to respond properly, objecting as often as possible. Some objections may allegedly be based on **attorney-client privilege** or the **work product rule**. Moreover, the attorney may not identify the facts, events, or documents to which the privilege attaches and does not provide evidence to support the privilege claim.

A fourth abuse is that the responding party makes no effort to answer the interrogatory questions as asked. A responding party answers a question that was not asked and then claims it has provided a responsive answer. This abusive technique is very time-consuming and determining whether the response provided was meant to be evasive can be difficult for counsel. A court may face a challenge in determining whether a response is evasive, especially cases that are industry specific or involve some type of product or service liability.

A fifth abuse revolves around the fact that some consider interrogatories well-suited for discovering information about technical or statistical data. Technical and statistical interrogatories require opposing counsel to ask the client to prepare the answer, as it is probable that the lawyer will not possess the necessary information. A responding party may skirt the interrogatory by using FRCP 33(d), which permits one to avoid answering when the answer may be derived from reviewing business records. The requesting party would then have to move to compel a response to the interrogatory.



Depositions

A deposition is an examination of a witness or a party under oath in the presence of a court reporter. Anyone who may have knowledge or expertise pertinent to the case may be deposed, including **expert witnesses** such as forensic accountants. The FRCP allow each party up to 10 depositions.[26] The 10-deposition limit is not per party but rather is calculated cumulatively for plaintiffs, defendants, and third-party defendants. The FRCP provide that a witness's deposition may be taken only once. A deposition in federal court is limited to one 7-hour day.

If a **deponent** is a party, counsel initiates the deposition by sending a notice of deposition to all parties in the action, stating the time and place of the deposition.[27] If the person to be deposed is not a party, he or she must also be subpoenaed for the deposition under FRCP 45. A subpoena commanding attendance must state the method for recording the testimony. If deposing counsel wishes a nonparty deponent to produce documents, ESI, tangible evidence, or to permit the inspection of premises, he or she may serve a subpoena duces tecum with the notice of deposition or set out information in a separate subpoena. A subpoena may specify the form or forms in which ESI is to be produced.[28] A subpoena may be served at any place in the United States.[29] A subpoena may command a person to attend a deposition as follows:

- Within 100 miles of where the person resides, is employed, or regularly transacts business
- Within the state where the person resides, is employed, or regularly transacts business (if the person is a party or party's officer or is commanded to attend a trial and would not incur substantial expense)[30]

[25] 119 F.R.D. 396 (N.D. Ill. 1988)
[26] FRCP 30(a)(2)(A).
[27] FRCP 30.
[28] FRCP 45 (a)(1)(C).
[29] FRCP 45 (b)(2).
[30] FRCP 45(c)(1).

A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on one subject to a subpoena.[31] A person commanded by subpoena to produce documents, ESI, or tangible items, or to permit the inspection of premises, does not have to personally appear unless he or she is also required to appear for a deposition.[32]

On timely motion, a district court having jurisdiction over subpoena compliance must quash or modify a subpoena that fails to allow reasonable compliance time, requires a person to comply beyond FRCP geographical limits, requires disclosure of privileged or other protected matter, or subjects a person to undue burden.[33] Said district court also may, on motion, quash or modify a subpoena if it requires disclosing a trade secret or other confidential commercial information or disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from a study not requested by a party.[34]

A person responding to a subpoena to produce documents must provide them as they are kept in the ordinary course of business or organize and label them as requested in the demand.[35] If a subpoena does not specify a form for producing ESI, the person responding must provide it in a form in which it is ordinarily kept or in a reasonably usable form.[36] A recipient of a subpoena for ESI need not provide discovery from sources the recipient identifies as not reasonably accessible because of undue burden or cost. On a motion to compel, a court may specify conditions for discovery.[37]

A person withholding subpoenaed information under a claim of privilege or work product protection must make the claim and describe the nature of the withheld documents, communications, or other items that will allow the parties to assess the claims.[38] Also, if information produced in response to a subpoena is subject to a privilege claim or work product protection, those receiving a notice thereof must return, sequester, or destroy the relevant information and must not use or disclose the information until the claim is resolved.[39]

FRCP 30(b)(6) indicates that when a corporation, association, limited liability company, or governmental body is to be deposed, the party taking the deposition need not identify the individual who will be deposed. The noticing party only must state the matter on which the entity will be questioned. FRCP 30(b)(6) depositions have become commonplace and a pivotal part of discovery and litigation strategy.

FRCP 30(b)(6) sets forth the process by which one party may uncover the position of another party. A notice of deposition must list specific topics on which discovery is sought and describe them with reasonable particularity.[40] The rule does not limit the number of specific topic areas that may be contained in a notice.

Upon receipt of the notice, the recipient entity must "designate one or more officers, directors, or managing agents or designate other persons who consent to testify on its behalf."[41] Multiple 30(b)(6) designees are not unheard of as notices of deposition may list quite varied topics without a nexus. Large corporations with voluminous and complex documents may require testimony from multiple officers and custodians to provide comprehensive testimony.[42] Moreover, a designee may be qualified to address a specific topic, but may not be qualified to speak on behalf of an entity about that specific topic.[43]

FRCP 30(b)(6) covers the needs of both requesting and responding parties. It is difficult for a responding party to parade a bevy of witnesses through a deposition all of whom claim a lack of knowledge on designated topics. On the other hand, the responding party controls the selection of designees to speak on its behalf and, indirectly, the

[31] FRCP 45 (d)(1).
[32] FRCP 45(d)(2)(A).
[33] FRCP 45(d)(3)(A).
[34] FRCP 45 (d)(3)(B).
[35] FRCP 45 (e)(1)(A).
[36] FRCP 45 (e)(1)(B).
[37] FRCP 45 (e)(1)(D).
[38] FRCP 45 (e)(2).
[39] FRCP 45 (e)(2).
[40] FRCP 30(b)(6).
[41] FRCP 30(b)(6).
[42] *State Farm Mut. Auto Ins. Co. v. New Horizont*, 254 F.R.D. 227 (E.D. Pa. 2008).
[43] *Sabre v. First Dominion Capital, LLC*, 2001 U.S. Dist. LEXIS 20637 (S.D.N.Y. Dec. 10, 2001).

overall number of individual 30(b)(6) sessions.[44] Each designee may be questioned in a separate deposition (each one may last up to seven hours).

Any designee testimony represents the responding party's formal position on a deposition notice topic. If the person (or persons) designated by an entity does not possess personal knowledge of the matters set out in the deposition notice, the entity is obligated to prepare the designee so that the person may give knowledgeable and binding answers.[45] The need of the entity to do a thorough investigation and gather information from coworkers, documents, past employees, and other sources cannot be overstated. Statements made by a designee bind the entity.[46]

An entity can expect designee statements to be brought out at trial and in summary judgment motions. FRCP 32(a) makes clear that all or part of a deposition, at a hearing or trial, may be used against a party if (1) the party was present or represented at the deposition; (2) it is used to the extent it would be admissible under the FRE; and (3) its use is permitted by FRCP 32. A 30(b)(6) designee speaks for the responding party without responses being edited by counsel or a script prepared by counsel. The highest risk of the 30(b)(6) (compared to other depositions) is that this deposition provides the seeking party with evidence that will invariably be used in motion hearings or at trial.

Because a 30(b)(6) deposition is live, unrehearsed, and binding, an incentive exists for abuse. One manipulative avenue is the expansion of 30(b)(6) topics by the questioning lawyer. Topic expansion beyond those designated can only be done in certain jurisdictions as federal appellate courts are split on whether topic expansion is permissible.[47] In those jurisdictions where non-listed topics may be pursued, a designee will be exposed to providing incorrect responses. A risk also exists that the querying lawyer may create inconsistencies in the designee's testimony by asking more than one designee about all topic areas. When questions of querying counsel deal with topics not on the notice list, the responding attorney should object to scope and move for a protective order preventing witness non-topic statements from being treated as admissions.[48] A responding attorney may make a motion in limine to exclude certain designee witness statements.

At the deposition, the witness is sworn, and may be examined by counsel on any issues within the scope of discovery. Opposing counsel may object to questions on a number of grounds but the examination still proceeds; the testimony is taken subject to objections. In federal court, a witness may be instructed not to answer only to preserve a privilege, to enforce a limitation on evidence imposed by the court, or to present a motion for a protective order.[49] When a witness is instructed not to answer, the examining party may move for a court order compelling an answer.[50] Failure of a witness to object to a deposition question is not a waiver of the right to object to the same query or answer at trial.[51] Errors in the taking of a deposition, including objections to forms of questions or in the manner of deposition taking, may not be raised as grounds for exclusion of the deposition at trial, if such errors might have been cured if promptly presented.[52]

At any time during a deposition, the deponent or a party may move to terminate or limit it on the ground that it is being conducted in bad faith or in a manner that unreasonably annoys, embarrasses, or oppresses the deponent or party. If the objecting deponent or party so demands, the deposition must be suspended for the time to obtain a ruling.[53]

In certain instances, FRCP 27 allows a person to depose another person before a lawsuit is even started. A person may file a verified petition in the district court in the area where an expected adverse party resides. Such a petition must show (1) that the petitioner expects to be a party to a lawsuit in federal court that may be presently filed; (2) the subject matter of the expected action; (3) the facts the petitioner wants to establish by the proposed

[44] *Fraser Yachts Fla. Inc. v. Milne*, [2007 U.S. Dist. LEXIS 27546 (S.D. Fla. Apr. 13, 2007).
[45] *U.S. v. Taylor*, 166 F.R.D. 356 (M.D.N.C. 1996).
[46] *Poole v. Textron Inc.,* 192 F.R.D. 494 (D. Md. 2000); *Marker v. Union Fid. Life Ins. Co.*, 125 F.R.D. 121 (M.D.N.C. 1989).
[47] *Paparelli v. Prudential Ins. Co. of Am*., 108 F.R.D. 727 (D. Mass. 1985); *Payless Shoe Source Worldwide Inc. v. Target Corp.*, 2008 U.S. Dist. LEXIS 28878 (D. Kan. Apr. 8, 2008).
[48] FRCP 26(c)(1); 30(d)(3).
[49] FRCP 30(c)(2).
[50] FRCP 37(a)(3).
[51] FRCP 32 (a)(1)
[52] FRCP 32(d)(3).
[53] FRCP 30(d)(3).

testimony and the reasons to perpetuate it; (4) the names or a description of those who will be adverse parties; and (5) the name, address, and expected testimony substance of each deponent. The petitioner must serve each expected adverse party with a copy of the petition at least 21 days before any hearing date.[54] A deposition to perpetuate testimony may be used under FRCP 32(a) in any federal lawsuit filed later if it involves the same subject matter as the FRCP 27 deposition.

FRCP 31 permits a party to conduct a deposition without showing up in person. Such a deposition may be done with or without leave of court. Written questions are asked of the deponent by the presiding person. A party who wants to depose a person by written questions must serve them on every other party with a notice stating the deponent's name and address. Other parties may submit written cross-examination questions. Such a deposition is mostly used to obtain background information from nonparty witnesses.

Federal depositions may be recorded by stenographic, audio, or audiovisual means if the party arranging the deposition chooses.[55] The noticing party bears the recording costs. With prior notice, to the deponent and other parties, any party may designate another method for recording the testimony in addition to that specified in the notice. The parties may stipulate or the court may order that a deposition be taken by telephone or other remote means.

Statements in depositions are hearsay and generally inadmissible at trial to prove the truth of the matters asserted by the deponents. Various exceptions exist to this prohibition:

1. Deposition statements by party-witnesses are admissible against those parties[56]
2. A deposition by a nonparty witness used for impeachment purposes[57]
3. The deposition of one who is unavailable at the time of trial due to death, infirmity, imprisonment, or beyond jurisdictional reach[58]

A party may object to the admission of deposition testimony on any ground that would be available if the witness testified in person. This is true even if the objection was not raised at the time the deposition was taken, except as to matters of form.[59]

As with interrogatories, depositions are used as a predatory discovery tool. One type of discovery abuse is vulgar and abusive language and physical threats. See box 5.3 for a summary of the differences between interrogatories and depositions.

Box 5.3 Summary of Depositions and Interrogatories

	Depositions	Interrogatories
Who	Each party is restricted to 10 depositions. Nonparties must be subpoenaed to attend. A party may depose any witness one time.	May only be served on other parties. Each party may be served up to 25 interrogatories from the other party.
When	In most cases, a deposition may be done only after the Rule 26(f) conference. It may be done before the conference or while an appeal is pending with leave of court.	May be served only after the Rule 26(f) conference. Responses are due within 30 days after the interrogatories are served.
Where	Must be within 100 miles of where the deponent resides, is employed, or transacts business.	Not applicable.
What	Involves oral questions of the deponent, but may be in writing or by phone. A notice or subpoena may command the deponent to produce documents.	Written questions from one party to another that require written responses.

[54] FRCP 27(a)
[55] FRCP 30(b)(3).
[56] FRCP 32(a)(3).
[57] FRCP 32 (a)(2).
[58] FRCP 32 (a)(4).
[59] FRCP 32 (b), (d)(3).

Case in Point

In one case, the plaintiff's attorney used very profane language numerous times, including during depositions. In one deposition, the plaintiff's counsel told the opposing attorney, "I will put my remarks on the record as I'm entitled. I do not need to be lectured by you sir. Don't **** with me." Sanctions were imposed by the federal district court but were overturned by a federal appellate court.[60]

Case in Point

In *Carroll v. The Jaques Admiralty Law Firm*,[61] the Fifth Circuit upheld sanctions against attorney Jaques for profane language and threats made to opposing counsel during a videotaped deposition.

Sanctions may also be imposed against a lawyer who does not act to prevent a deponent from using abusive language.

Case in Point

In *GMAC Bank v. HTFC Corp.*,[62] a breach of contract case, the owner of HTFC used various 4-letter words about 73 times during a 2-day deposition.

Physical threats are sometimes used to intimidate a deponent and opposing counsel.

Case in Point

In *Office of Disciplinary Counsel v. Levin*,[63] an attorney was suspended indefinitely from the practice of law for making physical threats during a deposition. Counsel threatened to take a questioner's mustache off his face, give the questioner the beating of his life, and slap him across the face and break his head.

Another type of predatory practice involves witness coaching, interrupting a witness, or private consultations. FRCP 30(c)(2) states that an objection "must be stated concisely in a nonargumentative and nonsuggestive manner."

Case in Point

Plaintiff Joyce VanPilsum sued Iowa State for alleged age discrimination. Her attorney repeatedly restated opposing counsel's objections (making thinly veiled instructions), objected to the form of the questions, and engaged in personal attacks. In a transcript of 4025 lines, only 70 percent contained questions by opposing counsel and the deponent. The attorney was sanctioned and another deposition in front of a master was scheduled.[64]

[60] *Saldana v. K-Mart Corp.*, (84 F. Supp. 2d 629 [D.V.I. 1999]), *rev'd. in part*, 260 F. 3d 228 (3rd Cir. 2001).
[61] 110 F. 3d 290 (5th Cir. 1997).
[62] 248 F.R.D. 182 (E.D. Pa. 1993).
[63] 517 N.E. 2d 892 (Ohio 1998).
[64] *VanPilsum v. Iowa State University*, (152 F.R.D. 179 [S.D. Iowa 1993]).

Another discovery abuse tactic is to hold private conferences with the client-deponent during the deposition. Courts take a dim view of this practice.

Case in Point

In *Hall v. Clifton Precision*,[65] the plaintiff's counsel conferred privately with the deponent on two occasions over the objection of opposing counsel. A federal district court held that not only are private conferences barred, but so are coffee breaks and recesses to discuss answers to deposition questions.

Requests for Document Production, ESI, and Tangible Things or Entering onto land

A request for the **production of documents** is a request made to a party in a lawsuit to turn over copies of any evidence in the form of paper documents, ESI or other items, including writings, drawings, graphs, charts, photographs, sound recordings, images, and other data or data compilations. The rule covers data stored in any medium from which the information can be obtained directly or indirectly.[66] A request for the production of documents under FRCP 34 usually contains separately numbered requests. The request specifies a certain class or type of document, but sometimes is broadly worded to cover as many documents as possible. Often, a request will start with a tedious list of definitions intended to assure that opposing counsel cannot interpret the request narrowly to avoid providing an important document. This is done because the party requesting production cannot know for certain what materials the responding party possesses and wants to avoid omitting valuable information. A request, however, "must describe with particularity each item … to be inspected."[67] The request must also "specify a reasonable time, place, and manner for the inspection."

Tangible items, such as a motor vehicle involved in drug or currency smuggling or a blood sample, are also subject to discovery and inspection under FRCP 34. Inspection can include testing and sampling of materials, and may involve an entry onto another's property. As with any other area of discovery, issues of burden and intrusiveness raised by requests to test or sample may be addressed under FRCP 26(b)(2) and (c). A request for ESI may specify the form or forms in which it is to be produced.[68]

Using current technology, a party might be called upon to produce word processing documents, e-mail messages, electronic spreadsheets, different image or sound files, and material from databases. Requiring that such diverse types of ESI all be produced in the same form could prove impossible, and even if possible could increase the cost and burdens of producing and using the information. The FRCP provide that the requesting party may ask for different forms of production for different types of ESI. Stating the intended form before the production occurs may permit the parties to identify and seek to resolve disputes before the expense and work of the production occurs.

Certain procedures apply to the production of documents or ESI unless changed by stipulation or court order. These procedures are as follows:

1. A party must produce documents as they are kept in the usual course of business or must organize and label them to correspond to the categories in the request.
2. If a request does not specify a form for producing ESI, a party must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form.
3. A party need not produce the same ESI in more than one form.[69]

[65] 150 F.R.D. 525 (E.D. Pa. 1993).
[66] FRCP 34(a).
[67] FRCP 34 (b)(1)(A).
[68] FRCP 34(b)(1)(C).
[69] FRCP 34(b)(2)(E).

4. A response to a request for ESI may state an objection to the form in which the requesting party wants it produced. The responding party must state the form or forms it intends to use.[70] If the requesting party is not satisfied with the form stated by the responding party, or if the responding party has objected to the form specified by the requesting party, the parties must meet and confer under FRCP 37(a)(2)(B) in an effort to resolve the matter before the requesting party can file a motion to compel production.

A party seeking discovery may serve a request for production or inspection without prior court order or a showing of good cause. When inspection of premises is sought, some degree of necessity is generally required. A showing of necessity may be required because entry upon land or premises may entail greater burdens and risks than production of documents.[71] A request for production or inspection may be served at any time after the Rule 26(f) conference. FRCP 34(b) indicates such a request for production or inspection must specify the proposed time, place, and manner of making the inspection. In federal actions, the party receiving a request for production or inspection may file written objections within 30 days following service of the request. If objections are made, the requesting party may move for an order compelling the requested inspection (except a conference must be held first in the case of ESI).

Requests under FRCP 34 are also a contentious battleground in discovery. One common abuse is the use of overbroad document production requests to cast a wide net to launch a "fishing expedition." A litigant has a duty to state discovery requests with reasonable particularity. A request for document production should be sufficiently definite to apprise a person of ordinary intelligence what documents are required and to enable the court to determine whether the requested documents have been produced.

Case in Point

In *Regan-Touhy v. Walgreen Co.*,[72] Ms. Touhy sued Walgreen Co. alleging intentional infliction of emotional distress, breach of duty of confidentiality, invasion of privacy, and disclosure of confidential medical information. Document production requests included a request for log files or other documents capable of identifying which employees had access to her pharmacy account information, a request for all manuals concerning any computer system or program housing data about Ms. Touhy, a request for an employee's personnel file, a request for all e-mails from one employee's e-mail account, and a request for all documents that relate in any way to Ms. Touhy. The plaintiff alleged that a former Walgreen's pharmacy technician, Kim Whitlock, disclosed the contents of Ms. Touhy's medical records to the plaintiff's ex-husband and others. The Tenth Circuit Court of Appeals upheld a district court order that the requests were overly broad.

A second abuse practice is the use of evasive responses (or incomplete responses), which involve document production requests. These responses leave the requesting party unable to determine whether the responding party has agreed to produce all of the requested documents, when production will be made, and, once made, whether it is complete. One evasive response is to indicate that initial document production may be supplemented if additional documents are found. This may appear reasonable but in practice it is used to deliberately withhold relevant records. Another type of evasive response is to provide only a subset of the documents requested and to indicate a limitation to the response to the request by saying there are no documents that exist with regard to the matter when in fact they do exist. FRCP 37 contains an express prohibition against evasive responses and provides mechanisms to shift fees for the cost of enforcing compliance. These rules are seldom enforced and, as a result, evasive discovery responses have become a routine tactic.

[70] FRCP 34 (b)(2)(D).
[71] *Belcher v. Bassett Furniture*, 588 F. 2d 904 (4th Cir. 1978).
[72] 526 F. 3d 641 (10th Cir. 2008).

Some of the reasons given for lack of enforcement of discovery sanctions include (1) a distaste for becoming involved in discovery disputes that litigants should be able to resolve themselves; (2) a belief that litigants should seek sanctions against an adversary only when they are without fault in complying with discovery; and (3) a belief that the imposition of a sanction embarrasses or humiliates the attorney or party and should thus be resorted to only in extreme situations. Other contributing factors include a lack of judicial resources, including time, and the lack of a uniform approach by the federal circuits in imposing sanctions.

A third abusive practice is the use of boilerplate objections to document requests. Parties routinely object to virtually every request on the same grounds, including broad relevancy objections, objections that requests are unduly burdensome, harassing or assuming facts not in evidence, privacy objections, attorney-client privilege, and work product objections. A document production request may be met with a dozen or more objections, regardless of whether the responding party agrees to produce documents.

Case in Point

In one case, various defendants lodged numerous general objections to a specific document request. The court overruled the objections and ordered production of the requested documents.[73]

The requesting party cannot determine whether any documents are actually being withheld on the basis of any objections. This issue is clearly addressed in the proposed amendments to the FRCP (see the "Proposed Amendments to the FRCP" section later in this chapter).

A fourth predatory practice is for the party who has been requested to produce documents to seek a **protective order**. The reasons sometimes offered in a request for a protective order are that the information sought is a trade secret or that the request is oppressive, harassing, and unduly burdensome. Protective orders that are granted assist defendants by delaying the release of documents, keeping harmful information away from the opposing side, and requiring attorneys to spend time negotiating complex provisions.

A fifth abusive technique is a document dump, in which a responding party provides thousands and thousands of pages of poorly organized documents to the requesting party. Sometimes the responding party will bury relevant documents within stacks of irrelevant documents the other party never requested. A variant of this technique is to fail to produce document indexes that help the requesting party review the documents even though such indexes exist.

Requests for Physical or Mental Examinations

If the physical or mental condition of a party is an issue, a motion under FRCP 35 is necessary to require a party to submit to an examination by experts in the service of other parties, as described in box 5.4. The condition triggering the request for an examination must be raised directly by the pleadings or factual contentions through discovery.[74] FRCP 35 indicates that if court action is required, an examination will not be ordered except upon a showing of good cause. Any court order for an examination must specify the time, place, manner, condition, and scope of the examination, and the person or persons who will conduct it.[75]

The party who moves for the examination must, upon request, deliver to the requesting party a copy of the examiner's report, together with like reports of all earlier examinations of the same condition. The examiner's report must be in writing and set out in detail the examiner's findings, including diagnoses, conclusions, and test results.[76] After report delivery, the party who moved for the examination may request, from the party against whom the examination

[73] *Cason-Merenda v. Detroit Med. Ctr.,* 2008 U.S. Dist. LEXIS 94028 (E.D. Mich. Nov. 12, 2008).
[74] *Schlagenhauf v. Holder*, 379 U.S. 104 (1964).
[75] FRCP 35(a)(2)(B).
[76] FRCP 35(b)(1) and (2).

Box 5.4 Federal Rules of Civil Procedure for Medical Examinations

	Requirements
Who	A litigant may pursue a medical exam only of another party under the following conditions: (1) a medical condition is in issue and (2) the court finds a good reason for the exam.
What	A court can permit a mental or physical exam. Such exam must be done by an examiner approved by the court.
Where	At a place selected by the examiner.
How	A party may refuse a medical or mental exam and not be held in contempt. However, facts that could be proved by an exam can be deemed established by the refusal.

order was issued, like reports of all earlier or later examinations of the same condition.[77]

An examinee who obtains a copy of the report or deposes the examiner waives the doctor-patient privilege with respect to any testimony about all examinations of the same condition.[78] If the report is unprivileged and is subject to discovery under other FRCP, discovery should not depend upon whether the person examined demands a copy of the report.

Requests for Admission

Under FRCP 36, a party may serve a written request on any other party to admit, for purposes of the pending action only, the truth of any discoverable matters relating to law, and application of law to facts, opinions, and the genuineness of any described documents. A request to admit the genuineness of a document must be accompanied by a copy of the document unless it is, or has been, otherwise furnished or made available for inspection and copying.[79] A **request to admit** may be served at any time after the Rule 26(f) conference. Usually requests for admission are used near the end of discovery to screen out matters in pleadings that have been clarified by discovery. The FRCP do not place a limit on the number of requests for admission.

A matter is deemed admitted unless the party served with the request for admissions provides a written answer or objection within 30 days after service.[80] If a matter is not admitted, the answer must make a specific denial or state in detail why it cannot be admitted or denied.[81] If a party qualifies an answer or denies only part of a matter, then the answer must specify the part admitted and qualify or deny the rest. The answering party may claim lack of knowledge for failing to admit or deny only if the party states it has made reasonably inquiry.[82]

If a party objects to a request, then the reason(s) therefor must be stated.[83] A requesting party may file a motion to determine the sufficiency of an answer or objection. If a court finds that an answer is insufficient, then it may rule the matter is admitted or that an amended answer be prepared.[84]

A matter admitted under FRCP 36 is conclusively established unless the court permits the admission to be amended or withdrawn. An admission applies only in the particular case and has no impact on other cases.[85]

Some distinctions exist between requests for admission and interrogatories. First, unlike an interrogatory, it is hard to evade a request for admission. Requests for admission are deemed admitted if not answered properly. Second,

[77] FRCP 35(b)(3).
[78] FRCP 35(b)(4).
[79] FRCP 36(a)(2).
[80] FRCP 36(a)(3).
[81] FRCP 36(a)(4).
[82] FRCP 36(a)(4).
[83] FRCP 36(a)(5).
[84] FRCP 36(a)(6).
[85] FRCP 36(b).

requests for admission must be specific and simple, but interrogatories may be broad and general.[86] Requests to admit are easier for the court to administer because they must be straightforward statements of propositions.

See box 5.5 for a summary of which discovery tools can be served on which parties.

Box 5.5 Service of Discovery Tools

Discovery Tool	On Party	On Nonparty
Interrogatories	Yes	No
Depositions	Yes	Yes, but only by subpoena
Document Inspection or Production	Yes	Yes, but only by subpoena
Medical Exam	Yes	No
Request for Admission	Yes	No

Ways to Fight Discovery Abuse

Seizing the initiative by using a team or collaborative approach is an important step that can be taken by the forensic accountant and attorney. The forensic accountant should meet with counsel, establish discovery objectives, and obtain all documents and other evidence already in the client's possession. Some evidence, not in document form, may be gleaned through interviews of various persons. Completion of these initial steps permits the litigation team to decide how much and what type of additional evidence is needed to satisfy the discovery objectives. The litigation team is now in a more informed position to prepare a work program. An initial step in the work program should entail collecting data on opposing counsel.

The forensic accountant, possibly with the guidance of counsel, should collect as much information as possible on the litigation work habits, style, and practices of opposing counsel. Such knowledge can help in predicting the kind and amount of discovery abuse, if any, to expect from opposing counsel. The extent of this knowledge can range from the superficial to the in-depth. One means of compiling data is for the forensic accountant to observe opposing counsel performing direct and cross-examinations, lodging objections, and engaging in opening and closing arguments at trial to develop an understanding of his or her litigation techniques and practices. Another means of gaining knowledge is to talk with lawyers who have litigated against opposing counsel. A third avenue is to review trial court files for several cases handled by opposing counsel. Such an examination may reveal the types of motions opposing counsel favors. A litigation file review should provide insight into the opposing attorney's approach to discovery practice. Such a file review should focus on cases, if any, in which opposing counsel has been sanctioned for misconduct. Knowledge that opposing counsel has been sanctioned previously, if at all, is a powerful tool in heading off discovery abuse.

A review of opposing counsel's litigation work habits, among other things, should generate answers to various questions. What types of objections, if any, did counsel raise to various interrogatories? Did counsel file any motions for a protective order? Did counsel do a document dump or engage in other abusive discovery practices? Did counsel ever refuse to comply with a court order? How did counsel respond to requests for admission? Did counsel often have motions to compel filed against him or her? Does counsel respond to discovery requests in a timely fashion? These are just a few of the many questions that could be answered by investigating the opposing attorney's litigation style.

Adoption of a collaborative approach includes using precise discovery requests. Use of an industry expert or forensic accountant is vital in preparing precise discovery requests, particularly when seeking financial documentation or data or technical information. Precise discovery requests diminish the legitimacy of the objection that the request is unduly broad and force opposing counsel to offer precise or specific objections if the objections are to withstand judicial scrutiny. Precise discovery requests may have a higher likelihood of surviving a motion for a protective order from the opposing side than would imprecise requests.

[86] *Johnson v. Kraft Foods N. Am. Inc.*, 236 F.R.D. 535 (D. Kan. 2006).

A collaborative or team approach also involves quick responses to any delays, omissions, incomplete responses, and so on. Some discovery abusers try to run the clock out (by waiting until the last minute to respond to interrogatories or requests for production) to force the other party to conduct depositions without adequate background information. Responding quickly is not often a simple matter. Attorneys have heavy case loads and it may take considerable time to analyze responses to interrogatories and requests for production.

One tactic in combating predatory discovery involves making a good record. Attorneys and forensic accountants should meticulously monitor deadlines and ask for extensions only when necessary. An attorney and forensic accountant should keep a spreadsheet of all discovery requests, motions, and the status of each request and motion. This tactic also requires the documentation of abuse by creating correspondence describing the other side's failure to follow the rules. The pursuit of a "meet and confer" process establishes a litigant's reasonableness in the face of discovery abuse. This approach provides a court a middle ground to resolve a dispute.

Another means of addressing discovery abuse is to insist that the opponent provide a privilege log. A privilege log lists the documents the opposing litigant refuses to produce on the basis of a legally recognized privilege or work product doctrine under FRCP 26 (b)(5). The log must describe the nature of the documents or items not produced without revealing privileged or protected information but permitting other parties to ascertain whether the claim is legitimate. Counsel may also request an in-camera review of documents withheld due to a privilege claim. One abuse maneuver is to insulate employees and attorneys from discovery by claiming that the shielded work product is in anticipation of litigation (work product rule).

Another step to fight discovery abuse is to seek a protective order from the trial court. Given the abusive conduct that can occur in depositions, obtaining a protective order that sets limits on the lengths of depositions and establishes payment obligations and other conditions for violations might be prudent. Some jurisdictions have local rules that place time limits (beyond those in the FRCP) on various forms of discovery. One common abusive maneuver is to ignore interrogatories, document production requests and requests for admission to force the other side to proceed to deposition without proper preparation. A protective order can overcome or shield against these predatory practices. Another favorite abuse maneuver is a document dump on the eve of a hearing on a motion to compel production. Keeping in mind that FRCP 34(b)(2)(E) states that a responding party "must organize and label them to correspond to the categories in the request," and FRCP 33(c) indicates that a "responding party has the duty to specify" the records from which answers to interrogatories may be derived; a protective order obtained beforehand may provide additional protections against such abuses.

The most potent tactic is to seek sanctions under FRCP 37 for predatory discovery. Federal courts have ample authority to impose sanctions such as the following:

1. Directing that matters embraced in a court order be taken as established for purposes of the lawsuit
2. Prohibiting the discovery abuser from supporting or opposing designated claims or defenses on introducing certain evidence
3. Striking pleadings in whole or in part
4. Staying further proceedings until a court order is obeyed
5. Dismissing the action in whole or in part
6. Rendering a default judgment against the abusing party
7. Treating as contempt of court the failure to obey a court order, except the failure to submit to a physical or mental examination
8. Ordering expenses to be paid by the misbehaving party

Despite the existence of the authority to impose sanctions, many federal courts do not enforce the civil discovery rules in this way. Also, many attorneys do not seek to enforce compliance with discovery rules and orders through sanctions. According to one recent study, discovery sanctions were sought in only about 3 percent of cases and of those filed, only 26 percent are granted in whole or in part.[87]

[87] Institute for the Advancement of the American Legal System. 2009. *Civil Case Processing in the Federal District Courts*. University of Denver.

Proposed Amendments to the FRCP

For quite a few years, many in the legal community, along with clients, have complained about the overwhelming costs, burdens, and delays of litigation in the federal courts. Recently, the Advisory Committee on the FRCP proposed a package of amendments designed to streamline pretrial discovery, promote litigation management, and encourage cooperation among parties and courts in the pretrial phase of litigation. The proposed amendments are in response to the legal community's concerns in three areas: (1) early and active judicial case management, (2) proportionality in discovery, and (3) cooperation among lawyers. The proposed amendments could be changed as they must obtain approval from the Judicial Conference, the Supreme Court, and Congress. At the earliest, the proposed amendments would become effective in December 2015. We now address the proposed amendments by areas of concern.

Improve Early and Effective Case Management

The first group of proposals begins with changes aimed at speeding up the initial stages of litigation. Delays and scheduling problems have accumulated for years, causing the initial stages of a case to take longer. As delays increase, costs do so as well. According to data provided by the Administrative Office of U.S. Courts, the median time interval from filing a case to disposition for the 12-month period ending December 2013 was 8.5 months, and from filing to trial for the 12 months ending December 2013 is 26.5 months. The proposed amendments address delays by amending FRCP 4, 16, and 26.

> Rule 4. Summons
>
> (m) Time Limit for Service. If a defendant is not served within 90 days after the complaint is filed, the court must dismiss the action without prejudice against that defendant or order that service be made within a specified time.

The presumptive time for serving a defendant is reduced from 120 to 90 days. This change will arguably reduce delay at the start of litigation. Some litigators suggest this change will result in a rise in dismissals for failure to properly serve a summons. Motions requesting more time to complete service may become more prevalent.

> Rule 16. Pretrial Conferences; Scheduling; Management
>
> (b) Scheduling
>
> (1) Scheduling Order. Except in categories of actions exemplified by local rule, the district judge-or a magistrate judge when authorized by local rule-must issue a scheduling order:
>
> (B) after consulting with the parties' attorneys and any unrepresented parties at a scheduling conference
>
> (2) Time to Issue. The judge must issue the scheduling order as soon as practicable, but unless the judge finds good cause for delay, the judge must issue it within the earlier of 90 days after any defendant has been served with the complaint or 60 days after any defendant has appeared.
>
> (3) Contents of the Order.
>
> (B) Permitted Contents. The scheduling order may:
>
> (iii) provide for disclosure, discovery, or preservation of electronically stored information;
>
> (iv) include any agreements the parties reach for asserting claims of privilege or of protection as trial-preparation material after information is produced, including agreements reached under Federal Rule of Evidence 502;
>
> (v) direct that before moving for an order relating to discovery, the movant must request a conference with the court.

The provision for consulting at a scheduling conference by telephone, mail, or other means is deleted. A scheduling conference is more effective if the court and parties engage in direct, simultaneous communication. Next, the time to issue the scheduling order is reduced to the earlier of 90 days after any defendant has been served or 60 days after any defendant has appeared. The order may provide for preservation of ESI. The order also may include agreements incorporated in a court order under FRE 502, controlling the effects of information disclosure covered by attorney-client privilege or work product protection.

> Rule 26. Duty to Disclose; General Provisions; Governing Discovery
>
> (d) Timing and Sequence of Discovery
>
> (2) Early Rule 34 Requests.
>
> (A) Time to Deliver. More than 21 days after the summons and complaint are served on a party, a request under Rule 34 may be delivered;

(i) to that party by any other party, and
(ii) by that party to any plaintiff or to any other party that has been served.
(B) When Considered Served. The request is considered to have been served at the first Rule 26(f) conference.
(3) Sequence. Unless the parties stipulate or the court orders otherwise for the parties' and witnesses' convenience and in the interests of justice:
(A) methods of discovery may be used in any sequence; and
(B) discovery by one party does not require any other party to delay its discovery.

Rule 26(d) is added to the FRCP to allow a party to deliver Rule 34 requests to produce to another party more than 21 days after that party has been served, even though the parties have not yet had a required Rule 26(f) or discovery conference. Delivery may be made by any party to the party that has been served, and by that party to any plaintiff and any other party that has been served. Requests are considered to be served at the first Rule 26(f) or discovery conference. Allowing the delivery of early requests for documents will prepare parties for the discovery conversation and to begin talking earlier.

Enhancing the Means of Keeping Discovery Proportional

The second group of changes seeks to reduce the cost, burden, and delays of discovery. In public comments to proposed amendments to the FRCP, this area provoked the most controversy. Some contend that the proposed changes will have the effect of shifting the discovery burden to plaintiffs, but defendants remain in control of the needed information. Plaintiffs will have to show proportionality in discovery requests and show good cause to obtain more depositions, interrogatories, or other discovery devices. Currently under the FRCP, the producing party remains on the defensive and has to show that the discovery request is disproportionate and that the request should be denied. The proposed Rule 26(b) may create a role reversal for parties. The requesting party may be unable to rely on broad and general requests for discovery because "the proponent of discovery must prove the requests are proportionate in order to be entitled to discovery." This may prove troublesome for individual plaintiffs seeking discovery from large entities.

Rule 26. Duty to Disclose; General Provisions; Governing Discovery
(b) Discovery Scope and Limits.
(1) Scope in General. Unless otherwise limited by court order, the scope of discovery is as follows: Parties may obtain discovery regarding any nonprivileged matter that is relevant to any party's claim or defense and proportional to the needs of the case, considering the importance of the issues at stake in the action, the amount in controversy, the parties' relative access to relevant information, the parties' resources, the importance of the discovery in resolving the issues, and whether the burden or expense of the proposed discovery outweighs its likely benefit. Information within this scope of discovery need not be admissible in evidence to be discoverable.
(2) Limitations on Frequency and Extent
(C) When Required. On motion or its own, the court must limit the frequency or extent of discovery otherwise allowed by these rules or by local rule if it determines that:
(iii) the proposed discovery is outside the scope permitted by Rule 26(b)(1).

Information is discoverable under the revised rule if it is relevant to any party's claim or defense and is proportional to the needs of the case. The objective is to guard against redundant or disproportionate discovery by giving the court authority to reduce the amount of discovery that may be directed to matters that are otherwise proper subjects of inquiry. The amended rule is intended to encourage judges to be more aggressive in identifying and discouraging discovery overuse. Restoring the proportionality calculation to Rule 26 does not change existing responsibilities of the court and the parties to consider proportionality. The change also does not place on the party seeking discovery the burden of addressing all proportionality considerations, nor is it intended to permit the opposing party to refuse discovery simply by making a boilerplate objection that it is not proportional.

Rule 34. Producing Documents, Electronically Stored Information, and Tangible Things, or Entering Onto Land, for Inspection and Other Purposes.
(b) Procedure.
(2) Responses and Objections.

(A) Time to Respond. The party to whom the request is directed must respond in writing within 30 days after being served or-if the request was delivered under Rule 26(d)(2)-within 30 days after the parties' first Rule 26(f) conference. A shorter or longer time may be stipulated to under Rule 29 or be ordered by the court.

(B) Responding to Each Item. For each item or category, the response must either state that inspection and related activities will be permitted as requested or state with specificity the grounds for objecting to the request including the reasons. The responding party may state that it will produce copies of documents or of electronically stored information instead of permitting inspection. The production must then be completed no later than the time for inspection stated in the request or another reasonable time stated in the response.

(C) Objections. An objection must state whether any responsive materials are being withheld on the basis of that objection. An objection to part of a request must specify the part and permit inspection of the rest.

Several amendments to FRCP 34 are made, aimed at reducing the potential to impose unreasonable burdens by objections to requests to produce. FRCP 34 would be amended to require that objections to requests to produce be stated with specificity. An objection may state that a request is overbroad, but if the objection recognizes that some part of the request is appropriate, the objection should state the scope is not overbroad. Examples would be a statement that the responding party will limit the search to documents or ESI created within a given time period prior to the events in the suit, or to specified sources. A Rule 34 objection must state whether anything is being withheld on the basis of the objection. This would end the confusion that often arises when a producing party states several objections and still produces information, leaving the requesting party uncertain whether any relevant information has been withheld on the basis of the objections.

Advancing Cooperation

The last group of proposed amendments creates an explicit duty of cooperation between parties. Litigants will be jawboned to curtail overzealous adversary behavior while working directly with opposing counsel. Trial attorneys must be aware of the duty to cooperate because the proposed amendments will provide support for judicial efforts to elicit and enforce more cooperation from parties when lawyers themselves fail to cooperate.

Rule 1. Scope and Purpose

These rules should be construed, administered, and employed by the court and the parties to secure the just, speedy, and inexpensive determination of every action and proceeding.

Rule 1 is amended to stress that just as the court should construe and administer these rules to secure the just, speedy, and inexpensive determination of every action, so the parties share the responsibility to employ the rules in the same way. For the first time, Rule 1 names "parties." Litigating attorneys must realize that they have a duty to engage in cooperative conduct.

Rule 37. Failure to Make Disclosures or to Cooperate in Discovery; Sanctions

Motion for an Order Compelling Disclosure or Discovery

(3) Specific Motions

(B) To Compel a Discovery Response. A party seeking discovery may move for an order compelling an answer, designation, production, or inspection. This motion may be made if:

(iv) a party fails to produce documents or fails to respond that inspection will be permitted-or fails to permit inspection-as requested under Rule 34.

Rule 37 is amended to reflect the common practice of producing copies of documents or ESI rather than simply permitting inspection.

Additional Comments

The original proposed amendments sought to encourage more active case management by lowering the presumptive numerical limits on discovery. FRCP 30 and 31 would have been amended to reduce from 10 to 5 the limit on the number of depositions taken by the plaintiffs, the defendants, or third-party defendants. Rule 30(d) would have been amended by reducing the limit for an oral deposition from 7 to 6 hours. Rule 33 would have been amended to

reduce from 25 to 15 the number of interrogatories a party may serve on another party. Also, for the first time, a limit of 25 would have been introduced for requests for admission under Rule 36. All these suggested amendments were withdrawn at the suggestion of the Advisory Committee on the FRCP.

Summary

The FRCP allow a litigant to pursue information from the other party through depositions, interrogatories, document production requests, requests for physical or mental examination, requests for admission, and automatic discovery. Numerous proposed amendments to the FRCP are presently pending.

FRCP 26(b)(1) provides that "parties may obtain discovery regarding any nonprivileged matter that is relevant to any party's claim or defense." Privileges which may bar discovery are attorney-client, spousal, doctor-patient, psychotherapist-patient, priest-penitent, and various others. A second exception to the broad discovery under FRCP 26(b) is the work-product doctrine.

FRCP 26(a) indicates that information can be discovered if it is information relating to "any nonprivileged matter that is relevant to any party's claim or defense…." Parties must automatically disclose certain information to their adversaries at the outset of the case without a discovery request. Automatic disclosure is, however, limited to discoverable information and witnesses the party "may use to support its claims or defenses." FRCP 26(a)(2) also requires a party to disclose to other parties the identity of any witness it may use at trial to present evidence under FRE 702, 703, or 705.

Over the years, discovery has been transformed from a tool to gather facts into a tactical weapon. For some attorneys, discovery evolved into an adversarial proceeding referred to as discovery abuse or predatory discovery. The practice of discovery abuse manifests itself in two ways: (1) excessive or improper use of discovery devices to harass, cause delay, or wear down an adversary by increased costs, and 2) stonewalling or opposing otherwise proper discovery requests for the purpose of frustrating the other party.

Today, the majority of documents are stored in electronic form. The process of examining and producing ESI is complicated and expensive. FRCP 26(b) sets out a process for handling disputes over e-data that is not readily accessible.

Interrogatories are a set of written questions directed to the other party to the lawsuit. Interrogatories must be answered by the party to whom they are directed. The responding party must serve its answers and any objections within 30 days after being served under Rule 33(b)(2). Litigants generally separate interrogatories into two categories: identification interrogatories and contention interrogatories.

Ways to abuse interrogatories as a discovery device by both sides include: taking advantage of a broad construction of FRCP 33 to file a larger number of interrogatories than is required for adequate discovery, outright refusing to answer interrogatories (or take excessive time to answer), crafting uninformative or inadequate responses to obscure important information, making no effort to answer the interrogatory questions, and skirting the interrogatory by using FRCP 33(d), which permits one to avoid answering when the answer may be derived from reviewing business records.

A deposition is an examination of a witness or a party under oath in the presence of a court reporter. Statements in depositions are hearsay and generally inadmissible at trial to prove the truth of the matters asserted by the deponents. As with interrogatories, depositions are used as a predatory discovery tool.

If the person to be deposed is not a party, he or she must also be subpoenaed for the deposition under FRCP 45. A person responding to a subpoena to produce documents must provide them as they are kept in the ordinary course of business or organize and label them as requested in the demand. FRCP 30(b)(6) indicates that when a corporation, association, limited liability company, or governmental body is to be deposed, the party taking the deposition need not identify the individual who will be deposed.

At the deposition, a witness may be instructed not to answer only to preserve a privilege, to enforce a limitation on evidence imposed by the court, or to present a motion for a protective order. At any time during a deposition, the deponent or a party may move to terminate or limit it on the ground that it is being conducted in bad faith or in a manner that unreasonably annoys, embarrasses, or oppresses the deponent or party.

A request for the production of documents is a request made to a party in a lawsuit to turn over copies of any evidence in the form of paper documents, ESI or other items, including writings, drawings, graphs, charts, photographs, sound recordings, images, and other data or data compilations. The rule covers data stored in any medium from which the information can be obtained directly or indirectly.

Tangible items, such as a motor vehicle involved in drug or currency smuggling or a blood sample, are also subject to discovery and inspection under FRCP 34. Inspection can include testing and sampling of materials, and may involve an entry onto another's property. A party seeking discovery may serve a request for production or inspection without prior court order or a showing of good cause.

Under FRCP 36, a party may serve on any other party a written request to admit for purposes of the pending action only, the truth of any discoverable matters relating to law, and application of law to facts, opinions, and the genuineness of any described documents. A matter is deemed admitted unless the party served with the request for admissions provides a written answer or objection within 30 days after service.

One tactic in combating predatory discovery involves making a good record. Attorneys and forensic accountants should meticulously monitor deadlines and ask for extensions only when necessary. Another means of addressing discovery abuse is to insist that the opponent provide a privilege log. Another step to fight discovery abuse is to seek a protective order from the trial court. The most potent tactic is to seek sanctions under FRCP 37 for predatory discovery. Federal courts have ample authority to impose sanctions, but many courts do not enforce the FRCP for numerous reasons.

Review Questions

1. In federal courts, discovery requests may be directed to _____.
   a. Only parties to the lawsuit.
   b. Only parties joined to the lawsuit, as approved by the court.
   c. Parties and nonparties to the lawsuit.
   d. None of the above.

2. Which of the following is not one of the four major types of discovery tools?
   a. Requests for admissions.
   b. Interrogatories.
   c. Depositions.
   d. All of the above are major types of discovery tools.

3. Which of the following statements is true regarding witness lists?
   a. Their production does not require a discovery request.
   b. Their production requires a subpoena.
   c. Their production requires court approval.
   d. None of the above.

4. Which of the following may not be commanded by a subpoena?
   a. Testimony.
   b. The production of documents.
   c. Seizing of documents.
   d. All of the above may be commanded by a subpoena.

5. High Quality Products Inc. files a suit against National Software Corporation. Mike is a witness for High Quality. Jim is a witness for National Software. High Quality may direct interrogatories to _____.
   a. National Software only.
   b. Jim only.
   c. National Software or Jim only.
   d. National Software, Jim, or Mike.
   e. None of the above.

6. In Ron's suit against Second National Bank, the discovery phase would include all of the following except _____.
   a. Ron's complaint.
   b. Ron's deposition.
   c. Ron's request for Second National's admissions.
   d. Second National's replies to Ron's interrogatories.
   e. None of the above.

7. Home Appliances Inc. files suit against H.H. Jones Corporation over a contract between them. Before the trial starts, what can H.H. Jones obtain from Home Appliances?
   a. Access to related documents in Home's possession.
   b. Accurate information about Home's trade secrets.
   c. An admission of truth of matters unrelated to the contract.
   d. All of the above.
   e. None of the above.

8. Abusive tactics are fostered by the court system because _____.
   a. Attorneys know that lawyers are given only one opportunity to comply with discovery requests.
   b. Lawyers have an incentive to increase discovery costs as they can bill their clients for more hours worked.
   c. No penalties exist whatsoever for using abusive tactics.
   d. None of the above.

9. The FRCP allows each party up to 10 depositions _____.
   a. To be taken however the party sees fit.
   b. To be computed discretely allowing for the fact that a witness's deposition may be taken more than once.
   c. To be calculated cumulatively for plaintiffs, defendants, and third-party defendants.
   d. As long as they are taken in a one-year time span.
   e. None of the above.

10. If a party refuses to answer an interrogatory, the opposing party may file a motion to compel an answer. A motion to compel an answer _____.
   a. Will be granted if the moving party shows the answer is necessary to prepare for trial.
   b. May be denied if the question asked is subject to a timely and valid objection.
   c. May be denied if the question asked is an invasion of privacy of the other party.
   d. Will be granted if the opposing party does not file a motion to refuse to respond.
   e. None of the above.

11. Tom worked for a messenger service owned by Dalton. While Tom was driving a Dalton-owned vehicle on business in Miami, he hit and injured Pedro, a pedestrian who resides in Alabama. Pedro brought a diversity action against Dalton in federal court in Florida on a theory of respondeat superior (principal-agent). Personal service was properly made, pursuant to FRCP 4(e)(2), on Dalton, a Florida resident. Dalton now wishes to implead Tom as a third-party defendant (if Dalton is held liable to Pedro, Dalton will be entitled to indemnity from Tom). Tom is a resident of Puerto Rico and lives in San Juan, a two-hour flight from Miami. Dalton caused a licensed process server to serve Tom personally at Tom's home in San Juan. Assume that Florida has no long-arm statute allowing state-court jurisdiction over any defendant who cannot be physically found with Florida. Does the Florida federal court have personal jurisdiction over Dalton's third-party claim against Tom?
   a. Yes, because Tom was a third-party defendant who was served within 100 miles of the federal courthouse.
   b. No, because there is no Florida long-arm statute that would authorize state-court jurisdiction over Tom.
   c. Yes, because service was properly made on Dalton within Florida, the state or district where the federal suit is pending.
   d. Yes, because Pedro, Dalton, and Tom are all citizens of different states or districts.
   e. None of the above.

Short Answer Questions

1. For an item to be discoverable, it must appear that it will lead to admissible evidence. True or False?
2. A set of interrogatories must be signed by the _____.
3. Interrogatories should be answered _____.
4. The person to be examined in a deposition is called the _____.
5. Prior to taking a deposition, the person to be deposed must receive a _____.
6. The production of electronic data may require the services of _____.
7. During document production, privileged documents should _____.
8. A response to a request for admission must be responded to within _____.
9. Document production may be accomplished by exchange of a CD-ROM. True or False?
10. A protective order may allow a person not to answer interrogatories. True or False?
11. Parties and witnesses are the only ones who may be deposed. True or False?
12. Depositions may last as long as the person asking the questions desires. True or False?
13. A court order requiring a witness to appear and produce documents is a _____.

14. When a deposition is offered for evidence, the _____ and introducing _____ is not permitted.
15. A party can object to the admission of a deposition as inadmissible if the witness is present and _____ _____.
16. A request for production of documents should _____, _____ _____, and _____.
17. Under FRCP 36, a request for admission asks _____, _____ _____, and _____.

Brief Cases

1. Must a party to a federal civil case disclose to an opponent, without having received a discovery request, the contents of a document that harms its case?
2. Peter serves a set of interrogatories on Scott and his wife. Scott's wife is not a party to the action. Scott objects to the service. What is the result?
3. Max sues Mortimer for personal injuries sustained in a traffic accident. Max claims he was off work for several months. Mortimer wants to check Max's time card maintained by Max's employer, but the latter has refused to provide the information. What discovery device may be used?
4. Gina and Kathy were involved in an auto wreck. Gina sued Kathy for negligence. Kathy took the deposition of John, a bystander who saw the accident. John is available to testify at trial, but neither party has called him. Kathy now offers a portion of John's deposition testimony as evidence. Will this be admitted if Gina objects?
5. Sally files a lawsuit against Miami Drugs Inc. in federal court. Sally wishes to conduct discovery by deposition, but is unsure which of the Miami Drugs employees has the necessary information and does not know whose name belongs on the notice of deposition. Should Sally file interrogatories to obtain the appropriate employee's name?
6. Murdock was injured using a lawnmower produced by Oscar Lawnmower Co. Murdock sues Oscar, claiming the firm negligently made the lawnmower. Murdock further claims he has been disabled from doing his job and seeks damages for loss of earning capacity. Oscar sends a request for production of Murdock's income tax returns for the five years before the injury and two years after the injury. What is the result?
7. Dennis brings a product liability lawsuit against Shanghai Corp. for an injury to his hand sustained in a stamping machine accident. One of Dennis's interrogatories requested Shanghai to list all complaints lodged over the last decade concerning safety guards on stamping machines. Shanghai makes more than 25 types of stamping machines and has over 5000 complaints in an unorganized file. How should the interrogatory be addressed?
8. An eyewitness to Abbott and Costello's traffic wreck claims to have seen the accident from his living room window. Defendant Costello wants to take photos from inside the witness's living room to verify the witness's claims. What discovery procedure is available?
9. Green sues Blue Inc. for personal injuries suffered in a collision with a vehicle belonging to Blue and driven by Bush, an employee (who is not a party). Green took the deposition of Key, president of Blue Inc. Key admitted Bush was driving within the scope and course of his employment. Can Green introduce Key's testimony at trial?
10. Elmer filed a lawsuit against David's Restaurant, claiming food poisoning. Elmer served the following interrogatory: "Have you obtained statements in writing from others about the food served on the night in question?" David's objects on the grounds such statements are hearsay and inadmissible in court. Elmer files a motion to compel. What is the ruling?

11. Paul was hurt in a car accident involving a vehicle driven by Dick. Paul brought a federal diversity suit against Dick on a negligence theory. After commencement of the action, Dick's lawyer, Ben, conducted an interview with an eyewitness to the accident, Carl. Ben wrote down those aspects of Carl's account of the accident that seemed most interesting to Ben. Paul's lawyer, after learning about this interview, submitted to Dick a Rule 34 Request for Production of Documents, requesting "any notes taken by Ben of any interviews with Carl." Dick and Ben refused to comply, so Paul made a motion to compel discovery. Should the court grant Paul's motion to compel production of the notes?

Cases

1. Dan is the plaintiff in a negligence suit against the Colorado Railroad Co. based on a train accident. Colorado requests production under FRCP 34 of "all medical records pertaining to any treatment Dan has received, from any medical provider or other health care professional, which the plaintiff alleges was required as a result of injuries suffered in the accident that is the subject of this action." Dan responds that he does not have these medical records, which are retained by the doctors or hospitals that have treated him. Is this response proper?

2. Counsel for the Colorado Railroad Co. (from case 1) prepares and sends out all the necessary documents to bring in Felicia, the driver of a third car involved in the accident, for a deposition and to obtain any relevant documents Felicia may possess. What documents should Colorado counsel prepare?

3. Mike was injured in an auto accident involving a car driven by Phil. Mike brought a federal lawsuit against Phil under a negligence theory. After the suit started, Phil's attorney, Maria, conducted an interview with an eyewitness to the wreck, Hank. Maria wrote down the facets of Hank's account of the accident that seemed most interesting to her. Mike's lawyer, after hearing about the interview, submitted to Phil a FRCP 34 request for production of documents. Mike's lawyer requested "any notes taken by Maria of any interviews with Hank." Phil and his counsel refused the request, so Mike made a motion to compel discovery. What is the result?

4. Patricia, driving a motorcycle, was injured in a collision with an SUV driven by Debbie. Patricia sued Debbie in federal court under a negligence theory. Patricia's attorney hired an accident reconstruction expert, Dewey Billem, to examine skid marks, inspect vehicle and motorcycle damage, and determine the speed of the SUV and motorcycle at the time of the collision. Dewey Billem formed an opinion that Debbie did not stop at the appropriate stop sign. Patricia plans to call Dewey Billem to testify at trial. How can Debbie's lawyer learn how Dewey Billem will testify?

5. Tiger Co., the plaintiff, and Panda Bear Co., the defendant, are pharmaceutical corporations. Tiger has initiated a patent infringement action against Panda Bear in federal court. Tiger's complaint also alleges that by hiring a former Tiger employee, Panda stole various trade secrets belonging to Tiger. Tiger has served Panda Bear with an FRCP 34 document production request seeking documents containing details of certain secret processes used by Panda. Tiger wants to determine whether these were taken from its own trade secrets. Panda is concerned that Tiger may use the information to put Panda at a competitive disadvantage. What should Panda's lawyer do?

6. Paint Inc. produces a line of can spray paints. During the past 24 months, numerous individuals have been harmed when cans of spray paint exploded during use. Two harmed users, Megan and Marcella, join as plaintiffs to sue Paint Inc. in federal court. Megan's claim or theory is that Paint designed a defective spray can mechanism. Marcella relies on the allegation that Paint employees misassembled the can. A few months into the case, Megan served two discovery requests. Initially, she sends interrogatories to Marcella, asking her to disclose any data that she has that might show a problem with the production of the can. Marcella objects to the relevance of the questions. Next, Megan notices the deposition of Hans, who is another victim of an exploding paint can. Hans has started his own lawsuit in state court alleging that the can causing him injury was mishandled by a transportation company. In the deposition, Megan asks Hans to disclose any information about issues involving transportation of the paint cans. Hans objects to the relevance of the questions. Can Megan obtain the data she seeks from Hans and Marcella?

Internet Research Assignments

1. Plaintiff employer Renaissance Nutrition Inc. brought an action against former employees George Jarrett and Dan Kurtz (the defendants) alleging that the latter breached non-compete agreements, misappropriated confidential information, and tortuously interfered with the plaintiff's business relationships. The former employees filed a request for production of the federal and state tax returns and all schedules of Renaissance Nutrition for each year starting in 2006. The defendants argue that the tax returns are relevant to Renaissance's claim of lost income and that the plaintiff's response is inadequate. The plaintiff notes that it provided defendants with all documents relied upon by its expert witness. What is the result?

2. Plaintiff Max Margulis asserts claims against Euro-Pro Operating, LLC for alleged violation of the Missouri Merchandising Practices Act and common law fraud. The plaintiff bought a vacuum cleaner system from the defendant based on a TV commercial claiming that the product can fit and operate under any bed and comes with a 60-day money back guarantee. The plaintiff found that the vacuum cleaner could not operate under his bed and tried to obtain his money back after returning the product. The defendant continued to charge the plaintiff's credit card, failed to credit his account for the product return, and turned the account over to a collection agency. The plaintiff served an initial set of 154 requests for admission, to which the defendant responded. The plaintiff then filed a second set consisting of 155 requests for admission. The defendant objected and filed a motion for a protective order. What is the outcome?

3. Plaintiff Staffords (Zen Investments) invested money in 1999 in a company controlled by defendant Robert Vito. The latter owns several related entities referred to as the unbreakable entities (also defendants). Unbreakable propounded 43 requests for admission, including the following:

   > If there was a contractual undertaking by Lawman to guarantee the Stafford entities or Stafford affiliates two seats on Lawman's board in Exchange for the Stafford Entities or Affiliates investment into Lawman, then the length or duration of that contract was from October 20, 1999, the date the Staffords were elected, until April 1, 2000.

   The plaintiff objected to this request for admission on the ground that it is ambiguous, vague, and unintelligible. Defendants filed a motion to compel an answer. What is the ruling?

4. Plaintiff Lothar Estenfelder filed a lawsuit against the Gates Corporation in federal district court. After the close of discovery, Gates filed a motion for leave to take the depositions of four former Gates' employees who resided in Europe. None of the former employees could be compelled through subpoena to attend trial. The plaintiff objected to the motion arguing that the deadline for discovery had passed. Gates cited FRCP 32 in support of its position. What is the result?

5. Roy Ferrand and other plaintiffs brought a putative class action against the Louisiana Secretaries of State, the Department of Health and Hospitals, and the Department of Children and Family Services seeking declaratory and injunctive relief for alleged violations of the National Voter Registration Act. Each defendant filed a motion for a protective order regarding interrogatories. The plaintiffs propounded 15 numbered interrogatories to the Secretary of State and 24 numbered interrogatories to the other 2 defendants. All defendants contend that the interrogatories exceed 25 in number. Defendants argue that the number of interrogatories was tripled by the plaintiffs' definitions and instructions lettered Y and Z to the Secretary of State (Z and AA went to the other 2 defendants). The definitions and instructions also set out or define 3 time periods. The defendants are instructed to provide an answer for each of the 3 time periods. How did the court rule?

Chapter 6
Litigation Services

Learning Objectives

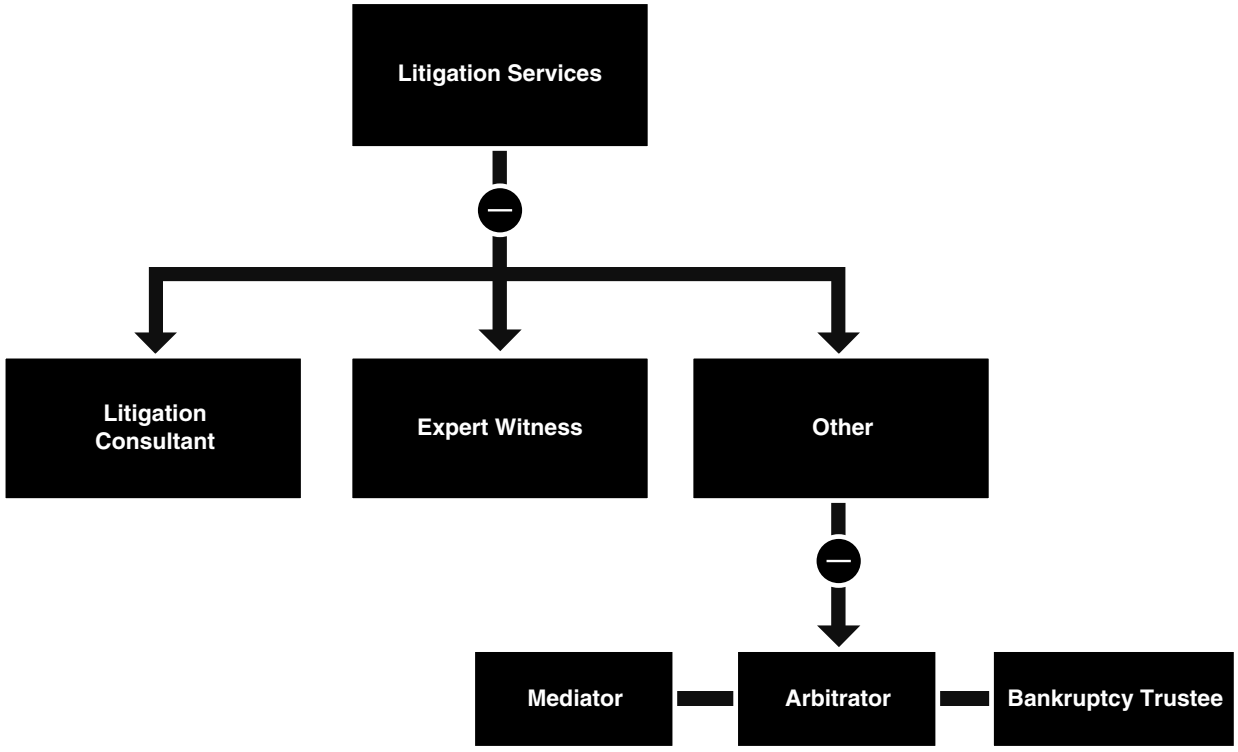
- Distinguish between expert consulting versus expert witness services
- Identify the requirements for the admissibility of expert testimony
- Explain the bases on which experts may form opinions in expert testimony
- Identify acceptable versus unacceptable ways of expressing expert opinions
- Explain the disclosure requirements for expert testimony
- Prepare for depositions
- Avoid expert witness liability problems
- Explain the basic types of alternative dispute resolution and how they function

Introduction

Some of the roles that forensic accountants play in legal and other kinds of adversarial proceedings include non-testifying litigation consultant, testifying expert witness, mediator, arbitrator, and bankruptcy trustee. Collectively these services are called litigation services, as shown in figure 6.1.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Figure 6.1
Litigation Services



The common element that makes consulting services fall within the realm of forensics is their connection to the legal system. Further, given their nature as consulting services, they are presumed to be performed by unbiased accountants acting with integrity and objectivity. In other words, they do not include work done by employees for employers. Work done by employees for employers may be very similar to work performed by independent consultants, but it does not fall within the scope of litigation services as discussed in the current chapter.

Forensic accounting services can be further divided according to the specific practice area related to a given service. For example, non-testifying litigation consulting and testifying expert witnessing include specific practice areas such as fraud investigations and business valuation. The focus of the current chapter is on the general practice areas of litigation consultant, expert witness, mediator, and arbitrator. The specific areas of fraud and business valuation are covered in subsequent chapters.

Expert Consultant Versus Expert Witness

In a litigation context, the main difference between an expert consultant and an expert witness is that the expert consultant does not testify and is not normally subject to discovery. Both are consultants who write reports and give expert opinions, and in principle, any report written by an expert consultant can end up in court. Further, it is possible that a forensic accountant who begins working for a client as an expert consultant can later become a testifying expert witness for the same client in the same matter. Therefore, given the communalities between the expert consultant and the expert witness, the remainder of the discussion in this chapter focuses on the expert witness.

The Work of an Expert Witness

In our court systems, expert witnesses hold a highly-privileged position: they are entitled to state their opinions on matters of interest to the court. This position contrasts with that afforded to ordinary fact witnesses whose testimony is limited to what they personally perceive through their senses. Consequently, expert witnesses, especially credible ones, can serve as a powerful force to shape conclusions made by triers of facts.

However, the highly-privileged position is not without its limitations. The primary limitation is that expert witnesses are not supposed to advocate for any party in a legal proceeding. Rather, their role is supposed to be limited to assisting the trier of fact through scientific, technical, or other specialized knowledge.

Federal Rules Governing Expert Testimony

In order to assure that expert witness testimony assists the trier of fact in a meaningful way, specific Federal Rules of Evidence (FRE) 702–706 exist to govern expert testimony. Within the requirements set forth by these rules, expert testimony becomes admissible evidence. However, as is the case with any type of evidence, expert testimony must first and foremost be relevant in order to be admissible. As was discussed in chapter 4, "Evidence," FRE 401 states that relevant evidence "means evidence having any tendency to make the existence of any fact that is of consequence to the determination of an action more probable or less probable that it would without the evidence."

FRE 702, Testimony by Expert Witnesses

FRE 702, *Testimony by Expert Witnesses*, provides a job description for the expert witness:

- *The Expert's Qualifications.* Sufficient "knowledge, skill, experience, training, or education."
- *The Form of Expert's Testimony.* The expert witness "may testify in the form of an opinion or otherwise" based on the expert's "scientific, technical, or other specialized knowledge."

FRE 702 further specifies the conditions that must be met for the expert's testimony to be admissible:

- *Relevance of Testimony.* The expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue.
- *Sufficient Basis for Testimony.* The testimony is based on sufficient facts or data.
- *Reliable Principles and Methods.* The testimony is the product of reliable principles and methods.
- *Reliable Application.* The expert has reliably applied the principles and methods to the facts of the case.

FRE 702 and Motions in Limine

A **motion in limine** is a written motion that requests an order regarding the admissibility of particular evidence at trial. In many cases, the opposing counsel uses a pretrial motion in limine to exclude or limit the testimony of an expert witness. All the requirements of FRE 702 can be used as a basis for such a motion. In jury trials, motions in limine are heard out of the presence of the jury. A sample motion is shown in figure 6.2.

Figure 6.2
Sample Motion in Limine

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

v.

CRIMINAL NO. CR-10-20403-NGE

HON. NANCY G. EDMUNDS
MAJ. JUDGE MONA K. MAJZOUB

D-1 KWAME M. KILPATRICK,
D-2 BOBBY W. FERGUSON,
D-3 BERNARD N. KILPATRICK, and
D-4 VICTOR M. MERCADO,

Defendants.

UNITED STATES' MOTION IN LIMINE FOR PRETRIAL DETERMINATION OF ADMISSIBILITY OF CERTAIN EVIDENCE

The United States of America, by its undersigned attorneys, moves this Court for a pretrial ruling on the admissibility of certain evidence pursuant to Federal Rule of Evidence 104(a) and (b). *See* FED. R. EVID. 104(a) (District courts "must decide any preliminary question about whether . . . evidence is admissible."). The evidence at issue is comprised of text messages exchanged between and among the defendants and others on two-way pager devices leased to the defendants from SkyTel. The government requests this ruling in advance of trial in order to

Source: United States District Court, Eastern District of Michigan

It is also possible that the expert's retaining attorney makes a motion in limine to request the judge rule that the expert's testimony is admissible. Some attorneys will make such a motion in order to avoid the need to qualify the expert in open court via direct examination. Further, a favorable ruling can avoid a challenge during trial.

Obviously, a judge's ruling that expert testimony is admissible does not preclude the testimony from being challenged by cross-examination in court. Further, it is perfectly possible, and permissible, that opposing experts have inconsistent and conflicting opinions. There is no requirement that expert witnesses agree or use the same sets of facts in rendering their opinions. The basis on which experts may form their opinion is discussed in the following section with respect to FRE 703, *Bases of an Expert Opinion*.

Qualifications

As previously noted, FRE 702 indicates that the expert's qualifications may arise from knowledge, skill, experience, training, or education. In other words, the expert's qualification may arise from any of these five areas, and only one area alone can be sufficient. The facts of the particular case determine the importance of each area.

It is the judge's **gatekeeper responsibility** to rule as a matter of law as to whether the expert witness is qualified to testify in particular areas. The expert may testify only in the particular areas ruled admissible by the judge. Appeals to the judge's ruling are possible. However, such appeals are rarely granted because the usual standard for a successful appeal requires that the appellant prove the trial judge's ruling amounted to an abuse of discretion.

In the absence of a motion in limine regarding the admissibility of the expert's testimony, the expert's retaining attorney will qualify the expert through direct examination. At that time, the opposing attorney may challenge the expert's qualification through cross-examination.

In determining the expert's qualification for a particular case, the judge will consider many factors. Some of these factors are enumerated in the rest of this section.

An expert that has testified in a given area many times in the past is likely to be permitted to testify again in the same area. This is because previous judges have reviewed and approved the expert's credentials in the context of adversarial proceedings in which attorneys have had ample opportunity to argue to the contrary. The lack of publications is not normally an issue in qualifying an expert. However, although publications are not necessary, they can evidence expertise in particular areas.

In some cases the expert witness may be trained in the general area of testimony but lack specialized education and training in the sub-area that is the subject matter of the case at hand. For example, a forensic accountant's opinion relating to the value of economic damages in a patent infringement case might be excluded unless the accountant has specific education and training in business valuation.

Firsthand involvement in facts relevant to a case is generally not sufficient to qualify an expert. After all, any unqualified person can have firsthand involvement in a case. However, in some cases a lack of firsthand involvement in a case can lead to the expert's testimony being excluded. For example, assume that a forensic accountant conducts a year-long investigation in a case of financial statement fraud, but then a partner in the forensic accountant's firm with no involvement in the investigation submits an expert report and seeks to testify.

Although the partner may be an expert in financial statement fraud, the opposing attorney could argue that the complexity of the investigation was such that expertise in the facts of the case would be necessary to render expert opinions in the areas under consideration. Of course, the success of the argument would depend very much on the facts of the case, but the opposing attorney could cross-examine the accountant on specific details of the case. The accountant's inability to demonstrate intricate knowledge of the details could result in an adverse ruling on admissibility.

In some cases, education and training alone might not be sufficient to qualify an expert. Education and training often start as a beginning point for developing expert qualifications. For example, someone who has just graduated from college with a forensic accounting degree may have a difficult time being qualified as an expert in a complex area of forensic accounting. On the other hand, relevant experience alone can easily qualify an expert to testify. For example, a person with no accounting degree but who has worked, say, 20 years as a corporate accountant may qualify to testify within the person's area of work.

Even "lay" persons can qualify as experts based on experience. For example, a high school student who regularly pays the family's bills and balances the checkbook might be permitted to testify as an expert in managing family finances.

Among accountants, professional licenses and designations can be a great source of expert qualifications. The following are some examples of the many possible licenses and designations that may be relevant to a forensic accountant:

- Accredited Business Accountant
- Accredited in Business Valuation
- Accredited Financial Examiner
- Accredited Senior Appraiser
- Certified Fraud Specialist
- Certified Government Auditing Professional
- Certified Government Financial Manager
- Certified Healthcare Financial Professional

Accredited Tax Advisor
Accredited Tax Preparer
Accredited Valuation Analyst
Certified Bank Auditor
Certified Divorce Financial Analyst
Chartered Financial Analyst
Certified Financial Examiner
Certified Financial Services Auditor
Certified in Financial Management
Certified Financial Planner
Certified Forensic Accountant
Certified Forensic Consultant
Certified Forensic Financial Analyst
Certified Fraud Deterrence Analyst
Certified Fraud Examiner
Certified Information Systems Auditor
Certified Information Security Manager
Certified Information Technology Professional
Certified Insolvency and Restructuring Advisor
Certified Internal Auditor
Certified Management Accountant
Certified Public Accountant
Certified Public Finance Officer
Certified Quality Auditor
Certified Risk Professional
Certified Valuation Analyst
Elder Care Specialist
Enrolled Agent (IRS)
Forensic Certified Public Accountant
Personal Financial Specialist

Memberships in professional organizations are commonly associated with professional certifications. For example, in order to obtain the Certified Fraud Examiner credential, one must be a member of the Association of Certified Fraud Examiners. Similarly, in order to obtain the Certified Public Accountant credential, one must become a member of the AICPA. Generally, speaking memberships can be helpful, especially when they are associated with the member's regular participation in professional meetings.

Keep in mind that in bench trials, judges do not have to be concerned with an expert misleading or confusing a jury. This tends to make judges more liberal in admitting expert testimony.

Reliable Principles and Methods

Special attention in the courts has been given to defining **reliable principles and methods**. In federal courts the historical standard for determining reliable principles and methods was set in *Frye v. United States*. Frye held that expert opinion based on a scientific technique is admissible if the technique is generally accepted as reliable in the scientific community. Although the **Frye standard** still applies in some states, the Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals* effectively interpreted reliable principles in federal courts to mean that the following conditions are met:

- The technique or theory has been subjected to scientific testing
- The technique or theory has been published in peer-reviewed scientific journals
- The error rate for the technique is reasonably estimated or known
- The technique or theory is accepted in the relevant scientific community

The Supreme Court did not intend this list of conditions to be either exclusive or dispositive. Subsequent to Daubert, other courts have given weight to other conditions. In *Kumho Tire Co. v. Carmichael*, the Supreme Court ruled that the Daubert criteria were only illustrative and also apply to nonscientific expert testimony.

Case in Point

PWC (www.pwc.com), a global accounting firm, has published a number of studies regarding challenges to financial expert witnesses under the Daubert standards. For example, PWC summarized one of its studies:

> The study examines the challenges to provide insight into the reasons experts were challenged and excluded and to delve more analytically into the causes of exclusions based on the qualifications of the experts and the relevance and reliability of the expert testimony. The study also summarizes some of the specific financial, statistical, economic, and valuation methods that courts have found inadmissible.

Some examples of additional conditions considered by the courts are as follows:

1. *Whether the expert's opinion appears to have been formed exclusively for the litigation at hand.* For example, assume that in a fraud case an embezzler claims that a bug in the accounting software might have caused a large number of invoices to be permanently deleted from the accounting system. Based on a Benford analysis of the remaining invoices, the forensic accountant opines that the pattern of the deletions is such that it could have only been caused by intentional human acts and not a software bug.

   In this case, the opposing attorney might ask the following question, "Have you ever before used, or do you know of anyone else ever having used, a Benford analysis to make inferences regarding missing invoices?"
2. *Whether the expert's opinion appears to be too large of a logical leap given the facts it is based on.* For example, assume that a forensic accountant investigating embezzlement finds a batch of missing sales invoices hidden inside a pile of old mail in the desk drawer of a fired employee. The total amount of these invoices was about $20,000. Someone had destroyed all other accounting records, and only this batch of sales invoices remained. Examination of these invoices show that many of them contained improper alterations. The types of alterations appear consistent with a classical sales skimming scheme. Further, through using net-cash-flow analysis, the forensic accountant is able to estimate that the company has an embezzlement loss of $400,000. Based on these facts, the forensic accountant opines that the person who altered invoices likely was the same person who was responsible for the $400,000 loss.

   In this case, the opposing attorney might ask a question like, "What makes you think that there was only one fraud and one fraudster?"
3. *Whether the expert has considered other alternatives in forming an opinion.* For example, assume that the forensic accountant documents that a finance manager's computer was used to initiate a fraudulent wire transfer. The forensic accountant opines that no one but the manager could have initiated the transfer because physical access to the manager's computer requires a scan of the manager's fingerprint, and because the transfer was initiated at a time when the manager was at work on the computer.

   In this case, the opposing attorney might ask the simple question, "Did you consider the possibility that a hacker could have remotely accessed the computer in question?"
4. *Whether the expert has given adequate professional effort and care in forming the opinion.* For example, a forensic accountant investigates the possibility of theft of raw materials in a finished goods department. It has already been established that large amounts of raw materials have been disappearing. The accountant examines a sample of 20 handwritten production orders (out of hundreds of orders) and discovers that 4 out of the 20 overstated the required amount of materials. The 4 orders with overstated amounts of materials were all signed by the same person.

   The forensic accountant opines that because the employee signed for the materials in question and clearly did not use them as was documented in the production order, then under the company's "charge and discharge of responsibility" policy, the employee was responsible for the loss of materials.

   In this case, the opposing attorney might ask the question, "Why didn't you go ahead and examine the rest of the production orders to investigate the possibility that this employee had made honest errors?"
5. *Whether the type of opinion formed by the expert is consistent with the types of opinions normally formed by experts in the area of expertise.* A forensic accountant investigates a case of financial statement fraud in a large company. The company has a large portfolio of complicated derivatives. The issue is whether the derivatives were deliberately overvalued. The forensic accountant opines that they were clearly way overvalued and, given the credentials of the corporate controller, it would be very unlikely that the unreasonable valuation could have happened by accident.

   In this case, the opposing attorney might simply ask the forensic accountant, "I see that you took a single basic course in business valuation 20 years ago and that you have no other valuation experience, education, or training listed on your resume. What makes you qualified to give such an opinion?"

FRE 703, Bases of an Expert Opinion

FRE 703 goes on to discuss the following:

> An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted. But if the facts or data would otherwise be inadmissible, the proponent of the opinion may disclose them to the jury only if their probative value in helping the jury evaluate the opinion substantially outweighs their prejudicial effect.

Choosing Facts

Generally speaking, this rule provides the expert a very wide degree of latitude in choosing facts on which to form an opinion. Particularly salient in this rule is the explicit statement that the expert's opinion may be based on facts that are not admissible. However, the wide degree of latitude is counterbalanced with the requirement that the experts in the field would reasonably rely on similar kinds of facts in forming their opinions on the subject at hand.

Some issues relating to what experts in a given area may rely on are as follows:

- *Hearsay evidence.* Subject to a reasonable reliance test, FRE 703 permits experts to rely on hearsay. However, the permitting of an expert to form an opinion based on hearsay evidence does not in of itself make the hearsay evidence admissible.

  A good example of acceptable hearsay involves a forensic accountant forming opinions based on systematic interviews with suspects and others in an investigation. This example of hearsay likely passes a reasonable-reliance test, because interviewing is a normal part of a forensic investigation. On the other hand, expert opinions based on reports of what interviewees have heard from others may be subject to a reasonable-reliance challenge. Of course, the others from which interviewees have heard may be deposed and independently put on the record, making their statements directly available to the expert.
- *Hypotheticals.* Experts may form opinions based on hypothetical sets of facts. Of course, opinions based on suppositions are no better than the facts assumed. Further, hypotheticals are subject to abuse. For example it is possible for an attorney to make a speech disguised as a question. Because a hypothetical question requires a statement of the assumed facts, it affords the attorney an opportunity to state, organize, and present all the facts of the case in a way that is consistent with the client's position. Such a presentation can amount to the equivalent of final arguments to the trier of fact.
- *Testimony at trial.* Generally speaking, experts may base opinions on their observations of testimony at trial. However, trial testimony can be conflicting and not helpful to forming expert opinions.
- *Other reports.* Generally speaking, the expert may rely on reports of other experts. For example, a forensic accountant might rely on a report of a security expert that explains how a particular hacker penetrated a company's security system. Of course, the opposing counsel can depose and challenge the second expert.
- *Conclusory statements of other professionals.* In general, expert witnesses are permitted to express conclusory opinions regarding the ultimate issue in a civil case. However, testifying experts must form such opinions themselves and not simply rely on the conclusory opinion of another professional.
- *Personal observation.* Experts may serve as both a fact witness and an expert witness at the same time. Further, experts may form expert opinions based on their own observation of facts they consider.
- *Facts provided by retaining counsel.* Experts mostly may rely on facts provided by retaining counsel. The issue of possible bias in the source of the facts may go to the weight that the trier of fact applies to the expert's opinion, but there is no general prohibition that prevents experts from relying on facts provided by retaining counsel.
- *Self-serving affidavits made by litigants.* In one case, experts were prohibited from relying on self-serving affidavits made by their clients. Relying on statements made by clients is mainly an issue when sufficient other facts are not considered by the expert in forming an opinion.

Expressing Expert Opinions

The burden of proof in civil trials is a preponderance of the evidence. This is often interpreted to mean "more likely than not" or "more than a 50 percent probability." In practice, an expert opinion that does not express a sufficient degree of certainty can be declared inadmissible. The following are some issues relating to expressing expert options with a sufficient degree of certainty:

- *Speculation.* Speculation tends to involve the expert expressing a particular opinion when there exists a reasonable possibility that an alternative, conflicting opinion is reasonably possible given the same facts and methodology. It may also involve the expert expressing an opinion that is not sufficiently based in facts. Generally speaking, a speculative opinion expresses a possibility with an inflated degree of certainty.

  For example, an expert might express an opinion that a particular employee failed to count inventory. Then on cross examination, the opposing attorney might ask the expert, "Can you say that your opinion is correct with a reasonable degree of certainty?"
- *Uncertain opinion.* Uncertainty alone in an expert opinion does not in of itself render an expert opinion inadmissible. Therefore, an opinion regarding what could be or might be true may be admissible.
- *Poor wording.* Vague wording regarding certainty can render an opinion inadmissible. For example, an expert might say something like the facts "tend to suggest" that an employee may have failed to count inventory. This type of nebulous statement runs the risk of being ruled inadmissible. Other similar types of expressions may also run the risk of being ruled inadmissible. Examples include "may," "possibly," and "apparently."
- *Range estimates.* In general, it is not necessary that expert opinions use only exact estimates. For example, an expert might opine that lost revenues are between $20,000 and $40,000.

There are various ways that expert opinions can be expressed to facilitate their admissibility. Some examples of helpful phrases include "more likely than not," "highly likely," "based on a reasonable degree of certainty," and "reasonably certain."

FRE 704, Opinion on an Ultimate Issue

FRE 704, *Opinion on an Ultimate Issue*, states the following:

> (a) In General—Not Automatically Objectionable. An opinion is not objectionable just because it embraces an ultimate issue.
>
> (b) Exception. In a criminal case, an expert witness must not state an opinion about whether the defendant did or did not have a mental state or condition that constitutes an element of the crime charged or of a defense. Those matters are for the trier of fact alone.

Generally speaking, an expert may express an opinion on a factual matter of the case, even when that factual issue goes directly to the ultimate issue in the case. Assume, for example, that a company files a claim with its insurance company for a fraud loss, and that the insurance company refuses to recognize the loss. The company then sues the insurance company for the amount of the loss. In this case, a qualified forensic accountant would likely be permitted to opine that a fraud loss had occurred.

The function of applying the law to the facts of a case in order to reach a legal conclusion is reserved strictly for the trier of fact. Experts are not permitted to opine legal conclusions. In the case of the insurance company not paying for an alleged fraud loss, the expert would likely not be permitted to opine that the insurer was liable for the loss. Legal liability in this case would be reserved for the trier of fact.

In some cases, experts might be permitted to testify regarding laws. For example, a legal expert might be permitted to testify that a particular insurance practice is illegal. However, the expert would not be permitted to apply the law to the facts of the case and opine that an insurer is liable because of having engaged in the illegal practice.

In general, expert opinions regarding an individual's mental state may run into problems. In criminal cases, an essential element of a crime is the mens rea (guilty mind). However, FRE 704(b) explicitly prohibits the expert from opining on the mens rea.

In civil cases, an expert opinion regarding state of mind can possibly amount to a legal conclusion. For example, in a civil case, the difference between breach of contract and fraud might depend on the defendant's intent at the time of signing a contract. Generally speaking, intent to deceive is a required element of fraud.

Case law is not entirely clear as to what constitutes a legal conclusion. The following are examples of ultimate issues that may not be subject be the subject of expert opinions:

- *How the trier of fact should decide the case.* The expert cannot opine that a defendant is liable or not liable, guilty or not guilty.
- *Questions of law.* The trial judge is the sole interpreter of law, and what law applies to the current case. Only the trial judge can instruct a jury regarding how law should be applied to the facts of the case.
- *Legal labels.* The expert cannot use any terms or phrases that carry special legal significance unless the trial judge first defines them for the jury. For example, an expert's use of the phrase "wilful neglect" could be barred because it has a special legal meaning.

There is, however, a modus operandi exception. In some cases, an expert may be permitted to testify as to the modus operandi of a particular complicated fraud or other criminal scheme. The theory behind allowing such testimony is that it involves the expert explaining factual patterns as opposed to instructing the jury as to the legal definition of the related scheme. So, for example, in a given case, a trial judge might permit an expert forensic accountant to testify as to the elements of, say, an account receivables lapping scheme. Of course, any testimony of this type is likely to be vigorously opposed. However, the trial judge's decision to admit or not admit the testimony is likely to stand on appeal, given that a successful appeal requires a finding of abuse of discretion.

FRE 705, Disclosing the Facts or Data Underlying an Expert

FRE 705, *Disclosing the Facts or Data Underlying an Expert*, states the following:

> Unless the court orders otherwise, an expert may state an opinion—and give the reasons for it—without first testifying to the underlying facts or data. But the expert may be required to disclose those facts or data on cross-examination.

FRE 705 is often abused. In some cases, attorneys may give the equivalent of opening or closing arguments in long-winded speeches under the guise of expressing expert opinions. Of course, the expert's testimony is subject to cross-examination, and courts permit a wide degree of latitude in examining the facts on which an opinion is based. Cross-examination is discussed in detail in the following section.

FRE 706, Court-Appointed Experts

FRE 706, *Court-Appointed Experts*, reads as follows:

> (a) *Appointment Process.* On a party's motion or on its own, the court may order the parties to show cause why expert witnesses should not be appointed and may ask the parties to submit nominations. The court may appoint any expert that the parties agree on and any of its own choosing. But the court may only appoint someone who consents to act.
>
> (b) *Expert's Role.* The court must inform the expert of the expert's duties. The court may do so in writing and have a copy filed with the clerk or may do so orally at a conference in which the parties have an opportunity to participate. The expert:
>
> (1) must advise the parties of any findings the expert makes;
>
> (2) may be deposed by any party;
>
> (3) may be called to testify by the court or any party; and
>
> (4) may be cross-examined by any party, including the party that called the expert.
>
> (c) *Compensation.* The expert is entitled to a reasonable compensation, as set by the court. The compensation is payable as follows:
>
> (1) in a criminal case or in a civil case involving just compensation under the Fifth Amendment, from any funds that are provided by law; and
>
> (2) in any other civil case, by the parties in the proportion and at the time that the court directs—and the compensation is then charged like other costs.

(d) *Disclosing the Appointment to the Jury.* The court may authorize disclosure to the jury that the court appointed the expert.

(e) *Parties' Choice of Their Own Experts.* This rule does not limit a party in calling its own experts.

Case in Point

FRE 706 is controversial and some judges believe that it should be seldom invoked. It was invoked in one well-publicized case, *Oracle v. Google*. The court appointed an independent damages expert in the face of opposing damage estimates that ranged from zero to $6.1 million.

FRE 706 gives trial judges broad authority to appoint expert witnesses in addition to those retained by the litigants. The expert witness may be made at the court's own motion or at the motion of one of the parties. The court may define the scope of the expert's mandate as narrowly or as broadly as it desires. A narrowly-defined mandate might instruct the expert to examine and report on a specific issue. Alternatively, a broadly-defined mandate might instruct the expert to review the entire case file.

Historically speaking, courts have seldom appointed experts per FRE 706. However, it seems likely that they will do so more in the future as a way of gaining a better understanding in issues that result from the proliferation of complex specialty areas in today's society.

Some legal authorities have expressed concern that the very idea of a court appointing an expert may subvert our adversarial legal system. In theory, dueling experts are supposed to best promote the cause of justice. On the other hand, it is fairly well known that attorneys shop for expert opinions, and in some cases it may be possible to find an expert to say almost anything. FRE gives the trial court the authority to appoint its own expert if it is not satisfied with the experts of the adversarial parties.

Court-appointed experts can be called to testify by any party in a case and are subject to depositions and cross-examination in the same manner as any expert witnesses are. In addition, in order to maintain the fairness of the adversarial system, the trial judge can give the jury an instruction to the effect that the fact that the court has appointed an expert witness does not in of itself mean that the witness's testimony should be given relatively more weight than that given to expert witnesses retained by the adversarial parties. However, the court, at its discretion, may withhold from the jury the fact that an expert witness is court-appointed.

Fees for court-appointed expert witnesses are paid by the litigants at a rate determined to be reasonable by the court. In some districts the court has the authority to allocate the cost of the fees between the litigants in a manner that the court deems reasonable.

Court-appointed experts differ from court-appointed technical assistants. Such assistants do not testify and are not subject to deposition or cross-examination. Depending on the jurisdiction, the trial court might not even disclose their services.

Disclosure of Expert Testimony

Federal Rule of Procedure 26 (a)(2)(B) states the following:

Witnesses Who Must Provide a Written Report. Unless otherwise stipulated or ordered by the court, this disclosure must be accompanied by a written report—prepared and signed by the witness—if the witness is one retained or specially employed to provide expert testimony in the case or one whose duties as the party's employee regularly involve giving expert testimony. The report must contain:

(i) a complete statement of all opinions the witness will express and the basis and reasons for them;
(ii) the facts or data considered by the witness in forming them;
(iii) any exhibits that will be used to summarize or support them;
(iv) the witness's qualifications, including a list of all publications authored in the previous 10 years;

(v) a list of all other cases in which, during the previous 4 years, the witness testified as an expert at trial or by deposition; and
(vi) a statement of the compensation to be paid for the study and testimony in the case.

The main purpose of the rule, as is with discovery in general, is to ensure that the opposing parties exchange discoverable information so as prevent unfair surprises and to facilitate resolving cases before they end up in trial. It would be terribly inefficient and would complicate trial proceedings if opposing parties were forced to discover everything at trial. Discovery helps narrow the issues of disagreement, and in many cases the issues are narrowed to the point that the underlying dispute is resolved.

Note that Rule 26(a)(2)(B) says that the report "must contain…" and then lists the required elements. This means that if any one required element is missing or deficient, the report may be ruled as inadmissible and the expert barred from testifying. Courts tend to be very strict in enforcing the rule. Examples of cases in which a report may be ruled inadmissible are as follows:

- *Missing qualifications.* The expert's qualifications must include all articles published in the previous 10 years. Any omitted articles could result in the expert's testimony being ruled inadmissible.
- *Conclusory report.* A report without a sufficient basis in facts is likely to appear to be speculative and be ruled inadmissible.
- *Incomplete list of past testimony in the previous four years.* All attorneys maintain a list of all cases in which they represent clients. It would be inexcusable to omit any cases.
- *Vagueness of the facts relied upon.* For example, if the expert relies on interviews with witnesses, the expert should provide the names of the witnesses, the dates and times of the interviews, whether the expert took notes, and so on.

DEPOSITIONS

Depositions are very important in the litigation process. This is because over 90 percent of all cases are resolved before going to trial.[1] Consequently, what happens in depositions can prove critical to the resolution of any case.

Depositions play a unique role in discovery. They represent the only way in discovery that attorneys can rapidly probe with follow-up questions and assess the potential credibility and demeanor of witnesses as they might appear in front of a jury.

Depositions tend to occur at the culmination of the discovery process. Attorneys first collect evidence through requests for admissions, interrogatories, and requests for the production of documents. They then assimilate all the evidence and bring it to bear on depositions.

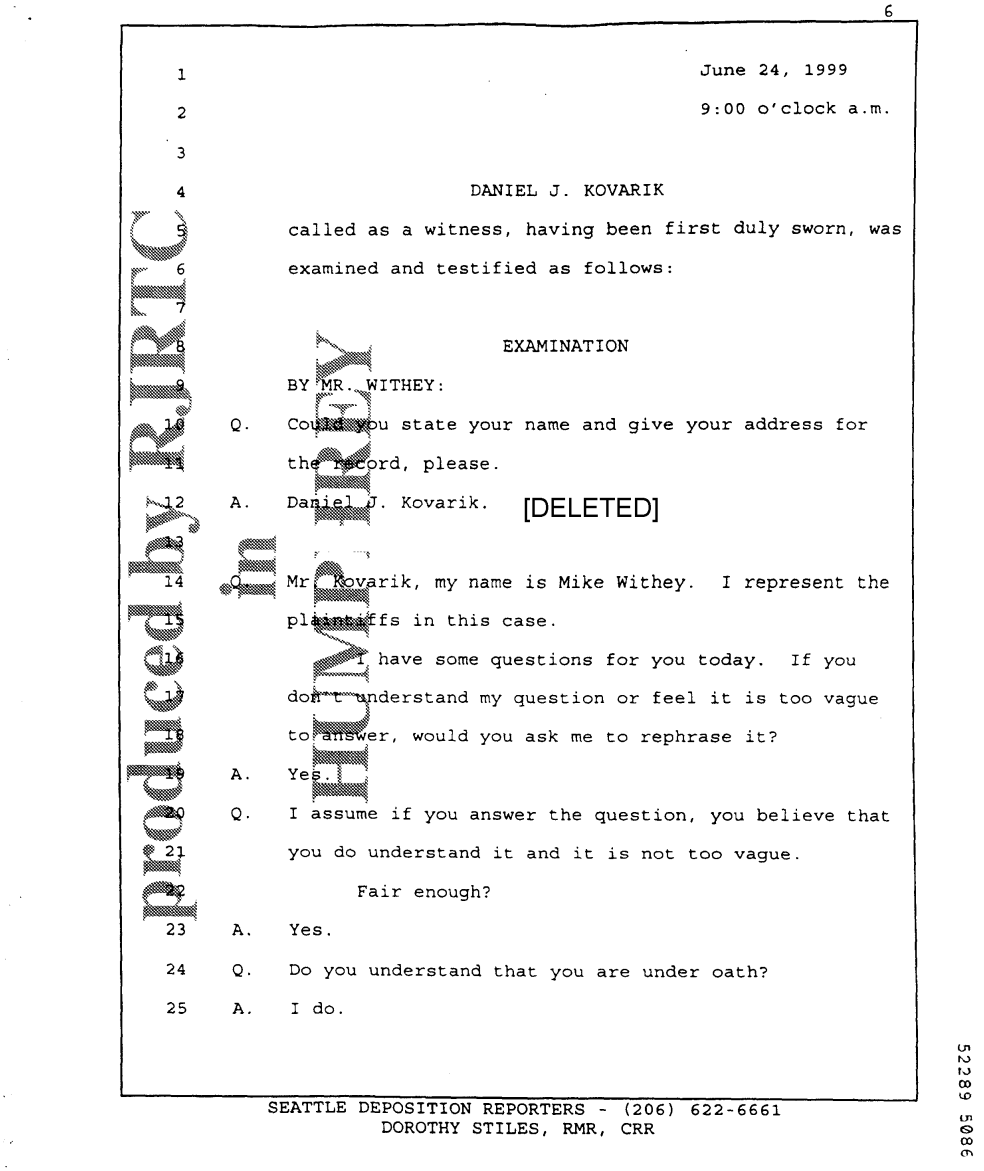
From the point of the expert, depositions may be similar to cross-examination at trial except for a few differences; depositions are typically held in the offices of the attorneys, and no judge or jury is present.

Attorneys are not permitted to object to questions for any of the usual reasons that may govern admissibility in court. For example, an attorney cannot object to a question because it calls for a conclusion, relies on hearsay, and so on. Of course, if questioning of the expert becomes abusive, the retaining attorney may ask the court to grant a protective order. Attorneys may sometimes object to the form of improperly worded questions. For example, an attorney would object to a loaded question such as, "Which month did you steal the money in, January or February?"

Attorneys have a very wide degree of latitude in asking questions. Given that depositions are subject to review by the trial judge before they can be admitted as evidence, there is little risk of asking questions where the answer may cause undue prejudice or confusion in the jury. See a sample deposition in figure 6.3.

[1] See James Hirby, "What Percentage of Lawsuits Settle Before Trial?" *The Law Dictionary.* thelawdictionary.org

Figure 6.3
Sample Deposition



6

June 24, 1999
9:00 o'clock a.m.

DANIEL J. KOVARIK

called as a witness, having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. WITHEY:

Q. Could you state your name and give your address for the record, please.

A. Daniel J. Kovarik. [DELETED]

Q. Mr. Kovarik, my name is Mike Withey. I represent the plaintiffs in this case.

I have some questions for you today. If you don't understand my question or feel it is too vague to answer, would you ask me to rephrase it?

A. Yes.

Q. I assume if you answer the question, you believe that you do understand it and it is not too vague.

Fair enough?

A. Yes.

Q. Do you understand that you are under oath?

A. I do.

SEATTLE DEPOSITION REPORTERS - (206) 622-6661
DOROTHY STILES, RMR, CRR

52289 5086

http://legacy.library.ucsf.edu/tid/xak79a00/pdf

Source: Deposition of Daniel J. Kovarik, June 24, 1999, The Legacy Tobacco Documents Library. http://legacy.library.ucsf.edu/tid/xak79a00

OBJECTIVES OF OPPOSING ATTORNEYS IN DEPOSITIONS

Attorneys use depositions to accomplish multiple objectives. Some of these objectives include the following:

- *Precisely understand the expert's opinion.* The attorney is likely to ask detailed questions regarding the opinion. Some examples of such questions are as follows:
  - ○ When did you form the opinion?
  - ○ Have you ever given the same opinion in the past?
  - ○ Do you know of any cases in which a similar expert opinion has been given?
  - ○ Do you know of any cases, including your own, in which an opposing opinion has been given?

- Has your opinion in this case changed in any way over time?
- How certain are you about your opinion?
- Which individuals did you speak to or communicate with regarding your opinion?

- *Find weaknesses in the expert's qualifications.* The attorney will seek to fully understand the expert's qualifications. Some possible goals in asking questions about the expert's qualifications are as follows:
  - *Identify general weaknesses in qualifications.* In some cases, opposing counsel may attempt to use an expert that clearly does not qualify. The retaining attorney must give due diligence to examining the expert's qualifications.
  - *Identify exaggerated qualifications.* Any exaggeration in the expert's qualifications could prove extremely damaging to the retaining attorney's case. The extent that the trier of fact gives weight to the expert's testimony is directly proportional to the expert's credibility.
  - *Identify lack of training in specialized areas.* In many cases the expert may have general training and experience in a given area, but not specialized training and experience. For example, a CPA who engages mostly in tax practice might not qualify to opine on a complicated auditing issue.
- *Lock in the expert's testimony.* The goal is to get the expert's testimony on record in as much detail as possible. The testimony can then be carefully examined for weaknesses and contradictions that can be brought out at trial.
- *Evaluate the expert's demeanor.* Demeanor is very important, especially in jury trials. When asking probing questions the opposing attorney will study the expert for signs of confusion, irritation, impatience, and so on.
- *Explore the basis of the expert's opinion.* An expert's opinion is only as good as the facts that it is based on. Therefore, the opposing attorney will seek to separate facts from assumptions, to identify facts that are not normally relied on by other experts in the area, and facts that may be doubtful or uncertain. The opposing attorney may also ask probing questions regarding how the expert applied reliable principles and methods to the facts as part of forming an opinion. The opposing attorney may also ask detailed questions regarding the expert's justification for the methods and principles used. Some examples of questions relating to principles and methods are as follows:
  - What principles and methods did you apply to the facts in forming your opinion?
  - Have you used the same principles and methods in the past?
  - Do you know of any published articles or studies in which the authors disagree with the principles and methods you used?
  - Are there other generally-accepted methods and principles that might be applied and lead to a different opinion?
- *Convert the expert witness to help the opposing party.* In some cases, the opposing counsel may ask the expert to consider different sets of facts that, if correct, lead the expert to render an opinion favorable to the opposing party.
- *Identify biases.* Bias is an issue that goes directly to an expert's credibility, and without credibility an expert's opinion is worthless. There are many ways in which opposing counsel can seek weaknesses in the expert's credibility. Some examples of relevant questions follow:
  - How much are you being paid for your testimony?
  - What portion of your annual income comes from expert testimony?
  - It seems that in all your previous cases, you have always testified for the plaintiff. Is that correct?
  - Is it true that the plaintiff is a long-time friend of yours?
  - Is it true that you once worked for the plaintiff?
- *Develop a strategy for cross-examination.* The opposing counsel will evaluate the expert's deposition and formulate a strategy for trial. For example, opposing counsel may plan to expose biases or attack the expert's qualifications or methods. If both the expert's opinion and demeanor appear weak, the opposing counsel might go easy on the expert in the deposition and then vigorously challenge the expert's credibility at trial.

Preparing for Depositions

The expert should expect vigorous examination at the deposition. Therefore, it is essential that the expert thoroughly and carefully prepare for the deposition. Inadequate preparation can lead to error, and even small errors can damage an expert's credibility. Even worse, errors can lead to the end of an expert's career as an expert. No one wants to hire an expert whose testimony was ruled inadmissible due to the expert having become confused regarding the facts or issues of a case. Consequently, the expert should know the facts inside and out, and should even go so far as to commit critical dates to memory.

Preparation includes a review of all pleadings and discovery materials of the case. It is important that the expert's testimony take into consideration all facts relevant to the case, and new facts can become available anytime during the discovery process.

The notice of the deposition may arrive accompanied by a subpoena duces tecum, requiring the expert to appear with specific documents. The expert should assume that any documents brought to the deposition will be subject to questioning, so the expert should consult with retaining counsel before bringing any documents that are not subpoenaed or that the retaining attorney does not require be brought.

As a matter of practice, depositions are transcribed. The expert should reserve the right to review the transcript for accuracy. Federal Rules of Civil Procedure permit the expert to make corrections the transcript. Such corrections must be explained on an errata sheet.

Abuse by Opposing Counsel

There are many ways that opposing counsel may seek to abuse or intimidate the expert in depositions. Cases have been reported of attorneys putting the expert in uncomfortable chairs facing windows with no blinds so that the sun shines directly into the face of the expert. Other abusive tactics include turning up the temperature in the room in order to make the expert sweat, refusing to allow for bathroom breaks, and not providing water.

Another tactic is to speak to the expert in harsh and accusing tones. The opposing attorney may seek to benefit from such an approach when no audio or video recording is made of the session. In such cases, the retaining attorney may threaten to file for a protective order, or even stop the session and proceed to file one.

Direct Examination

Direct examination involves friendly questioning by retaining counsel. The questioning will usually begin with respect to the expert's qualifications. The expert should remain confident, relaxed, and unrehearsed throughout the questioning. Some important points to remember are as follows:

- *Prepare for difficult questions.* In direct examination, the retaining attorney will likely address any issue that might reflect negatively on the expert. An example of such an issue could be, for example, the expert's license or certificate having been suspended sometime in the past due to an accidental nonpayment of the renewal fee. Raising such issues on direct examination can deprive opposing counsel of the opportunity to use cross-examination to make it appear that the expert has something to hide.
- *Request a subpoena to appear.* Testifying in response to a subpoena can sometimes help reduce any impression of bias.
- *Appear unbiased.* Avoid helping the attorney by showing more enthusiasm in answering questions that you think may help your client's case. Any appearance of bias can damage an expert's credibility. The expert's role is supposed to be to assist the trier of fact and not advocate for one side or the other.
- *Appear confident.* Appearing confident is essential to establishing credibility. A jury is not likely to assign much weight to expert testimony in which the expert lacks confidence.
- *Avoid distracting mannerisms.* The best way to avoid distracting mannerisms is to practice testifying with video recorded sessions. Actions such as nail biting, rubbing your hands together, or running fingers through your hair can detract from the expert's ability to project a relaxed, confident image.
- *Be likeable.* Juries tend to place more confidence in expects that they like.
- *Make eye contact with the jury.* Looking at the jury when speaking helps establish rapport with them.

- *Avoid small talk in the courthouse.* Avoid talking with anyone but the retaining attorney. Immediately leave the courthouse after giving testimony. Small talk can give the impression of bias.
- *Use visual aids.* Visual aids not only help the jury better understand the expert's testimony, they can also give the expert an opportunity to leave the witness stand and move closer to the jury. Always ask the trial judge for permission before leaving the witness stand.
- *Keep it simple.* Avoid jargon and keep explanations as brief and simple as possible. Long-winded and complicated answers may simply bore the jury. Some suggest speaking to the jury as if they are eighth graders.
- *Answer truthfully.* Always speak the plain and simple truth. Let the attorney worry about the consequences of your answers.
- *Grab interest.* Start out strong and finish strong.

Case in Point

Forensic accountants are becoming increasingly popular as expert witnesses. After the well-publicized O.J. Simpson murder trial, O.J. was pursued in civil court for wrongful death damages. O.J. Simpson pleaded poverty, but forensic accountants searched for and found millions of dollars in O.J.'s assets.

CROSS-EXAMINATION

Cross-examination places the expert witness in the hot seat. Through cross-examination, the opposing attorney will seek to do as much damage as possible to the expert's credibility. The opposing attorney may also seek to "turn" the expert's testimony in order to help the opposing client's case.

Opposing Counsel Tactics

An opposing attorney may use several tactics to damage the expert witness's credibility. The opposing attorney may attack aspects of the expert's resume, facts, methodologies, or ways in which the expert applied methodologies to facts in order to weaken the expert's credibility and expose an expert's bias. Opposing counsel will have carefully studied the expert's report and deposition with an eye on identifying errors or inconsistencies.

The opposing counsel will tend to focus on "yes" or "no" questions in order to avoid giving the expert free rein to say something that might benefit the retaining client's case. Another common tactic is to ask the expert hypothetical questions whose answers are favorable to the opposing client's case. For example, the opposing attorney might ask hypothetical questions that assume facts that are consistent with the opposing party's theory of the case.

Some important points to remember are as follows:

- *Don't be afraid to simply say, "I don't know."* Attempting to answer questions without knowing the answer can create an opportunity for the opposing counsel to directly attack the expert's credibility. Convincing a jury that an expert gives wrong answers can cause irreparable damage to the expert's testimony.
- *Prepare well.* The expert should commit as many details to memory as possible. A faulty recollection of details not only makes the expert look unprofessional, but also increases the likelihood of mistakes.
- *Listen well.* It is important to answer the opposing attorney's questions simply and directly. This can only happen if the expert carefully listens to and clearly understands the questions.
- *Never argue.* In some cases, the opposing attorney may attempt to ask questions in such a way so as to distort the expert's opinion. However, rather than arguing with the opposing attorney, the expert should trust the retaining attorney to clear up any distortions on redirect examination.
- *Pause before responding.* Pausing briefly can serve multiple purposes. It can make the expert appear thoughtful. It also gives the expert an opportunity to prevent the opposing attorney from asking questions in a rapid-fire manner. A pause also gives the retaining attorney an opportunity to object to the question.
- *Do not speculate.* Before making a statement, the expert should have a good basis to believe that it is more likely true than not true.

- *Finish answering.* Opposing attorneys sometimes interrupt answers they do not like. The expert should not be distracted and continue to answer questions after being interrupted.
- *Ask to see documents.* The expert witness can and should review any documents referred to by the opposing attorney.
- *Only answer the questions.* The expert should not go beyond the specific questions asked. Volunteering information can interfere with the way the retaining attorney wishes to present the case.
- *Maintain a consistent demeanor.* The expert should never become irritated or angry with any statements or questions from the opposing attorney. To do so can result in a loss of credibility.
- *Be prepared for open-ended questions.* Normally, the opposing attorney will ask questions that limit the expert's opportunity to opine. However, once the attorney asks a broad, open-ended question, the expert has both a right and an opportunity to respond. The expert should be prepared to take advantage of such an opportunity.
- *Tell the plain and simple truth.* The expert should answer questions simply and truthfully, without regard to the impact of the answer. Dealing with the impact of the expert's answers is an issue for the retaining attorney and not the expert. Of course, the expert may have an interest in correcting any pure communication errors. At times, very experienced experts are somewhat aggressive in dealing with distortions of their testimony, but doing so can risk doing more harm than good.
- *Only opine within areas of expertise.* The expert who opines in an area without sufficient expertise increases the risk of being impeached on qualifications, if not on such opinions themselves. The court's gatekeeper function involves preventing unqualified individuals from testifying as experts. But in some cases, the opposing counsel will not object and instead prefer to attack the expert's credibility in cross-examination. For this reason, the expert should never assume that the opposing counsel will merely repeat the same questions asked in the deposition.

The Extent of Questions in Cross-Examination

The trial judge has considerable discretion with respect to the extent of cross-examination. In some cases, the judge may permit in-depth questioning of the expert's professional past. With respect to sensitive questions, the judge must weigh the probative value against any possible prejudicial effect.

Given that the judge may permit extensive probing into an expert's professional past, the expert should be prepared to answer almost any kind of question. The following are some examples of potentially sensitive questions:

- Is it true that you were convicted of drunk driving 10 years ago?
- Is it true that you were sanctioned by a court because your expert report was not ready on time?
- Is it true that you were sued by a client for malpractice?
- Is it true that in every case in which you have testified for the plaintiff, the plaintiff lost the case?
- Is it true that in your last case, you were paid double the normal fee?
- Is it true that 80 percent of your annual income stems from expert testimony?
- Is it true that you took the [insert test name here] test 3 times before you passed?
- Is it true that in the last year you have submitted 4 articles for publication only to have them rejected in every case?
- Is it true that you have testified for your current client in 25 cases now?

Expert Witness Liability

As a general rule, expert witnesses in judicial proceedings are immune from being sued by adverse parties for defamation or other torts. In some cases, such immunity might also extend to non-judicial proceedings, such has arbitration. Expert immunity has been so strongly upheld that there have been cases in which suits by adverse parties were barred even after the expert witness had committed perjury.

On the other hand, there has been a tendency for courts to allow suits by retaining parties against expert witnesses. In many cases, courts have permitted suits by friendly parties against experts for negligence of or breach of contract. For example, a forensic accountant whose in-court presentation is shown to contain critical mathematical errors runs the risk of being sued for professional negligence.

In order to prove professional negligence, an injured party must show that the professional has not exercised the skill and knowledge normally possessed by members of the profession. There are four essential elements required to win a professional negligence case:

1. There must be a duty to exercise professional care.
2. There must be a breach of the duty.
3. There must be a causal relationship between the breach of duty and a resulting injury.
4. There must be an actual loss or damage.

Given this standard of proof, a friendly party who sues the expert witness for professional negligence would need to demonstrate that the expert was responsible for the friendly party losing the case. The friendly party could hardly expect to sue after winning a case.

Some examples of specific things that may lead to a friendly party lawsuit against an expert witness include the following:

1. Poor preparation
2. Errors in testimony
3. Spoilage of evidence
4. Dishonest testimony
5. Misrepresenting qualifications

Expert immunity in judicial proceedings stems from a long-standing tradition of witness immunity reaching back into Old English law. The theory is that courts want all witnesses to speak freely in order to promote justice. However, witness immunity does not extend to expert opinions outside of judicial proceedings.

The expert witness has two options to manage the risk of professional negligence lawsuits. One option is professional liability insurance. A second option is to obtain indemnity from the retaining client or attorney. In some cases, courts have permitted experts to sue retaining attorneys for indemnification.

Finally, witness immunity does not protect the expert witness from court sanctions by the trial judge, criminal charges for perjury, or for sanctions by professional organizations for ethical violations. Sanctions by the trial judge can arise for a variety of reasons (for example, disobeying an order from the court). Perjury changes or ethics sanctions may arise independently of any other action. For example, an expert who fails to exercise due care might escape a negligence suit because the negligence does not result in any financial harm to the retaining part; however such a failure may nevertheless lead to professional sanctions, especially if a complaint is filed with the professional organization.

Alternative Dispute Resolution

Litigation is a very common occurrence in today's business climate. Employees sue employers, vendors sue the buyers, companies sue each other, and so on. As a general rule, the larger the company, the more lawyers it needs. Further, litigation is very costly and distracts businesses from their core business activities.

Litigation also tends to destroy business relationships. Lawyers frequently use brutal legal tactics to win their cases. Many large law firms are experts in using "delay, deny, and defend" strategies, which along with rough discovery battles can lead to seemingly endless appeals and even counterclaims.

It is not so much that one party to the lawsuit is right and the other is wrong. In many cases, the problem is a legitimate business dispute. One side is not necessarily a predator and the other side a victim; both sides may believe they are in the right, meaning that they both believe they can win their case in litigation. However, in the end, regardless of which side wins, both parties may lose from bad publicity, destroyed business relationships, and wasted time and expense.

Over 90 percent of all lawsuits are settled out of court. This suggests that litigants can and do settle their own disagreements without resorting to a trial. In too many cases, however, the process of reaching an out-of-court settlement is inefficient and painful for the reasons already mentioned. Attorneys resist complying with discovery requests and file various kinds of procedural motions that often require considerable amounts of business resources to

prepare, comply with, and defend. Examples of such motions include those relating to orders to comply with discovery requests, protective orders, case dismissals, summary judgments, and so on.

To further complicate matters, attorneys play all kinds of games in discovery. Some examples are as follows:

- *Document dumps.* After resisting the production of documents, attorneys wait until the evening before a hearing for a motion to compel and then dump large quantities of documents on the opposing side.
- *Abuse of privilege claims.* In some cases, businesses will attempt to shield their employees from discovery by claiming they are expert consultants working under legal counsel and hence not subject to discovery.
- *Messy document production.* In some cases, one side will comply with a discovery request by providing multiple reams of superfluous documents with the requested documents randomly mixed in with the requested ones.
- *Run out the clock.* In cases in which discovery is on a timetable, delays and procedural motions can result in time running out before an opposing side can gather the evidence it needs.

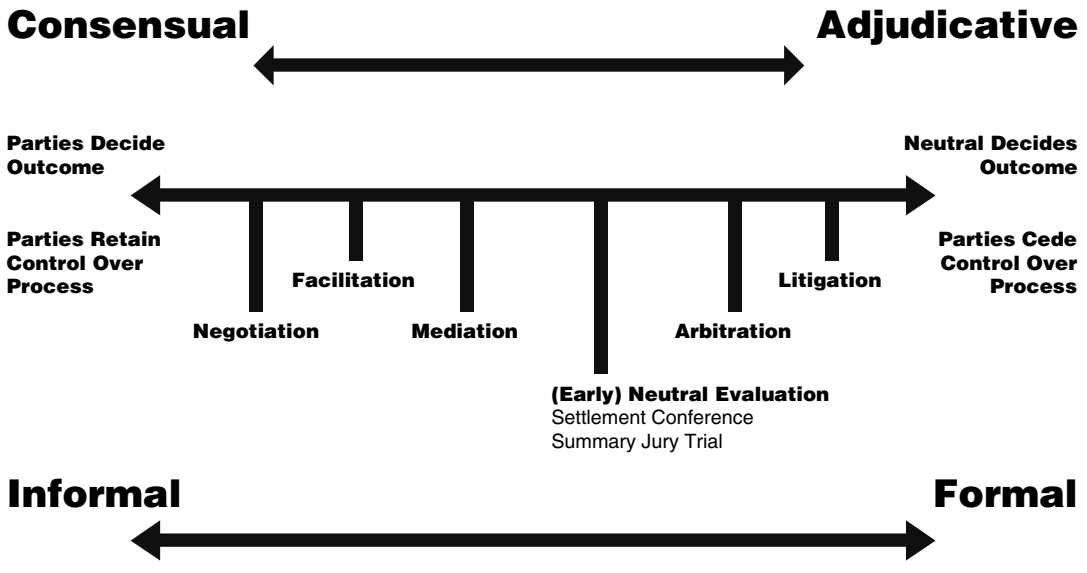
Opposing parties often vigorously fight discovery as part of a two-step strategy. The first step is to deny the opposing party any meaningful discovery. The second step is to file a motion for a summary judgment on the basis that sufficient evidence does not exist in the record to justify the opposing party's case going to trial.

Considerable legal battles may be fought only on the basis of what is subject to discovery. In many cases attorneys argue that discovery requests touch on business secrets, are over burdensome, or are not sufficiently relevant. Arguments over such matters can involve highly technical matters that trial judges do not understand, and it is possible to end up with mini-trials, along with experts, over individual items of discovery.

In recent years, there has been a trend towards resolving legal disputes in ways that are not only more efficient than trial litigation, but are also less painful, even sometimes beneficial, to all parties involved. The result has been in increased demand for **Alternative Dispute Resolution (ADR)**.

ADR is a process in which opposing parties are brought together to resolve their disputes through the help of a neutral third party. Generally speaking, the two forms of ADR are **mediation** and **arbitration**. Mediation basically involves structured negotiation with the help of the third-party neutral. Arbitration involves a third-party neutral (an arbitrator) who is empowered to render opinions and findings, very much like a trier of fact in a court proceeding. However, arbitration processes tend to be much simpler than the legal processes followed by courts as depicted in figure 6.4. The results of arbitration can either be binding or nonbinding, depending on the arbitration agreement.

Figure 6.4
The ADR Continuum



Source: Adapted from New York State Unified Court System

Forensic accountants can play various roles in mediation and arbitration. These include the following:

- *Mediator or arbitrator.* Many states permit almost anyone to serve as an arbitrator or mediator, with no special license required. However, in many cases arbitration and mediation services are provided by attorneys or CPAs that specialize in ADR.
- *Dispute participant.* Almost anyone, including a forensic accountant or any organization, may be involved in a dispute. ADR can and does resolve some disputes that would not normally lead to litigation. ADR's value in resolving disputes goes beyond that provided by the courts.
- *Expert consultants and witnesses.* Both mediation and arbitration participants can use experts, and if the agreed-upon rules permit, the third-party neutral may also retain experts.

ADR is used to resolve disputes in a wide variety of areas. Some examples are as follows:

- Sports contracts
- Patent infringement
- Mergers and acquisitions
- Partnership agreements
- Antitrust cases
- Insurance claims
- Bankruptcy claims
- Government contracts

Advantages of ADR

ADR has quite a few advantages:

- *ADR saves money.* Court litigation is very expensive. Minimum costs for even simple contract disputes can be as much as a million dollars. Further, out-of-pocket costs do not include the stress and distraction that litigation can produce.
- *ADR protects privacy.* Litigation is a public affair. In some cases, the news media can take sides in a dispute and make one party look bad. However, even in the absence of general bad publicity, the allegations of lawsuits are sometimes ugly. For example, in the case of a contract dispute, the plaintiff's claims may include fraud or deception. These kinds of things can damage a company's image.
- *ADR can build relationships.* Litigation can be very destructive and turn potential business partners into enemies. ADR, on the other hand, can bring opposing parties together and resolve disputes out of the public eye in a way that the opposing parties feel is fair and reasonable.
- *ADR tends to be quicker than court litigation.* In some cases, civil litigation drags on for 10 years or longer. Federal courts hear both criminal and civil cases, with criminal cases getting priority due to criminal defendants' constitutional right to a speedy trial. On the other hand, ADR does not depend on court dockets and typically operates with simplified rules and procedures without appeals.
- *ADR works with expert neutrals.* Civil cases frequently involve highly technical and complicated issues. However, trial judges can be randomly assigned and have absolutely no expertise in the area of the dispute. ADR can permit the opposing parties to select third-party neutrals with the required expertise. ADR neutrals are available in many specialized areas. For example, the American Arbitration Association (www.adr.org) provides access to neutrals in specialized areas that include accounting, communications, energy, financial services, health care, hospitality, insurance, intellectual property, and partnerships.
- *Flexible remedies.* ADR permits the parties to formulate remedies that best satisfy the needs and priorities of all those involved. This is in contrast with unpredictable jury awards that can be difficult to implement due to appeals and delays.
- *Fairness.* ADR can be perceived as being more reasonable because it frequently gives the opposing parties a say in selecting the neutral. In addition, negotiated settlements tend to be perceived as relatively reasonable, given that they require agreement of all parties.

Disadvantages of ADR

As helpful as ADR can be, it does have its disadvantages, or at least limitations. ADR is private, with each ADR case being independent of other ADR cases. Consequently, ADR can never set legal precedent. A victory in court litigation can serve as a deterrent to bad future conduct, but no such deterrent exists with private ADR. Further, ADR tends to lead to compromise rather than clear winners, so court litigation is a better vehicle for producing precedent and establishing clear winners.

Arbitration

Arbitration is a form of ADR in which participants resolve disputes through submitting them to a third-party neutral. In binding arbitration, decisions of the third-party neutral have the force of law. In nonbinding arbitration, decisions of the third-party neutral are merely advisory to the participants.

Although parties can agree to arbitration after a dispute arises, it is very common for contracts to contain a provision requiring arbitration for any future disputes that may arise. Further, it is very common for such arbitration provisions to designate **administered arbitration**. With administered arbitration the parties submit to the arbitration rules promulgated by an arbitration organization such as the American Arbitration Association.[2] Such organizations typically provide administration support for the arbitration processes, including things like model arbitration agreements and assistance with the selection of arbitrators.

In cases of **non-administered arbitration**, the parties must agree among themselves as to the arbitration arrangement. In a typical manner, each party will select one arbitrator and the two selected arbitrators will in turn select a third arbitrator that they both agree on. The parties must also agree on a set of arbitration rules. In a typical case they will either accept the rules proposed by the arbitrators or negotiate an agreement.

Arbitration can also be initiated through a **court-annexed arbitration program (CAAP)**, in which a court mandates that parties to a lawsuit enter into nonbinding arbitration. Individual states have their own laws regarding CAAPs, and some states require mediation or arbitration as part of the litigation process. In the federal court system, CAAPs are governed by the **Federal Alternative Dispute Resolution Act (28 U.S. Code Chapter 44)**, which requires that all federal trial courts implement ADR programs. It also empowers the courts to require that litigants submit to ADR. Jurisdiction for ADR in federal trial courts is defined by 28 U.S. Code section 652:

> (a) Consideration of Alternative Dispute Resolution in Appropriate Cases—Notwithstanding any provision of law to the contrary and except as provided in subsections (b) and (c), each district court shall, by local rule adopted under section 2071 (a), require that litigants in all civil cases consider the use of an alternative dispute resolution process at an appropriate stage in the litigation. Each district court shall provide litigants in all civil cases with at least one alternative dispute resolution process, including, but not limited to, mediation, early neutral evaluation, mini-trial, and arbitration as authorized in sections 654 through 658. Any district court that elects to require the use of alternative dispute resolution in certain cases may do so only with respect to mediation, early neutral evaluation, and, if the parties consent, arbitration.

Arbitration Awards

As a general rule, arbitration contracts and arbitration awards are binding and not subject to appeal. This is true in virtually all U.S. courts. With respect to federal courts, 28 U.S. Code section 657 (emphasis added) states,

> (a) Filing and Effect of Arbitration Award—An arbitration award made by an arbitrator under this chapter, along with proof of service of such award on the other party by the prevailing party or by the plaintiff, shall be filed promptly after the arbitration hearing is concluded with the clerk of the district court that referred the case to arbitration. Such award shall be entered as the judgment of the court after the time has expired for requesting a trial de novo. The judgment so entered shall be subject to the same provisions of law and shall have the same force and effect as a judgment of the court in a civil action, except that the judgment shall not be subject to review in any other court by appeal or otherwise.

[2] www.adr.org

Generally speaking, arbitration awards are enforceable throughout the United States and even across international borders. Well over 125 nations have adopted the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (also known as the New York Convention), which makes arbitration awards made in one adopting state enforceable in any other adopting state.

The Arbitration Process

Arbitration can proceed very much like a trial, but is less formal. In general, the Federal Alternative Dispute Resolution Act grants courts a wide degree of latitude in setting the arbitration rules. The arbitration rules can provide for discovery, testimony, cross-examination, and include rules of evidence, although the rules of evidence are likely to be less formal than in a judicial proceeding. The Federal Alternative Dispute Resolution Act provides for the use of subpoenas in conjunction with arbitration hearings:

> Rule 45 of the Federal Rules of Civil Procedure (relating to subpoenas) applies to subpoenas for the attendance of witnesses and the production of documentary evidence at an arbitration hearing under this chapter. (28 U.S. Code § 656).

Mediation

Mediation is a dispute resolution process that involves structured negotiations. As with arbitration, mediation can be subject to rules; however, with mediation there is no finding or award given by the third-party neutral. Also, as with arbitration, mediation can be either administered or non-administered.

The mediator's role can either be **facilitative** or **evaluative**. In a facilitative role the mediator focuses on a non-judgmental way of helping the opposing parties to understand each other's positions, to communicate well, and to find common ground. In an evaluative role, the mediator actively gives opinions and recommendations to both parties.

Mediation is much more informal than arbitration. With mediation there is no appearance of a trial. The mediator might begin with the two parties in different rooms and then shuttle back and forth between rooms, listening, relaying information, and conveying offers and counteroffers. After the parties substantially reach a far enough point in reconciling their differences, the mediator may bring them together to sign an agreement to resolve the dispute.

A great benefit of mediation is that it tends to preserve rather than destroy business relationships. Because it typically requires compromise from both parties, both parties become stakeholders and owners of the resolution. This can prevent one party feeling like a loser at the hands of the other.

Variations in ADR Approaches

In practice there are various approaches used to apply arbitration and mediation to resolve disputes. Some of these approaches are as follows:

- ***Med-arb.*** This approach entails beginning with mediation and then switching to arbitration if mediation fails to resolve the dispute. Med-arb has the advantage of giving the parties the opportunity to resolve their differences in a friendly way before a resolution is imposed on one of them. This approach works best when both parties have about the same degree of confidence in their cases. This is because if one party feels it has a relatively strong case, then that party may be unwilling to make any of the compromises normally required for successful mediation.
- *Rent a judge and jury.* This approach involves retaining a retired judge to proceed over a full-blown trial. It could be a bench trial or a trial with a rented jury. Such a trial could be carried out under the FRE and Federal Rules of Civil Procedure, or under similar state rules, subject to the absence of normal subpoena powers. A big advantage of the **rent-a-judge approach** is that a trial can proceed rapidly without long waits on a court docket, and the judgment is not subject to appeal. Further, the members of the jury can be drawn from industry experts. Finally, the entire proceeding can remain private, with the rented judge and jury signing nondisclosure agreements.

- ***Early neutral evaluation.*** This approach involves submitting the dispute to an expert or panel of experts for evaluation before the case is to be tried in court. An expert opinion can give each side a realistic view of how well their case may do a trial. Early neutral evaluation can be followed by mediation or arbitration.

Box 6.1 on the following page describes some specific examples of arbitration and mediation.

ADR and Accounting Litigation Support Practice

Many accounting firms offer ADR services and part of their litigation and dispute consulting practices. For example Deloitte (www.deloitte.com), one of the world's largest public accounting firms and professional service networks, offers ADR and related services through Deloitte Financial Advisory Services, LLP. Some of Deloitte's litigation and dispute consulting services are as follows:

- Risk assessment and damages exposure
- Financial analysis and damages theories
- Expert testimony
- Arbitration
- Buy and sell disputes
- Securities litigation

Some of Deloitte's senior partners serve as neutrals familiar with arbitrating under the rules of the American Arbitration Association and other major arbitration service organizations.

Some issues commonly dealt with by accounting firms' conjunction with mediation and arbitration include the following:

- *Corporate acquisitions.* Accounting firms prepare written objections to the seller's closing balance sheet. Accounting firms also evaluate and respond to such objections from the seller's standpoint.
- *Assisting clients involved in disputes.* If the accounting firm does not provide a neutral, it can recommend dispute resolution services to clients in need of them.
- *Proposal preparation.* Mediation and arbitration frequently require offers, counter offers, and proposals to resolve issues. Accounting firms are in a unique position to assist in preparing such documents in complex financial situations.
- *Expert testimony.* Both mediation and arbitration make use of expert reports and testimony.

Online Dispute Resolution

Online dispute resolution (ODR) is a growing area of ADR that typically uses the Internet as a hub for resolving disputes. Although ODR is the most-commonly used term, other terms are also used at times:

- Internet dispute resolution
- Electronic dispute resolution
- Electronic ADR
- Online ADR

ODR has especially been used for disputes in particular areas:

- *Disputes involving online consumer-to-consumer transactions.* A good example is with eBay (www.ebay.com) transactions.
- *Internet domain name disputes.* Common disputes involve cybersquatting and trademark violations. Internet domain names are controlled by the Internet Corporation for Assigned Names and Numbers (ICANN), who has created the Uniform Domain Name Dispute Resolution Policy (UDRP). The URDP is a globally-recognized efficient process for resolving domain name disputes.

Box 6.1 Examples of Arbitration and Mediation

Type of Arbitration or Mediation	Description
Baseball salary arbitration	In major league baseball, players who are not satisfied with their salary offers can request arbitration. In arbitration, both the player and the team submit proposed salaries to the major lead baseball arbitrator, who in turn makes the final decision.
Environment Protection Act (EPA) regulatory enforcement actions mediation	According to the New England EPA[3] [m]ediators have helped EPA and Respondents settle administrative and judicial penalty cases under the Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act, Toxic Substances Control Act and other federal regulatory statutes, in some instances through the development of mutually acceptable Supplemental Environmental Projects….
International disputes arbitration	Over 100 countries, including the United States, are parties to the founding conventions of the Permanent Court of Arbitration (PCA). The PCA provides arbitration to resolve issues between member states.
Labor grievance arbitration	Union contracts frequently contain provisions for arbitration of employee grievances. Grievances can be for issues on subjects that range from compensation to work conditions.
Securities arbitration	In the United States, all securities brokers are members of the National Association of Securities Dealers (NASD). The NASD requires its member dealers to arbitrate disputes with clients through its disputes resolution program run by Financial Industry Regulatory Authority (Finra).[4] Finra permits mediation if both parties agree. Otherwise the client may file a claim against the broker to be decided in arbitration.
Divorce mediation	Some attorneys and other professionals offer divorce mediation services. The mediation sessions administered by these individuals can result in both parties signing a marital settlement agreement. Either party can then submit the agreement to a family court in conjunction with a petition for dissolution of the marriage. The mediator is neutral and does not represent either party in divorce proceedings.
Accounting firm partner disputes	Disputes among accounting partners can arise for a variety of reasons, such as in the distribution of partnership income. Disputes can also arise with clients and ex-employees. Clients may be dissatisfied with services received from the firm, and ex-employees can have disputes with the firm over non-compete agreements. All these issues are sometimes subject to arbitration by contract. For example, the firm's standard engagement letter may contain a provision that requires arbitration for any disputes that may arise from an engagement.

[3] www.epa.gov
[4] www.finra.org

- *Chargebacks.* In some cases, e-commerce services like PayPal (www.paypal.com) temporarily retain the buyer's funds, giving the buyer an opportunity to open an online dispute. With most e-commerce services, the service first facilitates communication about the issue between the buyer and seller. The buyer who is not satisfied after such communications may then escalate the dispute to arbitration.

Modria (www.modria.com) is one of the leading online dispute resolution services, handling over 60 million cases a year. The Modria platform operates as a Software as a Service (SaaS) and provides modules for integration into end-user solutions. The modules implement best practices in the areas of dispute diagnosis, negotiation, mediation, and arbitration.

The Modria Resolution Center platform permits users complete entire disputes online from beginning to end. Online dispute resolution activities may include making payments, selecting neutrals, negotiating, managing documents, and so on.

The advantages of ODR are as follows:

- *Low cost.* ODR is relatively inexpensive because online tools facilitate simple channels of communications between parties to disputes. For viewing and response options, documents can be scanned and uploaded for all parties, including neutral parties.
- *Global reach.* By its very nature ODR involves asynchronous communications. This permits easy communications across time zones and international borders. Asynchronous communications afford the parties plenty of time to think about their positions and respond in a thoughtful way.
- *Speed.* With minimal human intervention from neutral parties, disputes can often be resolved very quickly. ODR services generally place time limits at each step of the way.
- *Shared experts.* By handling large volumes of transactions, ODR services can become very good at what they do. Economies of scale can permit hiring the best industry experts.

ODR appears to be handling increasingly complex cases over time. However, it does come with the disadvantage of being impersonal. Some cases are best resolved through in-person communications.

Corporate ADR Programs

Many organizations set up ADR programs in order to resolve disputes with vendors, customers, or even between departments within the organization. Such programs may be initiated by a pledge from the CEO to use ADR techniques in order to resolve disputes whenever possible.

The CPR International Institute for Conflict Prevention & Resolution (www.cpradr.org) publishes the following copyrighted model pledge:

> Our company pledges to commit its resources to manage and resolve disputes through negotiation, mediation and other ADR processes when appropriate, with a view to establishing and practicing global, sustainable dispute management and resolution processes.

In order to establish an ADR program, an organization should follow specific steps:

- *Assign a program coordinator or director.* The ADR program must have a director with a formal position within the organization chart. Many companies prefer to assign the ADR function to the legal department, but an overseer or a risk management or compliance department can also suffice.
- *Dispute risk analysis.* Determine the types of disputes that occur and their related business and financial risks. For each possible dispute, identify the specific risk factors:
  - The party with whom the dispute may occur. Examples of such parties include customers, vendors, clients, and employees.
  - The specific details of the dispute that might occur.
  - The costs of engaging in the disputes and related loss exposures.
  - The likelihood that the dispute will occur and the likelihood of winning or losing it.
  - The importance of the need to establish a precedent to avoid the dispute from reoccurring.
  - The effect of the dispute on the company's reputation and business relationships.

- *Select resolution approaches.* For each type of dispute, select the best ADR approach. However, some disputes might best be referred to legal counsel for possible litigation.
- *Implement dispute resolution policies and procedures.* Each department in the organization must implement policies and procedures to initiate and refer disputes. The head of the program must have policies in place for privacy, confidentiality, and for managing disputes.
- *Educate and train employees.* The dispute resolution program must be widely promoted, and all employees must be trained in aspects of disputes relevant to their job positions.
- *Monitor dispute outcomes.* Reports must be generated of processed disputes. The head of the ADR program should periodically review the reports and make changes to the program as needed.

Summary

Some of the various roles that forensic accountants perform include non-testifying litigation consultant, testifying expert witness, mediator, arbitrator, and bankruptcy trustee. Collectively these services are called litigation services.

In a litigation context, the main difference between an expert consultant and an expert witness is that the expert consultant does not testify and is not normally subject to discovery. In our court systems, expert witnesses hold a highly-privileged position: they are entitled to state their opinions on matters of interest to the court.

FRE 702–706 exist to govern expert testimony. FRE 702 provides a job description for the expert witness. The expert's qualifications include sufficient knowledge, skill, experience, training, or education. FRE 702 further specifies the conditions that must be met for the expert's testimony to be admissible. In many cases, the opposing counsel uses a pretrial motion in limine to exclude or limit the testimony of an expert witness. All the requirements of FRE 702 can be used as a basis for such a motion.

In the absence of a motion in limine regarding the admissibility of the expert's testimony, the expert's retaining attorney will qualify the expert through direct examination. At that time, the opposing attorney may challenge the expert's qualification through cross-examination. Special attention was given in the court cases *Frye v. United States, Daubert v. Merrell Dow Pharmaceuticals*, and *Kumho Tire Co. v. Carmichael* in order to define reliable principles and methods.

FRE 703 provides the expert a very wide degree of latitude in choosing facts on which to form an opinion. Particularly salient in this rule is the explicit statement that the expert's opinion may be based on facts that are not admissible. Subject to a reasonable reliance test, FRE 703 permits experts to rely on hearsay. Experts may also rely on hypothetical sets of facts, testimony at trial, reports of other experts, personal observation, and facts provided by retaining counsel.

FRE 704 permits experts to express an opinion on a factual matter of the case, even when that factual matter goes directly to the ultimate issue in the case, but experts are not permitted to opine legal conclusions.

Generally speaking, FRE 705 permits that an expert may state an opinion—and give the reasons for it—without first testifying to the underlying facts or data. However, the expert may be required to disclose those facts or data on cross-examination.

FRE 706 gives trial judges broad authority to appoint expert witnesses in addition to those retained by the litigants.

Depositions play a unique role in discovery. They represent the only way that attorneys can rapidly probe with follow-up questions and assess the potential credibility and demeanor of witnesses as they might appear in front of a jury. Attorneys use depositions to accomplish multiple objectives. Some of these objectives include precisely understanding the expert's opinion, finding and identifying weaknesses or exaggerations in the expert's qualifications, identifying lack of training in specialized areas, locking in the expert's testimony, evaluating the expert's demeanor, converting the expert witness to help the opposing party, identifying biases, and developing a strategy for cross-examination.

Experts should thoroughly and carefully prepare for the deposition. Preparation should include a review of all pleadings and discovery materials of the case. The expert should reserve the right to review the transcript of the deposition for accuracy because Federal Rules of Civil Procedure permit the expert to make corrections to the transcript.

Direct examination involves friendly questioning by retaining counsel. The questioning will usually begin with respect to the expert's qualifications. The expert should remain confident, relaxed, and unrehearsed throughout the questioning. Cross-examination places the expert witness in the hot seat. Through cross-examination, the opposing attorney will seek to do as much damage as possible to the expert's credibility.

As a general rule, expert witnesses in judicial proceedings are immune from being sued by adverse parties for defamation or other torts. On the other hand, in many cases, courts have permitted suits by friendly parties against experts for negligence of or breach of contract or professional negligence. Witness immunity does not protect the expert witness from court sanctions by the trial judge, criminal charges for perjury, or for sanctions by professional organizations for ethical violations.

In recent years, there has been a trend towards resolving legal disputes in ways that are more efficient and less painful than trial litigation. The result has been an increased demand for ADR. The two forms of ADR are mediation and arbitration. Mediation basically involves structured negotiation with the help of the third-party neutral. Arbitration involves a third-party neutral (an arbitrator) who is empowered to render opinions and findings, very much like a trier of fact in a court proceeding.

Arbitration can proceed very much like a trial, but is less formal. In general, the Federal American Arbitration Association Act grants courts a wide degree of latitude in setting the arbitration rules. The arbitration rules can provide for discovery, testimony, cross-examination, and include rules of evidence, although the rules of evidence are likely to be less formal than in a judicial proceeding. The Federal Alternative Dispute Resolution Act provides for the use of subpoenas in conjunction with arbitration hearings.

Mediation is a dispute resolution process that involves structured negotiations. As with arbitration, mediation can be subject to rules; however with mediation there is no finding or award given by the third-party neutral. Also, as with arbitration, mediation can either be administered or non-administered.

The mediator's role can either be facilitative or evaluative. In a facilitative role the mediator focuses in a nonjudgmental way on helping the opposing parties to understand each other's positions, to communicate well, and to find common ground. In an evaluative role, the mediator actively gives opinions and recommendations to both parties.

In practice there are various approaches used to apply arbitration and mediation to resolve disputes. Some of these approaches include med-arb, rent a judge and jury, and early neutral evaluation. ODR is a growing area of ADR that typically uses the Internet as a hub for resolving disputes.

Review Questions

1. Which of the following is not an advantage of alternative dispute resolution over traditional litigation?
   a. Cost efficient.
   b. Private.
   c. Provides a clear winner.
   d. Tends to build rather than destroy relationships.

2. Alternative dispute resolution methods do not include _____.
   a. Negotiation and arbitration.
   b. Mediation and arbitration.
   c. Negotiation, mediation, and arbitration.
   d. Litigation.

3. In alternative dispute resolution, negotiation _____.
   a. Leads to a binding agreement.
   b. May lead to a binding agreement.
   c. Leads to binding arbitration.
   d. None of the above.

4. Binding arbitration is _____.
   a. Generally enforceable in the courts.
   b. Never enforceable in the courts.
   c. Enforceable in the courts if the arbitrator is a licensed attorney or CPA and not enforceable otherwise.
   d. None of the above.

5. In mediation, the mediator's role may be _____.
   a. Evaluative.
   b. Facilitative.
   c. Evaluative or facilitative.
   d. None of the above.

6. The Federal Rules of Evidence determine _____ that courts may rely on in rendering verdicts.
   a. The facts.
   b. The opinions.
   c. The facts and opinions.
   d. None of the above.

7. Generally speaking, non-expert witnesses are permitted to testify based on _____.
   a. Their opinions in conclusory terms.
   b. Their personal knowledge.
   c. Their opinions in conclusory terms that are based on their personal knowledge.
   d. All of the above.

8. Regarding expert testimony, which of the following is not required by Rule 702?
   a. It must help the trier of fact to understand the evidence or to determine a fact in issue.
   b. It must be based on sufficient facts or data.
   c. It must be a product of reliable principles and methods.
   d. It must reliably apply training and expert opinion to the facts of the case.

9. Given that the general qualifications are met, the expert may base an opinion on _____.
   a. Facts or data in the case that the expert has introduced into evidence.
   b. Facts or data in the case from percipient witness testimony.
   c. Facts or data in the case that the expert has been made aware of or has personally observed.
   d. None of the above.

10. Generally speaking, reports written by the CPA as part of a forensic accounting engagement are _____.
    a. Protected by the work-product doctrine.
    b. Protected by the accountant-client privilege.
    c. Protected by both the work-product doctrine and the accountant-client privilege.
    d. None of the above.

11. An expert witness who is scheduled to testify in a federal court and who reports directly to an attorney is _____ before the trial starts.
    a. Subject to discovery.
    b. Not subject to discovery.
    c. Subject to discovery in criminal, but not civil cases.
    d. Subject to discovery in civil, but not criminal cases.

12. In planning and preparing for engagements, paramount considerations include _____.
    a. Understanding the client and the client's needs.
    b. Establishing a clear understanding regarding the scope and nature of the services to be provided and the responsibilities of both the member and the client.
    c. Establishing a clear understanding regarding any issues relating to confidentiality of materials and possible conflicts of interest.
    d. All of the above.

13. Expert consultants in legal cases are typically _____.
    a. Subject to discovery.
    b. Subject to discovery once the trial begins.
    c. Subject to depositions, but not document requests.
    d. Not subject to discovery.

14. The non-testifying expert serves as _____ whose work is not subject to discovery.
    a. A discoverable expert.
    b. A consultant.
    c. A witness.
    d. None of the above.

15. _____ must prepare and make available a written report to the court and the opposing side.
    a. The expert witness.
    b. The expert consultant.
    c. Both the expert witness and expert consultant.
    d. None of the above.

16. The expert witness generally can rely on documents that _____ authenticated or that are acceptable to the court under the various rules of evidence.
    a. The practitioner has.
    b. The attorney has.
    c. The parties to the proceedings have.
    d. None of the above.

17. An expert witness can base opinion testimony on _____.
    a. Only facts that might be admissible into evidence.
    b. Only on facts admitted into evidence.
    c. Both (*a*) and (*b*) are correct.
    d. Neither (*a*) nor (*b*) is correct.

18. The expert witness should understand that his or her _____ may be subject to cross-examination by opposing counsel.
    a. Conclusions and judgments.
    b. Conclusions and judgments, but not other testimony.
    c. Conclusions, but not professional judgments.
    d. None of the above.

19. In preparing expert reports, which of the following is an item that the professional may not rely on?
    a. Financial statements.
    b. Simulations involving hypothetical data.
    c. Cash flow analysis.
    d. The professional may rely on all of the above.

20. Rule 26 of the Federal Rules of Civil Procedure requires that, subject to exemptions (for example, privileged information), all parties to the lawsuit disclose, without a discovery request, all contacts, items, and _____ that may be used to support the disclosing party's claims or defenses.
    a. Damage computations.
    b. Witnesses.
    c. Evidence.
    d. None of the above.

21. Which of the following is not required to accompany an expert witness's written report?
    a. A statement of compensation in the case.
    b. Data relied upon and exhibits.
    c. His or her qualifications, including 10 years of publications.
    d. All of the above must be submitted with written reports from expert witnesses.

22. Regarding expert testimony, Rule 702 (Testimony by Experts) of the Federal Rules of Evidence states that if scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise, if the testimony is based upon sufficient facts or data, that the testimony is the product of reliable principles and methods, and _____.
    a. The witness has applied the principles and assumptions reliably to the facts of the case.
    b. The witness has applied the principles and assumptions reliably to the conclusions of the case.
    c. The witness has applied the principles and evidence reliably to the facts of the case.
    d. None of the above.

23. In _____, the U.S. Supreme Court first provided standards for what constitute reliable principles and methods.
    a. Kumho Tire case.
    b. Daubert case.
    c. Frye case.
    d. None of the above.

24. Prior to the Daubert decision, courts generally applied the _____ test for the admissibility of expert testimony.
    a. Kumho Tire.
    b. Kelly.
    c. Frye standard.
    d. None of the above.

25. The U.S. Supreme Court provided standards for what constitutes reliable principles and methods. Which of the following is not one of these standards?
    a. The technique or theory has been subjected to scientific testing.
    b. The technique or theory has been published in peer-reviewed scientific journals.
    c. The error rate for the technique is reasonably estimated or known.
    d. All of the above are standards provided by the U.S. Supreme Court.
26. Basically speaking, the Frye standard is a much more lenient test than that required by Daubert and mainly requires that the methods used by the expert to form conclusions are _____.
    a. Subject to an error rate that is reasonably estimated or known.
    b. Generally acceptable in the scientific community.
    c. Subject to court approval.
    d. None of the above.
27. In contrast to expert testimony in which the witness is permitted to form conclusions and give opinions, non-expert testimony is subject to the personal knowledge rule. This rule limits the non-expert's testimony to matters that the witness personally perceives through his or her _____.
    a. Justifiable conclusions.
    b. Justifiable assumptions.
    c. Verifiable beliefs.
    d. None of the above.

Short Answer Questions

1. What is the main difference between an expert consultant and an expert witness?
2. What does FRE 702 mean by sufficient "knowledge, skill, experience, training, or education?"
3. Why might an attorney make a motion in limine to have expert testimony admitted?
4. What is meant by the judge's gatekeeper responsibility?
5. How might a bench trial versus a jury trial affect a judge's decision to admit expert testimony?
6. When can an expert base his or her opinions on hearsay evidence that is not admissible?
7. Describe the modus operandi exception. How might it be abused?
8. What is the requirement to disclose the expert's compensation to the opposing side?
9. On what basis can attorneys raise objections in depositions?
10. What should an expert witness do when a cross-examining attorney intentionally distorts his or her testimony?
11. Why do cross-examining attorneys generally avoid open-ended questions?
12. Name several advantages of ADR relative to conventional litigation.
13. Why might parties prefer administered arbitration to non-administered arbitration?
14. When might evaluative mediation be preferred to facilitative mediation?
15. What types of disputes lend themselves to online dispute resolution?

Brief Cases

1. You have been engaged to testify in a case of employee fraud. You did not conduct the investigation, but you have a copy of a report from a competent investigator. What do you need to do to prepare for testimony?
2. You were arrested 10 years ago, when you were a teenager, for drunken driving. How relevant might this be to your testifying as an expert in a fraud case? How should the issue be handled?
3. You are preparing to testify in a fraud case. Your investigation showed that the defendant lied about making bank deposits in a timely manner. Immediately before your deposition, the opposing attorney threatens to sue you if you say that the defendant lied about making bank deposits in a timely manner. What should you do?
4. You have conducted a fraud investigation and are testifying in court. The opposing attorney has asked you to explain to the jury what you did to give adequate professional effort in forming your expert opinion. How might you answer?
5. You are preparing an expert opinion on a fraud investigation conducted by a qualified expert. The retaining attorney has redacted part of the previous investigator's report for privacy reasons. Would you be willing to rely on that report as a basis of your expert testimony? Explain.
6. You are being asked to testify as an expert in a criminal case of accounts receivable lapping. After examining the evidence, your personal feeling is there is not sufficient evidence to convict the accused, but you are being asked to testify regarding lapping as a modus operandi. Should you decline the engagement if you feel that your testimony is likely to lead to the accused being wrongfully convicted?
7. Your ethical guidelines do not permit you to express an opinion regarding the guilt of an accused fraudster. However, the fraudster confessed to you and signed a written confession. Given this, how would you respond in a deposition to an attorney who asks you if you believe that the accused is guilty?
8. You are preparing an expert report for a case of financial statement fraud. Your analysis of the accounting records showed that the accountants for the opposing side erased accounting records that, if still in existence, could explain a large loss of funds due to embezzlement. However, one day before you are set to testify, your retaining counsel presents you with a copy of the missing account records. You want more time to examine them, but you are told that the court will not grant a delay. What should you do?
9. As an expert, you are permitted to opine regarding the ultimate issue. You are in court and are asked to testify as to whether the defendant's actions are consistent with a particular fraudulent billing scheme. However, your professional ethics forbid you from expressing opinions of guilt. What should you do?
10. You are in a deposition and the opposing attorney speaks to you in a hostile, accusatory voice. The opposing attorney makes mocking faces at your answers and even gets up from the table and gets in your face. How do you react?

Cases

1. Barbara Mendels has been hired by an attorney representing Greenride Inc., a large dealer of state-of-the-art electric cars. Greenride has independent departments for new car sales, used car sales, services, and parts. Jason Miraba has been the head accountant for the last five years. He oversees all accounting and financial aspects of the business.

   Camina Greenride is the owner of the business. She has just fired Jason Miraba. She is very upset because in recent months, cash flow reports have become progressively negative, but she is sure that the numbers are wrong because she is on the lot almost daily and business seems to be holding up well. On two occasions she asked Jason to explain the bad numbers, but Jason became angry and defensive and gave her no useful information. Further, over the last few months Jason has become withdrawn and difficult to deal with.

"I'm sure he stole a lot money," said Camina Greenride. "I just don't know how, and I have no solid proof, but I looked through the accounting records and found all kinds of nonsensical debits and credits in our consignment account. I could see that his goal was to make the account records completely unintelligible, surely to cover up his stealing."

In the initial interview with Ms. Greenride, Barbara learned that Jason's brother-in-law had recently opened a competing dealership on the other side of town.

"I'm sure that Jason is siphoning off funds and funneling them to his brother-in-law's business. I think he is stealing our customer lists as well," Mrs. Greenride stated.

Barbara also learns that Ms. Greenride is filing a lawsuit against both Jason Miraba and his brother-in-law. She is alleging civil theft and a conspiracy to steal, not only her money, but also her customers.

"The IRS just visited here this morning," said Ms. Greenride. "It looks like Jason didn't turn over payroll taxes, and now I have a two hundred and thirty thousand dollar lien filed against my business."

Barbara accepts the engagement. She discovers that a large portion of the audit trail for the cash accounts is missing. Bank records are in shambles, half the deposit slips are not there, and the related cash accounts are filled with unintelligible entries. To make things worse, Jason has made all kinds of transfers between various bank accounts, and general operations expenses are mixed in with consignment account transactions.

Barbara slowly pieces together her investigation, but the records are in such bad condition that the best she can do is guess that $220,000 in funds cannot be accounted for, but she will need many months more in investigation to know for sure. However, she has seen enough evidence to know that the destruction of the financial records was no accident.

At the same time Barbara is conducting her investigation, Ms. Greenride is pleading with a local detective to arrest Jason Miraba. She is concerned that if Jason and his brother-in-law are not stopped, they will steal too many of her customers. In addition, some of her most loyal employees are quitting and joining the brother-in-law's dealership.

Barbara is still in the middle of her investigation, but she is being pressured by Ms. Greenride to give a preliminary opinion to the detective. She wants Barbara to tell the detective that, in her opinion, a fraud has been committed and that the loss is consistent with Jason Miraba having committed the crime. The pressure from Ms. Greenride is intense. She feels that unless the police become involved to stop what is going on, she may lose her entire business.

Required

How should Barbara respond to Ms. Greenride's request for a preliminary opinion? What are the possible ramifications of Barbara complying? What can Barbara safely say, if anything at all?

2. You have been hired as an expert witness on an economic damages case. Your client is Jeffry Milken of TrueShakes Inc. TrueShakes makes prepackaged protein shakes and distributes them throughout the United States. The lawsuit is against Remco Nutrition Inc., a competing company that operates mostly in the Midwest. It turns out that Remco was selling a competing product in the Midwest market. The problem is that Remco copied TrueShake's paper-carton design and sold the competing product using the too-similar name, TrueShaker.

   You have completed weeks and weeks of detailed product and market analyses and have concluded that the loss to TrueShakes is $1.4 million dollars. You have already written your expert report and provided it to the opposing side. You are preparing to testify the following day, but you discover a memo written four years ago that shows the name and design for the product in question actually originated in Remco. Remco is totally unaware of the memo, or even that it is the rightful owner of the product design and name. Apparently, the CEO of Remco left the company four years ago and then became the CEO of TrueShakes. When she left Remco, she brought the design to TrueShakes.

   You are very upset, because you were never given this information. You only discovered it when flipping through a pile of low-priority memos that you considered only tangentially important to your investigation and report.

Consequently, you present the issue to the retaining attorney. She asks you to show her the memo, so you return to TrueShake's main office to retrieve a copy. To your surprise, the entire pile of memos has disappeared. No one can tell you what happened to it.

Required

What should you do in this situation?

3. You are scheduled to testify in a criminal case in which the defendant is charged with bilking customers out of their deposits. The alleged scheme involves selling condominium time shares in Miami's South Beach area. According to the allegations, the defendant took millions of dollars for deposits in condominium time shares, but instead of constructing the condominium as planned, the defendant paid himself an exorbitant salary and did little more than hire an architect to draw up plans.

   You have been hired by the state attorney to testify as to the amounts of money that the defendant paid himself over the three years in which the alleged scheme persisted. Your analysis of bank records shows that the defendant took a salary of $300,000 per year for a total of four years. During the same period he collected about $12 million in deposits.

   You are very comfortable regarding the report you are writing. The bank records are very clear, and the only difficult part was tracing some of the payments to the defendant because it took some time to discover all the bank accounts involved.

   The problem is that the district attorney is now pushing you to say in your report that the defendant's salary was unreasonable given his experience, and also that he had no reasonable expectation that the project could have succeeded.

   You express doubts regarding your ability to include such wording in your report. The district attorney responds by asking you to do the right thing, and proceeds to show you photographs of elderly and frail persons who lost money because the defendant had told them how good of an investment they were making.

   The district attorney further states that the judge in the case will most certainly not exclude your testimony for your lack of qualifications. The judge very strongly favors prosecutors, and there is a very strong political pressure to bring a conviction.

   You have doubts about your qualifications to testify in the additional areas requested by the prosecutor, but you have worked for this prosecutor before and know that she is a straight shooter. You believe her when she says that the judge will permit your testimony.

   Required

   Should you agree to expand your testimony? Support your response. What issues are involved?

4. You have been hired as an expert consultant by the board of directors of the EZ Consulting Company. You are working directly with Jane Woe, the chair of the audit committee. She has quietly asked you to investigate a shareholder's suspicion that the CEO and CFO have fraudulently inflated income in the most recent annual report.

   You have decided to accept the engagement and your plan is to conduct a forensic audit of the revenue accounts. You have indicated that you will not give an opinion on the financial statements as a whole, but only give an opinion regarding possible fraud in the revenue accounts. You have insisted on this limiting provision because you do not want to subject your investigation to attestation standards.

   Your investigation reveals several serious revenue irregularities. Large amounts of revenue were booked for work not yet done, and there were no provisions for bad debts despite serious questions about the collectability of fees earned, but not yet paid, by clients.

   It is your personal opinion that the CEO and CFO knew exactly what they were doing in engaging in the irregularities. They are both experienced accountants with previous experience in public accounting. Further, it appears to you that their main reason for inflating revenues was to facilitate getting a large loan from a local bank.

You write your report and indicate that you found revenue irregularities inconsistent with generally accepted accounting principles. Further, these irregularities were made under the authority of both the CEO and CFO.

Jan Woe is very unhappy with your report because it never once uses the word "fraud." She tells you that she hired you to investigate possible financial statement fraud, and you owe her an answer to her question.

You respond that it is not your responsibility to determine guilt. That is for a trier of fact to decide. You can only comment on the facts as you found them.

She is still not happy. "I'm not asking you to find anyone guilty," she says. "I only want you to say that a fraud has been committed."

Your personal opinion is that a fraud was committed.

Required

Is there anything that you can say, or should say, that might indicate that a fraud has been committed? Could you say that the actions of the controller and CEO are consistent with a fraud scheme?

5. The Vendi Company is an umbrella organization that specializes in purchasing small insurance agencies. Vendi recently purchased Trico, a medium-sized insurance agency in South Florida.

   The problem is that Vendi believes that Trico deceived Vendi by listing many junk insurance policies as assets in pre-acquisition reports. Vendi is now suing the seller of Trico for civil fraud and breach of contract.

   Vendi has hired you as a testifying expert. You conduct your investigation by personally verifying a sample of 1,000 policies that should have been acquired from Trico. You find that a full one third of the policies expired in the middle of the year and were not renewed. This led to a misleading picture of Trico's future revenues, and the result was that Vendi substantially overpaid for the acquisition.

   You have prepared your report and are ready for the deposition. However, the evening before the deposition, you discover that your first cousin owns half of Trico.

   Required

   How should you react to this conflict of interest?

Internet Research Assignments

1. Visit www.seak.com and find a seminar relating to the development of an expert witness practice. Write a brief report on what you find, the content of the seminar, and the cost.
2. Research and identify the "Big Four" accounting firms. Visit the websites for two of these firms. Write a brief report on the litigation services they offer.
3. Search the Internet for a forensic accountant that serves an expert witness and whose resume is online. Write a brief one-paragraph report regarding what is on this person's resume.
4. Search the Internet and find at least two directory services that list forensic accounting expert witnesses. Write a very brief report on your findings.
5. Visit www.aicpa.org and find the AICPA's resources for forensic accountants. Write a brief report on your findings.

Chapter 7
Engagement and Practice Management

Learning Objectives

- Explain the various general types of forensic accounting services
- Give specific examples of forensic accounting services
- Explain ways in which forensic accountants can assist in civil and criminal trials
- Explain the standards applicable to CPA expert services
- Understand the basics of planning and preparing for forensic accounting engagements
- Explain the main elements of an engagement letter
- Describe appropriate marketing tactics for a forensic accounting practice
- Describe the abuse and unreasonable demands that can be placed on a forensic accounting expert

Introduction

A forensic accounting engagement involves providing forensic accounting services to a client. This chapter discusses three important aspects of forensic accounting practice: the types of services that forensic accountants engage in, managing engagements, and practice development.

The following discussion focuses on services provided by independent forensic accountants as opposed to those provided by forensic accounting employees within organizations. However, internal forensic accountants can and do provide services similar to those provided by independent forensic accountants.

Forensic Accounting Services

General Types of Forensic Accounting Services

The AICPA Code of Professional Conduct, specifically section 1.295.140, "Forensic Accounting" (AICPA, *Professional Standards*) defines and classifies forensic accounting as follows:

> For purposes of this interpretation, forensic accounting services are nonattest services that involve the application of special skills in accounting, auditing, finance, quantitative methods and certain areas of the law, and research, and

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

investigative skills to collect, analyze, and evaluate evidential matter and to interpret and communicate findings and consist of:

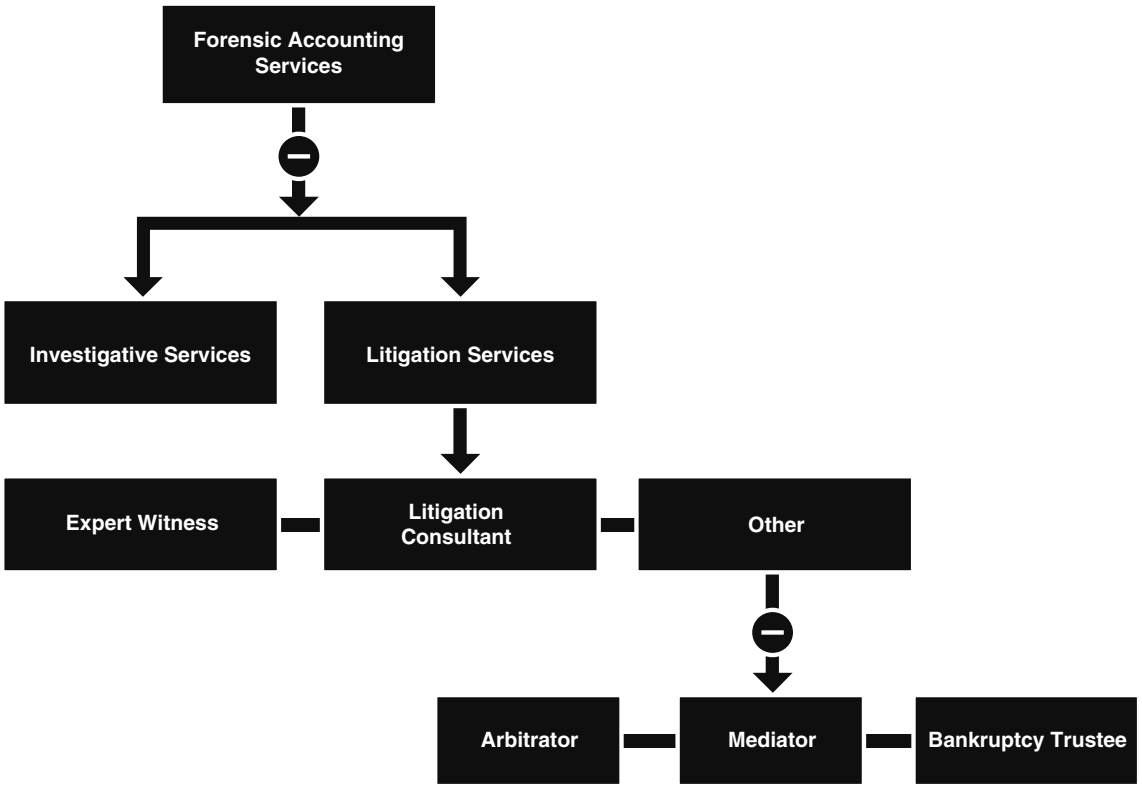
- Litigation services; and
- Investigative services.

Litigation services recognize the role of the member as an expert or consultant and consist of providing assistance for actual or potential legal or regulatory proceedings before a trier of fact in connection with the resolution of disputes between parties.

ET section 1.295.140 lists and defines three types of litigation services (as shown in figure 7.1) as follows:

- Expert witness services are those litigation services where a member is engaged to render an opinion before a trier of fact as to the matter(s) in dispute based on the member's expertise, rather than his or her direct knowledge of the disputed facts or events.
- Litigation consulting services are those litigation services where a member provides advice about the facts, issues, and strategy of a matter. The consultant does not testify as an expert witness before a trier of fact.
- **Other litigation services** are those litigation services where a member serves as a trier of fact, special master, court-appointed expert, or arbitrator (including serving on an arbitration panel), in a matter involving a client. These other services create the appearance that the member is not independent.

Figure 7.1
Forensic Accounting Services



ET section 1.295.140 also defines investigative services to "…include all forensic services not involving actual or threatened litigation such as performing analyses or investigations that may require the same skills as used in litigation services."

Case in Point

The AICPA has an entire special interest section dedicated to forensic and valuation services (FVS). The related website (www.aicpa.org/interestareas/forensicandvaluation) includes sections for membership and credentialing. Special publications and databases (for example, Daubert Tracker) are available for members.

Specific Examples of Forensic Accounting Services

Some of the services most commonly provided by forensic accountants are as shown in the following box:

Computation of economic damages: • Lost profits • Lost value • Extra costs • Lost cash flow • Mitigation • Restitution
Punitive damage studies
Professional standards analysis
Valuation of the following: • Business • Pensions • Intangibles
Fraud, prevention, detection, and investigation
Bankruptcy consultant, trustee, and examiner
Tax analysis, including the following: • Tax basis • Cost allocation • Treatment of specific transactions
Marital dissolution assessment and analysis
Contract cost and claims analysis
Historical results analysis
Special accountings, tracing, reconstructions, and cash-flow analyses
Antitrust analysis, including the following: • Price fixing • Market share • Market definition • Predatory conduct • Dumping • Price discrimination
Business interruption and other insurance claims assessment and analysis
Attest services, if specifically engaged to perform them in connection with litigation services

In providing such services, forensic accountants may perform various functions:

- Issue identification
- Locating other experts
- Fact finding, including the following:
  - Asset searches
  - Market studies
  - System reviews
  - Interviewing of witnesses
  - Due diligence
  - Research
- Analysis
- Investigative accounting
- Computer modeling
- Statistical
- Actuarial
- Discovery assistance
- Document management
- Settlement assistance
- Expert testimony
- Trial and deposition assistance
- Post-trial support (such as bookkeeping services and funds administration)
- Negotiations
- Arbitration
- Mediation
- Training
- Case evaluation

Forensic Accounting Services in Civil Trials

Forensic accountants can provide expert witness or expert consultant services in civil trials. Box 7.1 describes the potential services that the forensic accountant can provide in each phase of civil litigation.

Box 7.1 Forensic Accounting Services in Civil Trials

Phase	Activity	Phase or Activity Description	Practitioner's Potential Services
	Motions	Motions are requests by the disputing parties to have the court make a specified ruling or order in the case. Motions commonly encountered by the practitioner may include a scheduling or calendaring motion, a motion for summary judgment requesting the court to decide on judgment before the trial, a motion to compel discovery to order a response to a valid discovery request, or a motion to dismiss the complaint.	• Preparation of materials to support the motions • Drafting document request lists
	Rulings and Orders	Rulings are the decisions made by the court or judge on disputed legal issues or case matters. These represent the opinions and judgment of the court or judge. Orders are the commands, directions, and instructions of the court or judge.	• Reviews of rulings and orders for insight into court proceedings (that is, timing, discovery, procedures, and so on)
Answer or Response		In response to the complaint, the defendant prepares a pleading, called an answer or response, which denies or admits each of the allegations made by the plaintiff.	• Preparation of materials or verbiage for answer or response • Response preparation • Counterclaim preparation

Box 7.1 **Forensic Accounting Services in Civil Trials *(continued)***

Phase	Activity	Phase or Activity Description	Practitioner's Potential Services
Discovery		Discovery is the exchange of information and knowledge between the parties after the case has been filed in order to assemble evidence for the trial.	• Case strategy (consulting only)
	Interrogatories	Written questions prepared and submitted to an opposing party, which require written answers under oath.	• Assistance with questions for interrogatories • Assistance with responses to interrogatories
	Requests for Admissions	These are formal written requests for an opposing party to agree to, or admit the accuracy of, undisputed facts.	• Settlement assistance
	Stipulations	These are voluntary agreements between opposing parties about any matter relevant to the dispute.	• Settlement assistance
	Requests for Production of Documents	These are requests to have an opposing party produce, or make available for inspection and duplication, certain specifically identified materials believed to be potentially relevant to the dispute. The materials may be hard copy or electronically stored information.	• Drafting production requests and responses • Document, data, and evidence identification, recovery, analysis, and management
	Written Sworn Statements (Affidavits) and Declarations	A sworn statement, or affidavit, is a written and signed out-of-court statement or account given under oath. A declaration is a signed and written out-of-court statement.	• Expert witness affidavit • Rebuttal of opposing expert affidavit • Analysis of case documents • Damages quantification
	Expert Reports	Written reports prepared by the practitioner, or other experts, based on the report requirements, such as under Rule 26, "Duty to Disclose; General Provisions Governing Discovery," of the *Federal Rules of Civil Procedure* for a federal case.	• Expert report • Analysis and rebuttal of opposing expert report
	Depositions	Out-of-court oral testimony given by a witness or expert under oath and reduced to writing, usually by a certified court reporter.	• Deposition assistance • Expert witness deposition testimony • Rebuttal of opposing expert testimony • Witness preparation

Box 7.1 **Forensic Accounting Services in Civil Trials *(continued)***

Phase	Activity	Phase or Activity Description	Practitioner's Potential Services
Pretrial		Prior to the trial, the disputes may be narrowed by using information obtained during discovery, through court hearings, and by rulings made and orders issued by the judge as a result of numerous pleadings, motions, and objections registered over the course of litigation.	• Trial preparations • Trial demonstratives • Settlement and resolution support
	Pretrial Conference	In most federal cases, a conference is ordered prior to the commencement of the trial to encourage the parties to settle their disputes.	• Settlement and resolution support
	Settlement	Settlement of all or a portion of the litigated dispute may take place at any time during the litigation process. Settlement occurs when the disputing parties agree on the outcome and resolution of the claims in the complaint.	• Settlement and resolution support • Settlement assistance
Trial		The trial can either be a jury or bench trial (a judge serves as the trier of fact).	• Jury selection
	Direct Examination	Direct examination is the initial questioning of a witness at the trial by the attorney who calls the witness for examination. Direct examination consists of a series of questions designed to solicit admissible evidence from the witness in the form of responsive testimony and other materials.	• Expert witness testimony • Witness preparation • Analysis of opposing expert testimony
	Cross-Examination	The initial examination of a witness by the opposing legal counsel, cross-examination follows the direct examination. The opposing attorney can use leading questions that are prohibited in direct examination, and frequently, deposition testimony is used to impugn the witness.	• Opposing expert cross-examination assistance • Trial preparation • Witness preparation

Box 7.1 Forensic Accounting Services in Civil Trials *(continued)*

Phase	Activity	Phase or Activity Description	Practitioner's Potential Services
Post-trial		After the trial is concluded, a number of activities may occur, including appealing adverse decisions or calculating and distributing monetary damages.	• Calculation of beneficiary allocations • Distribution of judgments and awards
	Calculation and Distribution of Judgments and Awards	Prepare a final calculation of the amount of damages, including applicable pre- and postjudgment interest, and any penalties; attorney fees; or exemplary, punitive, or other damages awarded by the court.	• Calculation of amounts awarded

Source: AICPA FVS Practice Aid 10-1,"Serving as Expert Witness or Consultant."

Forensic Accounting Services in Criminal Trials

Forensic accountants can provide expert witness or expert consultant services in criminal trials. Box 7.2 on the following page describes the potential services that the forensic accountant can provide in each phase of civil litigation.

Case in Point

Forensic accountants developed the evidence needed to convict Joseph Massino, the head of the LCN Bonnano family and the last of the big New York crime bosses to be sent to prison. Two forensic accountants used subpoenaed financial records to develop cases against lower-level Bonnano associates, who in turn cooperated.

Applicable Standards for CPAs

The AICPA has three authoritative professional standards which are applicable to forensic accounting services: The AICPA Code of Professional Conduct (the code); Consulting Services (CS) section 100, *Consulting Services: Definitions and Standards* (AICPA, *Professional Standards*); and Valuation Services (VS) section 100, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*). CS section 100 refers to the most relevant parts of the code for consulting services and is discussed in the section that follows.

CS section 100 generally applies to all forensic accounting services, as well as other consulting services. Consulting services include consultations, advisory services, implementation services, transaction services (for example, valuation and litigation services), staff and support services, and product services. CS section 100 does not apply to services subject to other AICPA professional standards, such as attestation services, financial planning and bookkeeping, reports and advice relating to the application of accounting principles to specified transactions or events, and certain recommendations and comments that directly result from observations made while performing excluded services. For engagements involving both consulting and attestation services, CS section 100 applies to the consulting part of the engagement.

Box 7.2 Forensic Accounting Services in Criminal Trials

Phase	Activity	Phase or Activity Description	Practitioner's Potential Services
Investigation		The federal criminal litigation process usually starts with an investigation of suspicious activities or suspected crimes by an authorized federal governmental unit.	• Assist with federal governmental investigation, such as suspected financial statement fraud, tax crimes, money laundering, or corrupt practices • Case assessment • Document management
Indictment—Federal Crimes		The following lists some of the federal crimes likely to be serviced by the practitioner in criminal litigation support engagements: • Antimoney laundering law violations • Antitrust law violations • Bankruptcy crimes (for example, fraudulent conveyance and illegal preferential payments) • Federal income tax crimes (for example, conspiracy, false returns, tax evasion, and fraud) • Federal financial institution law and regulatory violations • Federal health care law violations • Federal financial statement fraud crimes involving public companies • Federal securities law violations	• Case assessment based on alleged regulatory violation • Indictment assistance • Grand jury testimony • Document management • Case strategy (consulting only)
	Grand Jury	The grand jury reviews the evidence and must decide whether to issue an indictment. However, it differs from a civil trial because the jury has subpoena power to compel witness appearance, and no defendant defense is presented.	• Grand jury testimony • Indictment fact assistance

Box 7.2 Forensic Accounting Services in Criminal Trials *(continued)*

Phase	Activity	Phase or Activity Description	Practitioner's Potential Services
Discovery		The discovery process typically is accelerated in criminal litigation to protect the defendant's rights and ensure a speedy trial.	
	Evidence Gathering	The federal government, depending on the alleged crimes and violations of law, may be able to use surveillance and other investigative methods to gather admissible evidence, such as undercover observation and wiretapping. In addition, evidence developed for a civil trial can be admissible in a criminal trial.	• Document production requests and responses • Document, data, and evidence identification, recovery, analysis, and management
	Subpoenas and warrants	Subpoenas are used extensively in criminal cases to compel reluctant or uncooperative witnesses to provide testimonial evidence. In addition, warrants are used to legally search for and seize potential evidence for criminal litigation.	• Document production requests and responses • Document, data, and evidence identification, recovery, analysis, and management
Trial		Criminal trials are jury trials, with limited exception. The evidence admissible in a federal criminal trial receives a higher level of scrutiny by the court than the evidence in most civil trials.	• Trial preparation • Trial demonstratives

Source: AICPA FVS Practice Aid 10-1, "Serving as Expert Witness or Consultant."

The general standards of the profession set forth in ET section 1.300.001, "General Standards Rule" (AICPA, *Professional Standards*), apply to all consulting services and require professional competence, due professional care, adequate planning and supervision, and the procurement of sufficient relevant data. The following additional general standards for all consulting services were promulgated to address the distinctive nature of consulting services in which the understanding with the client may establish valid limitations on the practitioner's performance of services. These standards are established under CS section 100:

- *Client interest.* Serve the client's interest by seeking to accomplish the objectives established by an understanding with the client while maintaining integrity and objectivity.
- *Understanding with client.* Establish with the client a written or oral understanding about the responsibilities of the parties and the nature, scope, and limitations of services to be performed and modify the understanding if circumstances require a significant change during the engagement.

- *Communication with client.* Inform the client of (*a*) conflicts of interest that may occur pursuant to interpretations of ET section 1.100.001, "Integrity and Objectivity Rule" (AICPA, *Professional Standards*), (*b*) certain significant reservations concerning the scope or benefits of the engagement, and (*c*) significant engagement findings or events.

Professional judgment must be used when applying CS section 100 in specific instances because the oral or written understanding with the client may establish constraints with respect to services to be provided.

When attestation services are performed, both independence and objectivity standards apply. For consulting services, however, the integrity and objectivity standards apply, but the independence requirement as defined in the AICPA literature does not. For CPA firms providing clients with attest and consulting services, certain consulting services could impair their attest independence and thus prevent them from performing future attest services. Consulting services that generally impair attest independence include serving as an expert witness, serving as a trier of fact, and performing certain valuation, appraisal, and actuarial services. Services that generally do not impair attest independence include providing other kinds of litigation consulting services, serving as a fact witness, providing investigative services, and serving as an expert witness in certain cases involving large groups of defendants or plaintiffs. Non-attest services that may impair attest independence are documented in ET section 1.200.001, "Independence Rule" (AICPA, *Professional Standards*). Although such non-attest services may impair attest independence that affects whether a CPA can perform future attest services, this independence guidance does not prevent a CPA from providing non-attest services to an attest client.

VS section 100 applies to services that estimate the value of a business, business ownership interest, security, or intangible assets using valuation approaches and valuation methods and situations in which professional judgment is used to apply these approaches and methods. Such services might be provided as a separate engagement or as part of a larger engagement. VS section 100 comprises developmental guidelines, reporting guidelines, and guidance for ethical and practical considerations. The standard defines two kinds of valuation services: valuation engagements and calculation engagements. Valuation engagements are more comprehensive than calculation engagements, thus calculation engagements may have limited value for triers of fact in adversarial matters compared to the more comprehensive valuation engagement. Valuation engagements result in a conclusion of value and calculation engagements result in a calculated value. The reporting guidelines of VS section 100 do not apply in litigation and other kinds of controversial proceedings, but the developmental guidelines still apply.

In addition to complying with VS section 100, the valuation analyst must also comply with the code, CS section 100, and all relevant laws and regulations.

VS section 100 does not apply to the following:

- A member who participates in estimating the value of a subject interest as part of performing an attest engagement (for example, as part of an audit, review, or compilation engagement)
- In cases in which the value of a subject interest is provided to the member by the client or a third party, and the member does not apply valuation approaches and methods, as defined by VS section 100
- In cases of internal-use, assignments handed from employers to employee or members not in the practice of public accounting
- In engagements that are exclusively for the purpose of determining economic damages (for example, lost profits), unless such determinations include an engagement to estimate value
- In cases of mechanical computations that do not rise to the level of an engagement to estimate value (that is, when the member does not apply valuation approaches and methods and does not use professional judgment)
- When it is not practical or not reasonable to obtain or use relevant information, and as a result the member is unable to apply valuation approaches and methods that are described in VS section 100

VS section 100 describes overall considerations for valuation engagements, including professional competence (as per paragraph .01[A] of Rule 201), objectivity and conflict of interest, independence and valuation, establishing an understanding with the client, and assumptions and limitations. Professional competence dictates that the member possesses the required specialized knowledge and skills and considers, at a minimum, certain factors such as the subject entity and its industry, subject interest, valuation date, and scope and purpose of the valuation engagement. If

the client is both a valuation and an attestation client, practitioners should be aware of the impact of the interaction between attest and consulting services on attest independence discussed earlier.

Engagement Management

Forensic accounting engagements can range from the very simple to the complex. However, regardless of the degree of complexity, all engagements have certain common elements. Important elements are planning and preparation, information and evidence management, and communications with clients and attorneys. Each of these elements is discussed in turn.

Planning and Preparation

Planning and preparation involve evaluating and accepting (or rejecting) the engagement. Once the decision is made to accept the engagement, the issue becomes one of reaching an understanding (an agreement) with the client. Agreements may be oral or in writing. If they are in writing, the forensic accountant provides the client an engagement letter that sets forth the terms of the engagement.

Initial Case Assessment

Before accepting an engagement, the forensic accountant must first understand certain fundamental issues: who the client is, the needs of the client, the relevant legal considerations, and the information available. After reviewing these fundamental issues, the forensic accountant then decides whether to accept or reject the engagement. A flowchart for deciding whether to accept a litigation engagement is shown in figure 7.2 on the following page.

First, understand who the client is, either the attorney or the attorney's client. If the client is the attorney, then the forensic accountant's work product may be protected by the work product privilege or doctrine (if there is no anticipation that the forensic accountant will testify). On the other hand, if the client is the attorney's client, then any work done by the forensic accountant is subject to discovery. For this reason, many experts prefer to accept initial calls and inquiries only from attorneys, because doing so begins the engagement under the umbrella of the work product privilege. Otherwise, communications between the forensic accountant and the non-attorney client could be subject to discovery. Further, if there is ultimately no retaining agreement between the forensic accountant and the attorney or the attorney's client, the forensic accountant could be subpoenaed to testify as a fact witness without being paid. Best practice is for the forensic accountant to begin all discussions only with the attorney, and also avoid discussing the case in detail without a retainer agreement that ensures adequate compensation.

Next, various relevant legal considerations should be discussed including

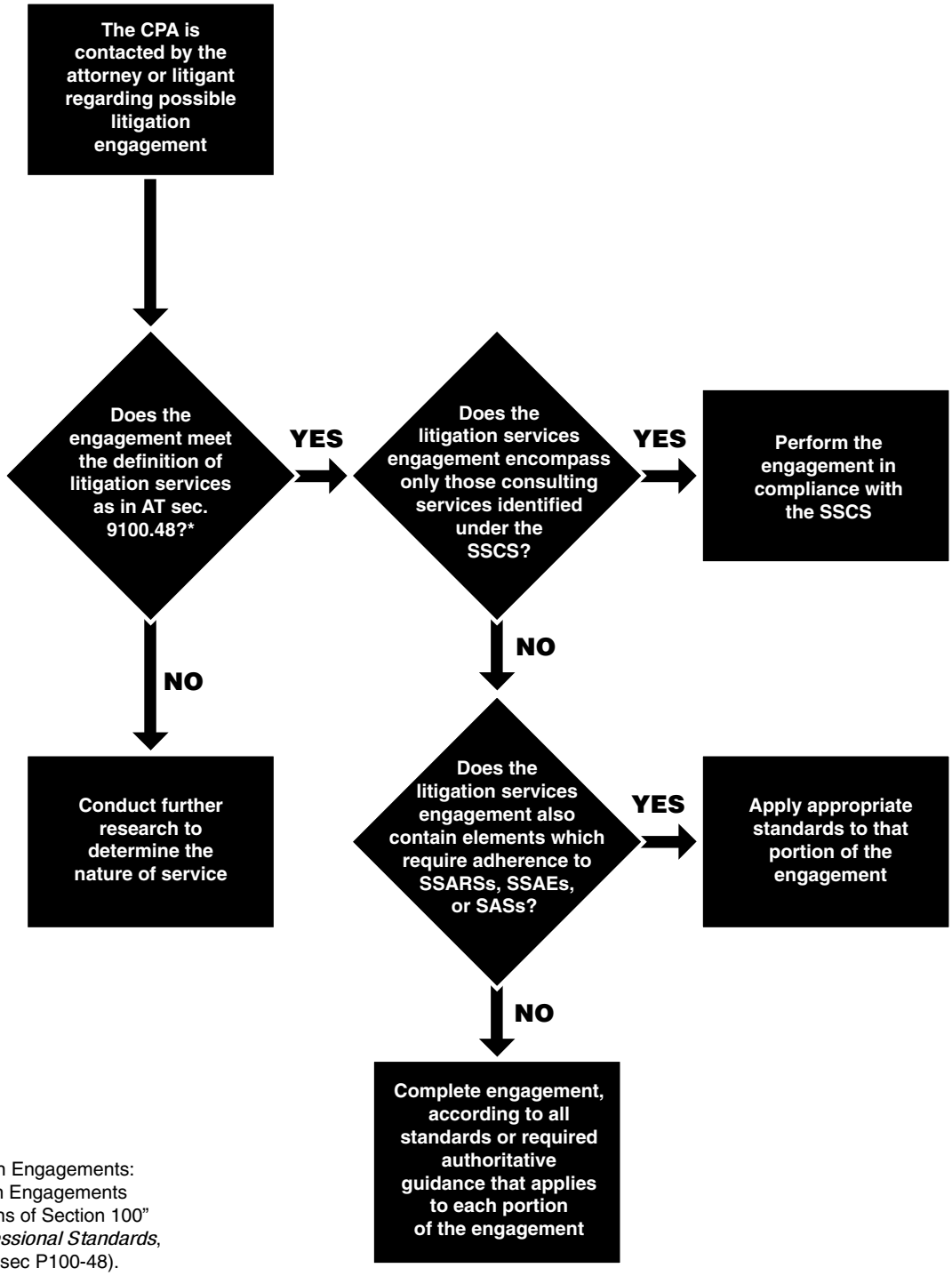
- any laws and regulations applicable to the case,
- whether attorney work-product privilege is to apply,
- whether the forensic accountant's role might change from non-testifying expert to testifying expert,
- the extent to which ongoing coordination with the attorney is necessary,
- whether a written report is needed, and
- what type of report is needed.

In addition, understand the needs of the client. This involves understanding the client's issues and the types of services the client needs. Some specific issues include the following:

- If there is a dispute, the issues involved, and the history of the dispute
- All parties involved in the dispute or issue
- The priority and urgency of the issue
- The scope of the services required
- The resources and budget available
- The extent that the client can devote resources to assist the forensic accountant as may be needed

Figure 7.2
The Application of Professional Standards

Use the decision tree below to determine which professional standards apply in a litigation services engagement.



* "Attestation Engagements: Attestation Engagements Interpretations of Section 100" (AICPA, *Professional Standards*, vol 1, AT sec P100-48).

*For definition and explanation of litigation services, refer to Interpretation no. 3, "Applicability of Attestation Standards to Litigation Services," of Statement on Standards for Attestation Engagements (SSAE) no. 10, *Attestation Standards: Revision and Recodification* (AICPA, *Professional Standards*, vol. 1, AT secs. 9101.34–.39).

http://www.journalofaccountancy.com/Issues/2004/Oct/SoYouWantToBeAnExpertWitness.htm

Finally, the forensic accountant needs to understand what information is, or may become, available that is relevant to the case. Some specific issues in this area are

- the types of information that may be available (for example, documents, transcripts, recordings, witnesses, and computer files);
- the location of various pieces of information (for example, documents may be located in different cities, states, or even countries); and
- control over information and vulnerability of critical information. The forensic accountant needs to know who has control over relevant information, and whether the information is vulnerable to being corrupted, lost, or stolen.

Deciding to Accept the Engagement

The decision to accept an engagement is a very serious one. This is especially true for expert testimony. All it takes is a single mistake to end one's career as an expert witness. This is because expert witnesses are routinely grilled extensively on all aspects of their professional lives, including previous cases. Because of the risk of making mistakes, and because one bad case can ruin the career of an expert witness, some say that expert witnesses constantly face high **career risk**.

Given the career risk and the need to provide quality services, before accepting an expert-witness engagement a forensic accountant should carefully weight all aspects of the case in light of the case's merits, the expert's qualifications, and any possible conflicts of interest.

The forensic accounting should ensure that he or she possesses adequate skills, knowledge, education, experience, and training (**SKEET**) to testify. In many cases, general SKEET skills may suffice, but some cases may require specialized skills in areas such as information systems auditing, digital forensics, valuation, or taxation.

Once the expert is disclosed, the opposing party can be expected to thoroughly investigate the expert's background, including the expert's previous opinions and testimony, published articles, and even the expert's personal background. In some cases, opposing attorneys may discover weaknesses in the expert's background, but not challenge the expert's qualification until trial, and possibly in front of a jury. For this reason, the expert should make an independent assessment of his or her qualifications and not rely too much on the opinion of the retaining party.

The forensic accountant should assess the merits of the retaining party's case. Testifying in the wrong types of cases can weaken the forensic accountant's reputation.

At a minimum, the expert must disclose any actual or potential conflicts of interest the expert may have relative to any party or issue in the case. Although it is not necessary that the expert be an independent party, the opposing party can be expected to search for and exploit any conflicts of interest that may yield any appearance of bias in the expert's testimony.

Understanding With the Client

Once the forensic accounting expert decides to accept an engagement, the forensic accountant must reach an understanding with the client regarding the terms of the engagement. In most cases, the forensic accountant drafts an engagement letter for the client to sign. CS section 100 does not require an engagement letter, and oral agreements are acceptable.

However, in cases of court-appointed experts (under Federal Rules of Evidence 706), the court might decline to sign an engagement letter. In such cases, the forensic accountant should require a satisfactory court order. Further, the forensic accountant should consider being personally represented by his or her own attorney.

In some cases a forensic accountant might be initially hired to serve as a non-testifying expert consultant. At some point, however, the forensic accountant's role might change to that of testifying expert. In such cases, some forensic accountants require a second engagement letter to replace the first one. However, the fact that there are two engagements and two engagement letters cannot be expected to shield the forensic accountant's non-testifying consulting work from discovery.

Engagement Letters

Although there is no such thing as a standard engagement letter, there are certain elements generally applicable to engagement letters. The exact elements in a particular engagement letter will depend on the particular engagement and practitioner. Examples of such elements are discussed as follows:

- *Introductory information.*
  - *Dating.* An engagement letter should normally contain the date in which it is written. In some cases it might also contain an effective date. Some practitioners do not explicitly include an effective date, but instead consider the effective date to be the date that the engagement letter is signed and returned along with a retainer.
  - *Addressing.* Some practitioners address the engagement letter directly to the client and then spell out the parties to the agreement within the letter, but most attorneys address the letter to the attorney, or to the attorney's client in care of the attorney. However, even if the practitioner addresses the letter to the attorney, courts may nevertheless determine that the practitioner has obligations to the client, especially if the client pays the practitioners fees.

    Generally speaking, expert-witness engagements are addressed from, and signed by, the forensic accountant. This practice contrasts with audit engagement letters, which are generally addressed from, and signed on behalf of, the accounting firm.
  - *Case name.* Courts normally assign case numbers to all new cases. The typical engagement letter may contain the case name and number at the top on a separate reference line. Some practitioners instead prefer to describe the case in an opening paragraph.
- *Description of services.*
  - *Basic understanding.* It is generally necessary to document certain basic elements of the services the forensic accountant is to provide the following:
    - *A timeline applicable to the services to be provided.*
    - *Any reports, demonstrative evidence, or oral testimony to be provided.*
    - *A statement regarding professional standards that the forensic accounting must follow.*
    - *Reference to the court's local rules.* It is common practice for courts to have local rules that all parties must follow. For example, a local rule might require that the opposing attorneys attempt to resolve an issue between themselves before either makes a motion asking the court to intervene in a discovery dispute.
    - *Generalities versus specifics.* The engagement letter will be subject to discovery if the forensic accountant is expected to testify. Consequently, in some cases, opposing counsel may seek to use the engagement letter as a basis for attacking the expert's work or credibility. For example, if the engagement letter contains a specific list of tasks for the expert to perform, the opposing counsel might attack the credibility of the expert's testimony on the basis that the expert did not complete all tasks on the list. For this reason, it is generally best practice to avoid too much detail in the engagement letter.
    - *Language that avoids the excessive appearance of a lack of independence.* In some cases, the expert might be tempted to include a statement such as, "The work will be performed at the direction of the attorney." Such a statement might be used to argue that the expert's opinions are controlled by the attorney.
    - *Provisions for contingences.* Cases evolve and change as they progress. As a result it might not be possible to deliver everything as promised. For example, due to motions and discovery disputes, the expert might not be able to complete a report on time. Such contingencies call for appropriate provisions in the engagement letter.
- *Scope of services.* The engagement letter should document the initial understanding of the scope of the services to be provided by the forensic accountant. Allowance should generally be made for the scope of the work to change over time. Any such changes should be accompanied by memoranda at the time they are initiated. Various possible options for the scope of the provided services may be assistance with case strategy, fact-finding (including assistance in the discovery and analysis of data), damage calculations, business valuation, document management, and expert testimony. Examples of such services were provided earlier in this chapter.

- *Assistance with case strategy.* The forensic accountant can assist counsel in understanding the facts of the case as they are relevant to the theories and strategies selected by the attorney. For example, in the case of lost profits, the expert might assist the attorney by explaining different approaches used for their calculation.
- *Assistance with discovery.* The expert can help the attorney formulate interrogatory questions, construct requests for admissions, document production requests, and assist with questions and strategies for depositions. The expert can help the attorney manage discovery timetables and organize and manage documents produced or obtained in discovery.

- *Independence and conflicts of interest.* Any potential conflicts of interest must be disclosed. The engagement letter should also document any related discussions. Any potential ethical or legal constraints should be discussed and documented in the letter. For example, serving as an expert witness impairs independence (but not objectivity), which (depending on the time frame) may preclude the forensic accountant from providing attestation services to the client.
- *Rights and duties of the engagement parties.*
  - *Performance by client.* The engagement letter may require that the client provide the information that the expert needs to properly form an opinion and testify. Sometimes attorneys may withhold information critical to the expert's forming an opinion. In such cases, the language of the engagement letter can give the forensic accountant a right to withdraw from the engagement.
  - *Resources from the client.* In some engagements, the forensic accountant may need to make extensive use of a business's employees in order to collect needed information. The business's employees may be assigned to assist the forensic accountant throughout the case.
  - *Duties of the forensic accountant.* In addition to providing the designated services, the forensic accountant also has a duty to follow relevant professional codes of conduct and standards.
- *Termination of the engagement.* It is good practice to include provision in the engagement letter that permits the forensic accountant to withdraw in the event of certain contingencies. Examples of such contingencies include the following:
  - The client asks the forensic accountant to produce opinions or reach conclusions that are in disagreement with those of the forensic accountant.
  - Previously unknown and critical information becomes available to the forensic accountant.
  - Information that was supposed to be available becomes unavailable.
  - The client provides incorrect or untruthful information.
  - The client requests the forensic accountant to perform an illegal or unethical act.
  - Any party in the litigation hires new counsel that creates a conflict of interest for the forensic accountant.
- *Privacy, confidentiality, ownership, and use of the materials*
  - *General protection.* The engagement letter may acknowledge that the forensic accountant will, to the extent possible, prevent the release of materials or information pertaining to the case.
  - *Cost of bearing subpoenas.* The engagement letter may state that the client is responsible for bearing the cost of any subpoenas served on the forensic accountant.
  - *Privacy protection for the client.* During the course of a case, the forensic accountant may obtain private, personal, or trade secret information regarding the client or client's employees or customers. The engagement letter can commit the forensic accountant to protecting the privacy of such information to the extent permitted by law.
  - *Restriction of use by the client.* It is not uncommon for experts to restrict the use of their work to specific purposes or for use only in the present case. The restriction may apply to the client or to any party in the case. Such a restriction can prevent a party from using the expert's work or deliverables (for example, a written opinion) in an inappropriate manner.
  - *Ownership rights of materials and deliverables.* It is common for engagement letters to indicate that the expert is the owner of materials and deliverables that the expert produces in the case. In addition, the expert may reserve the right to use such materials and deliverables in the expert's future engagements, subject to privacy and confidentiality restrictions.

- *Document retention policy.* The engagement letter may set forth responsibilities to retain documents for specified time periods or until specific conditions are satisfied. However, regardless of any document-retention understanding with the client, the expert must retain documents in active cases to avoid becoming liable for spoilage. In many cases, the expert is expected to return documents to the retaining attorney at the close of a case. The expert should never destroy any attorney-provided documents without written authority to do so.

- *Dispute resolution provision.* The engagement letter may require that any expert-client disputes be submitted to alternative dispute resolution (ADR), such as managed binding arbitration by the American Arbitration Association.
- *Choice-of-law provision.* When aspects of the dispute or the parties involve different legal jurisdictions, it may be desirable for the engagement letter to designate the jurisdiction whose laws apply.
- *Limitations of liability and damages.* There are various ways in which the forensic accountant may seek to minimize the risk of liability through "hold harmless" provisions. These are discussed individually. The expert should consult with a risk management expert, the expert's professional liability insurer, or the expert's attorney regarding such provisions. Also, the expert should consider attaching a resume to the engagement letter as protection in case the court later rejects the expert's testimony based on the expert's qualifications.
  - *Limit liability.* Provisions that state that the practitioner assumes no liability are likely to be rejected by clients. Moreover, such provisions may provide little or no protections against claims that allege malpractice or other torts.
  - *Limit damages.* Provisions that limit damages to some multiple of the expert's fees are relatively likely to be accepted by clients and hold up in litigation.
  - *Indemnification.* In some cases, the client might want the expert to indemnify the client for damages that result from acts of the experts. Of course, the expert might want a similar indemnification from the client.
- *Expiration of the engagement letter.* In some cases, experts place a date in the engagement letter that terminates the engagement offer if the client does not properly accept the engagement by the indicated date.
- *Court-appointed expert.* In cases in which the expert is appointed by a court, the court order may define the terms of the engagement. However, despite the court order, the expert may still want to get both parties to sign an engagement letter.
- *Fees.* The engagement letter should describe how fees will be changed and invoiced. Generally speaking forensic accounting experts bill on an hourly basis. It is common practice to charge an up-front retainer fee, which may be nonrefundable, but used as a deposit against which work is charged. When the retainer fee is used up, work may be billed as performed and invoiced periodically (for example, monthly). However, periodic billing beyond the amount covered by the retainer fee creates a credit arrangement between the expert and the client. As a minimum, the expert may want to make sure that the account is paid up to date before testifying.
  - *Contingency fees.* CPAs are not permitted to perform expert services on a **fee contingency basis**, in which the fee paid is based on a specific finding or result. Obviously, such an arrangement would, at a minimum, impair the appearance of objectivity and would likely open an easy line of attack by a cross-examining attorney.
  - *Discoverability of fees.* Non-testifying expert fees are generally not subject to discovery. However, fee arrangements, fees billed, and detailed fee billing data are fully discoverable when the forensic accountant is testifying.
  - *Jurisdiction and fees.* Individual judicial jurisdictions can have their own rules regarding fees, timekeeping, disclosure, and invoicing. For example, bankruptcy courts may require invoicing in tenth-of-an-hour increments.
  - *Attestation conflict.* The CPA expert is prohibited from charging expert-witness fees when the CPA performs an audit or review of the client's financial statements in the same period, or for the financial statement periods covered in the audited or reviewed periods.
  - *Collection issues.* Some experts include a provision in the engagement letter that requires the client to pay attorney fees in the event that a formal collection action is necessary. However, in many cases, such provisions might not be enforceable due to the prevailing practice that each party in litigation must pay its own attorney fees.

- Acknowledgement and payment for services. The engagement letter should explain how payments are credited and acknowledged by the expert.

Communicating With Counsel

The testifying expert must be very careful regarding all communications with the retaining counsel. Depending on the jurisdiction, communications between the forensic accountant and attorney may be discoverable by opposing counsel. This includes not only written reports, but also drafts of reports, notes, verbal discussions, and e-mail correspondence.

Some experts never prepare any kind of written document unless requested to do so by retaining counsel. Unnecessarily putting thoughts or discussions in writing may simply give opposing counsel more material on which to base cross-examination.

Administrative Issues

Various administrative issues must be taken into consideration as part of the planning and preparation for an engagement. Some of these may be incorporated into the engagement letter or dealt with at the beginning of the engagement:

- *Timetables.* Generally speaking, it is impossible to plan precise timetables in litigation. Most cases are settled out of court, and often during the end of a complicated and hard-fought discovery period. Depending on the jurisdiction and the particular court, discovery may take place on a very dragged-out and unpredictable timetable. A common tactic in defending lawsuits is "delay, deny, and defend," in which the defendant's attorneys do everything in their power to make the discovery process as difficult and as complicated as possible.
- *Scheduling.* Lawyers frequently wait until the very last minute to hire an expert witness. This may present the forensic accountant with little time to prepare a report and prepare for depositions and a trial. Consequently, the forensic accountant should be prepared to decline some engagements due to an insufficient amount of time to prepare.
- *Staffing and supervision.* All work must be done under the supervision, direction, and control of the testifying expert. Any work that the expert relies on that does not meet this test is likely to result in attempts to discredit the expert, the expert's reports, or the expert's testimony. Therefore, in order to help ensure that the expert bases his or her opinions on sufficient relevant data, the expert should consider the following:
  - *Legal evidence.* Generally speaking, experts can rely on documents that have been authenticated by the parties of litigation or that are acceptable to the court under the court's rules of evidence. Because what is acceptable to courts varies from one jurisdiction to another, the expert should consult with the attorney to ensure that the consultant relies only on evidences that is acceptable to the court. However, experts can rely on facts that other experts in the same area would reasonably rely on, and such facts do no usually need to be admissible.
  - *Assumptions.* The expert may rely on assumptions and hypothetical sets of facts. However, the trier of fact judges whether assumptions and hypotheticals are reasonable.
  - *Documentation.* The expert must excise judgment with respect to the types of documentation to create and maintain. However, given that the testifying expert's documents, even drafts and e-mail messages, may be subject to discovery, the expert may not want to prepare any documents, especially reports, without clear direction from the attorney. Some experts do not retain any documents from previous engagements because such documents may also be subject to discovery. The expert might seek legal advice regarding the expert's document retention policy. It is best that the expert follow a consistent practice in destroying documents that are no longer needed; this can help prevent the expert from being attacked for retaining documents in a way that shows bias.
- *Identify the location and custodian of documents and evidence.* At the beginning of a case, the expert should, to the extent possible at the time, identify relevant documents and evidence, and their location and custodian. To the extent possible such documents and evidence should be sequestered and scheduled for controlled access. This practice can serve not only to preserve relevant evidence but also to help prevent attacks due to problems with chain of custody or spoilage.

Practice Development

This section discusses various issues associated with developing a professional practice as a forensic accounting expert.

Marketing

Experts have a unique problem in marketing their services in that any advertisement, directory listing, e-mail, website, or other marketing creative can be used in cross-examination to attack the expert's credibility. Consider, for example, an advertisement for an expert that says something like, "Hire me, and I'll help you win your case." With an advertisement like this, the cross examination of this expert is likely to proceed as follows:

> Attorney: "So, you are here to help your client win her case?"
>
> Expert: "Yes, but …"
>
> Attorney: "No need to say anything else. So, you have developed your opinion in order to help your client win?
>
> Expert: "No, I'm here to assist the court."
>
> Attorney: "Oh yes, so it's the court who is paying $25,000 for you to help win case?"

The point here is that the opposing attorney is using the words of the expert's advertisement to produce an appearance that the expert is biased. An attack like this might not completely succeed in destroying an expert's credibility, but this attack along with some others might instead cause a jury to assign lesser weight to the expert's testimony. The implication is that experts must be extremely careful in all advertising.

Marketing Options

Various options are available to market the expert's practice. Some are discussed here, but it should be remembered that everything the expert says and does to market his or her practice can and will be used against him or her in cross-examinations:

- *Speaking engagements.* Because attorneys are the ones who frequently hire experts, the expert may wish to give presentations at legal conferences sponsored by professional legal associations. However, the expert should expect to be cross-examined on such presentations. The expert should avoid consistently speaking on one side of a particular issue, especially one that is industry-specific. For example, the expert should avoid speaking only at conferences that are oriented towards defending lawsuits in a given industry. To maintain an appearance devoid of bias, the expert should also speak at conferences oriented towards plaintiffs in the same industry.
- *Publications.* Publications can help establish an expert in a given area as an authority, but opposing attorneys can be expected to carefully study the expert's publications for any contradictions between what the expert says in a current case versus what the expert said in a past publication. Another issue is that an opposing attorney can argue that the particular choice of journals in which the expert publishes shows bias. For example, if the expert publishes in only journals in the law enforcement area, an opposing attorney might argue that the expert is biased in favor of law enforcement.
- *Referral services and directories.* Experts routinely list their services in directories and referral services. Any apparent bias in the directory or service might be used to argue bias in the expert.
- *Advertising in general.* The expert should carefully review and approve all advertising done on his or her behalf. For example, deferring too much to an advertising agency might result in an unapproved advertisement that says something like, "We'll give the right testimony to win your case."
- *E-mail.* Unsolicited bulk e-mail (that is, spam) can do significant damage to an expert's reputation. An opposing attorney might argue that the expert engages in spam out of desperation for lack of business.
- *Blogs and newsletters.* Regular blog and newsletter posts can be one of the best ways to obtain visibility.
- *Websites.* Websites are necessary. Generally speaking, experts should avoid publishing long lists of specialties. Such lists can be used against the expert. For example, the opposing attorney can raise the issue of how it is possible to be really good in so many areas.

The Expert's Curriculum Vitae

The expert's curriculum vitae (CV) is important for both marketing and actual litigation. The CV is one of the most visible aspects of an expert's expertise and experience, so it must be prepared and maintained with the utmost care. Even small issues with the CV can turn in to fodder for opposing counsel in cross-examination. Some of the possible issues are discussed as follows:

- *Grammar and typos.* Any type of sloppiness or error in the expert's CV can leave a jury with a bad impression. A sloppily-prepared CV is not likely to install confidence in the expert's work. For this reason, the expert's CV should be edited by a professional editor.
- *Currency.* Some experts are lazy when it comes to updating their CVs. This can not only produce an appearance of sloppiness, but in some cases create an appearance of dishonesty. For example, an opposing attorney might ask, "I see that you omitted the ABC case from your CV. Didn't your client lose that case by way of a summary judgment?"
- *Accuracy.* Any type of mistake in a CV might possibly be used by opposing counsel to show that the expert is dishonest, sloppy, or prone to exaggeration.
- *Gaps.* Opposing counsel can be expected to explore any time gaps in the CV. Further, the opposing attorney can expect to attempt to make it appear as though the expert has intentionally left a gap in order to deceive the jury.
- *Previous cases.* As a general rule, it is best not to include a list of previous cases on the CV. Doing so just makes it easier for opposing counsel to investigate and attack the expert.
- *Professional licenses, certifications, and membership.* Experts sometimes possess many professional licenses, certifications, and memberships. This can make it difficult to keep the list up-to-date. The last thing in the world an expert needs is for an opposing attorney to point out that the CV lists a professional membership or certification that has lapsed, possibly because the expert did not pay his or her annual dues on time.
- *Self-promoting language.* Any kind of self-aggrandizing language should be avoided. It opens the door to charges of exaggeration, which in turn may damage an expert's credibility.
- *Multiple versions.* If the expert has copies of his or her CV in multiple places (for example, on the Internet and in the office), he or she must be careful to update all copies at the same time.
- *Completeness.* Federal Rule of Civil Procedure 26 requires that, in conjunction with his or her report, the expert provide a list of all his or her qualifications, including all publications in the previous 10 years. Even one missing publication could be grounds for the judge to bar the expert from testifying.

Expert Liability

Under the theory of **witness immunity,** testifying experts are generally immune from lawsuits from adverse parties—those on the opposing side in litigation. Further, depending on the jurisdiction, court-appointed experts may be completely immune from all lawsuits that stem from the court-appointed engagement.

On the other hand, experts may be liable to friendly (retaining) parties for failing to exercise due professional care. A particularly disturbing possibility is that after being retained by an attorney, the court does not accept the expert's qualifications and bars the expert from testifying. In this case, there is some possibility that the retaining attorney may seek to hold the expert responsible for damages and refuse to pay the expert's fees. As was previously mentioned, to minimize this possibility, the expert may want to attach a copy of the expert's CV to the engagement letter. The expert might also include a provision in the engagement letter indicating that the retaining attorney has carefully reviewed the expert's qualifications and concluded that they are relevant to the case.

Of course, witness immunity will not protect an expert from court-ordered sanctions, professional ethics charges, and criminal prosecution, as may be applicable. For this reason, the expert must always act with due professional care and testify honestly.

In some cases, the expert may change his or her opinion so the revised opinion is inconsistent with the client's position. In this case, the expert has an obligation to immediately notify the client of the change, and if the expert has maintained due professional care, no breach of contract should result. This is because experts should never agree in advance to opine a certain way.

A final issue relating to expert liability is **spoliation**. Although the law varies from one jurisdiction to the next, the expert may be liable to the retaining party for negligent or intentional spoliation of evidence. Further, in some cases the court may hold the retaining party responsible for the expert's spoliation, and the result could be the retaining party losing the case. Such an event would likely be a career-ender for the expert's practice.

Case in Point

Forensic accountants can and do get sued. According to news reports, Alabama State University filed a lawsuit against the forensic accounting firm that alleged financial wrongdoing and waste at the school. The suit alleged that the report of the forensic accounting firm made "false and misleading" statements intended to interfere with the relationships between the university and its stakeholders.

Abuse and Unreasonable Demands

Experts are sometimes subjected to abuse and unreasonable demands. A few possibilities are discussed as follows:

- *Uncompensated use of the expert's name and reputation.* In some cases, attorneys may provide an expert's name to opposing counsel without first retaining (and paying) the expert. The goal in such cases is to exploit the expert's name and reputation to help convince an opposing party to settle the case. This type of behavior is unethical and should be reported to the court and the appropriate legal bar. This type of abuse might not be easy to detect. As a result, if an expert does detect such abuse in an individual case, the expert may have good reason to suspect that the guilty attorney has done the same thing in other cases.
- *Preliminary opinions without being retained.* In some cases, attorneys will engage in opinion shopping. They will ask the expert to review the facts of a case and then ask the expert for a preliminary opinion. There are three problems with this type of request. First, the expert should never give any kind of opinion without a thorough review of the facts on which the opinion needs to be based. Second, reviewing facts and rendering any kind of opinion, even an oral opinion, can amount to working without compensation. Third, if the engagement does take place, the initial tying of an opinion to being retained might later be used to produce the appearance that the expert's opinion was directed or influenced by the retaining attorney. The safest thing for any expert to do is to require an engagement agreement and retainer before any work is performed.
- *Stealing the expert's opinion.* One unscrupulous tactic is for an attorney to directly expose the expert to the facts of the case and then later attempt to call the expert as a fact witness. If no retainer agreement is in place, the expert could be subpoenaed to testify without compensation. If this happens, the expert should strongly indicate that he or she will not give any written opinion, thus precluding him or her from being qualified as an expert.
- *"Conflicting out" the expert.* Some attorneys will seek to discuss their case with an expert with no intention of ever retaining the expert. The goal is to force the expert to decline an engagement with the opposing party due to the fact that such an engagement would be a conflict of interest. The best way to combat this type of behavior is to require a retainer agreement before discussing a case. This type of problem is mostly likely to happen to a well-known expert. The best way to combat it is to require a retainer agreement before discussing a case.
- *Late payments and non-payments.* Some clients do not pay their monthly invoices when they are supposed to. The simple solution for this problem is to use a replenishing retainer. When the retainer is used up, the client must increase the amount of the original retainer. If the client fails to replenish the retainer, the expert can withdraw from the engagement.
- *Attempting to shape the expert's opinion or testimony.* It is not uncommon for clients to tell the expert what the client wants the expert to say. This type of abuse can take various forms. For example, the client can attempt to push the expert into opining outside of the expert's area of expertise. The expert must simply refuse such requests unless they are compatible with the expert's objective opinion and within the expert's area of expertise.

- *Withholding information from the expert.* Sometimes attorneys withhold key facts from experts in an attempt to shape their opinions. This type of behavior is generally unethical and can put the expert in an embarrassing situation if such facts become available in the course of a trial and cast doubt on the expert's pretrial written report.
- *Rush cases.* In many cases, attorneys like to wait until the last minute (close to trial) to retain a testifying expert. After all, experts can be expensive, and so attorneys hoping to settle a case out of court may prefer to spare the expense of an expert who will never testify. The result can be that the expert does not have sufficient time to properly prepare a report. In such cases, it is best for the expert to decline the engagement. By declining, the expert may miss out on a good professional opportunity, but proceeding in such cases can result in the expert's reputation being irreparably damaged as a consequence of insufficient preparation.
- *Harassment at depositions.* There are various ways attorneys can seek to harass and intimidate experts in depositions. For example, if the deposition is being held in the opposing attorney's office, the opposing attorney might make the room very hot or very cold. Once the deposition commences, the opposing attorney may do things like ask the same questions over and over again, make accusing statements, and so on. Because depositions are not held in the presence of a judge, there is not much that the expert can do to object to or prevent a certain amount of such abusive behavior. Consequently, the expert needs to have "thick skin." Nevertheless, if the level of abuse goes too far, the expert can note the behavior on the record, ask that it be rectified, and indicate that if it continues the expert will terminate the deposition and discuss with the retaining attorney a motion for sanctions or a protective order against the abusing attorney. However, the expert should keep in mind that the retaining attorney does not represent the expert. Therefore, the expert may need to seek advice from the expert's personal attorney.
- *Pressures to act in unethical ways.* In some cases an attorney may ask the expert to do something that is unethical or illegal. For example, the attorney might ask the expert to overlook certain key facts. In such cases, the expert should immediately ask that the request be put in writing and then withdraw from the engagement. If the expert continues with the engagement, he or she would be required to testify truthfully and, if asked, disclose the unethical or illegal the attorney had asked him or her to perform.

Summary

Some examples of the services most commonly provided by forensic accountants include computation of economic damages; punitive damage studies; professional standards analysis; valuation of businesses, pensions, and intangibles; and fraud prevention, detection, and investigation. Forensic accountants can provide such services in conjunction with both civil and criminal trials.

The AICPA has three authoritative professional standards that are applicable to forensic accounting services: the Code of Professional Conduct, CS section 100, and VS section 100. CS section 100 refers to the most relevant parts of the code for consulting services.

CS section 100 generally applies to all forensic accounting services, as well as other consulting services. CS section 100 does not apply to services subject to other AICPA professional standards, such as attestation services, financial planning and bookkeeping, reports and advice relating to the application of accounting principles to specified transactions or events, and certain recommendations and comments that directly result from observations made while performing excluded services. For engagements involving both consulting and attestation services, CS section 100 applies to the consulting part of the engagement.

For attestation services, both independence and objectivity standards apply. For consulting services, however, the integrity and objectivity standards apply, but the attest independence requirement does not. For CPA firms providing clients with attest and consulting services, certain consulting services could impair their attest independence, and thus prevent them from performing future attest services.

VS section 100 applies to services that estimate the value of a business or business ownership interest, security, or intangible asset using valuation approaches and valuation methods and situations in which professional judgment is used to apply these approaches and methods. In addition to complying with VS section 100, the valuation analyst must also comply with the code, CS section 100, and all relevant laws and regulations.

Important elements of managing forensic accounting engagements are planning and preparation, information and evidence management, and communications with clients and attorneys. Planning and preparation involve evaluating and accepting (or rejecting) the engagement. Once the decision is made to accept the engagement, the issue becomes one of reaching an understanding (an agreement) with the client. Agreements may be oral or in writing. If they are in writing, the forensic accountant provides the client an engagement letter that sets forth the terms of the engagement.

Before accepting an engagement, the forensic accountant must first understand certain fundamental issues: who the client is, the needs of the client, the relevant legal considerations, and the information available. After reviewing these fundamental issues, the forensic accountant then decides whether to accept or reject the engagement.

The decision to accept an engagement is a very serious one. The forensic accountant should carefully weigh all aspects of the case in light of the case's merits, the expert's qualifications, and any possible conflicts of interest. However, once the forensic accounting expert decides to accept an engagement, the forensic accountant must reach an understanding with the client regarding the terms of the engagement. In most cases, the forensic accountant drafts an engagement letter for the client to sign. CS section 100 does not require an engagement letter, and oral agreements are acceptable.

In some cases a forensic accountant might be initially hired to serve as a non-testifying expert consultant, but at some point the forensic accountant's role might change to that of testifying expert. In such cases, some forensic accountants require a second engagement letter to replace the first one.

Although there is no such thing as a standard engagement letter, there are certain elements generally applicable to engagement letters. The exact elements in a particular engagement letter will depend on the particular engagement and practitioner. Examples of such elements are introductory information (dating, addressing, and case name); a description of the services; the scope of the services; a basic understanding of the services; an applicable timeline for completion of the services; any reports, demonstrative evidence, or oral testimony to be provided; a statement of applicable professional standards; applicable contingencies; a statement regarding independence and conflicts of interest; rights and responsibilities of the parties; privacy and confidentiality requirements; and fees and retainers. Generally speaking, contingency fees are inappropriate.

The testifying expert must be very careful regarding all communications with the retaining counsel. This is because almost any communication between the expert and the retaining counsel is likely to be subject to discovery.

Various administrative issues must be taken into consideration as part of the planning and preparation for an engagement. Some of these may be incorporated into the engagement letter or dealt with at the beginning of the engagement. These issues include setting timetables, scheduling, staffing and supervision, and identifying the location and custodian for key documents. Special care should be exercised to avoid spoilage.

Experts have a unique problem in marketing their services in that any advertisement, directory listing, e-mail, website, or other marketing creative can be used in cross-examination to attack the expert's credibility. Therefore, experts must be extremely careful in all advertising.

The expert's CV is important for both marketing and actual litigation. The CV is one of the most visible aspects of an expert's expertise and experience, so it must be prepared and maintained with the utmost care.

Review Questions

1. The practitioner should _____.
   a. Destroy all records, except formal reports, at the end of litigation.
   b. Immediately destroy all records, except formal reports, as they are contained in reports.
   c. Adopt a formal policy for retaining records.
   d. None of the above.

2. The professional is _____ personally direct and supervise the work performed in support of his or her expert opinions.
   a. Required by law to.
   b. Required by AICPA authoritative standards to.
   c. Is not required to.
   d. Is required in criminal cases only to.

3. The practitioner should closely supervise staff and be ready to testify that the work, exhibits, analyses, and other items were prepared under _____.
   a. The direct control of the attorney.
   b. The practitioner's direct control.
   c. The client's direct control.
   d. None of the above.

4. In planning and preparing for engagements, paramount considerations include _____.
   a. Understanding the client and the client's needs.
   b. Establishing a clear understanding regarding the scope and nature of the services to be provided and the responsibilities of both the member and the client.
   c. Establishing a clear understanding regarding any issues relating to confidentiality of materials and possible conflicts of interest.
   d. All of the above.

5. Which of the following is not a litigation service?
   a. Expert witness.
   b. Litigation consulting.
   c. Special master.
   d. All of the above are litigation services.

6. Calculation of judgments would be most applicable to which of the following parts of the litigation process?
   a. Discovery.
   b. Interrogatories.
   c. Trial.
   d. Post-trial.

7. Which of the following is not a general standard that applies to CPA client services?
   a. Client interest.
   b. Due professional care.
   c. Professional competence.
   d. All of the above are general standards applicable to CPA client services.

8. Valuation Services (VS) section 100, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*) does not apply _____.
   a. To cases in which the value of a subject interest is provided to the member by the client or a third party, and the member does not apply valuation approaches and methods, as defined by VS section 100.
   b. To cases of internal-use assignments from employers to employee members not in the practice of public accounting.
   c. When it is not practical or reasonable to obtain or use relevant information, and as a result the member is unable to apply valuation approaches and methods that are described in VS section 100.
   d. All of the above situations.

9. The concept of career risk is most applicable to _____.
   a. Expert consulting services.
   b. Expert testimony services.
   c. Investigative services
   d. All of the above

10. With respect to an engagement to provide expert testimony, contingency fees are _____.
   a. Not a problem if disclosed under Rule 26.
   b. Not a problem if disclosed under FRE 702, 703, 704, 705, or 706.
   c. A problem even if disclosed.
   d. Never a problem.

11. Verbal reports from a testifying expert to retaining counsel are _____.
   a. Exempt from discovery under the work-product doctrine.
   b. Exempt from discovery under the work-product privilege.
   c. Exempt from discovery under attorney-client privilege.
   d. None of the above.

12. Generally speaking, testifying experts may be liable to _____.
   a. The retaining party.
   b. The opposing party.
   c. The opposing attorney.
   d. None of the above.

13. Which of the following may not be an element of spoliation?
   a. Accidental destruction of evidence.
   b. Intentional destruction of evidence.
   c. Both (*a*) and (*b*).
   d. Neither (*a*) nor (*b*).

14. Conflicting out an expert means _____.
   a. Firing an expert due to a conflict of interest.
   b. The court removal of an expert for a conflict of interest.
   c. The loss of an expert due to a failure to consider conflicts of interest in the engagement letter.
   d. None the above.

Short Answer Questions

1. What are litigation services?

2. What are the three types of litigation services?

3. For CPAs, which forensic accounting services are subject to the Consulting Services (CS) section 100, *Consulting Services: Definitions and Standards* (AICPA, *Professional Standards*)?

4. Under AICPA Rule 201, what is involved in communication with the client?
5. Do CPAs performing investigative services need to be independent? Why or why not?
6. For expert testimony, who should the client normally be?
7. Give three reasons for declining an expert witness engagement.
8. In the area of expert consulting, what does career risk mean?
9. What would be an appropriate action for the practitioner in the case of reaching a conclusion that is in disagreement with those of the client?
10. What are three ways a practitioner might seek to limit liability in an engagement letter?
11. For a testifying expert, which communications with retaining counsel are subject to discovery?
12. What is the significance of a typographical error in the curriculum vitae of a testifying expert?
13. What does "conflicting out" an expert mean?
14. What are the consequences of accidental spoliation by an expert witness?
15. How might an expert deal with harassment at depositions?

Brief Cases

1. You have been offered an engagement to testify as a forensic accounting expert in a breach of contract case. The retaining attorney's letter to you indicates the type of work you will perform under the direction of the attorney. Do you find any issues with this arrangement? Explain.
2. You have been offered an engagement to testify as an expert in case of alleged fraud in the context of a corporate acquisition. The retaining attorney has told you that you are not to produce any kind of report, even an oral one, without first being asked for it. In conducting your investigation, you discover an embezzlement scheme that has nothing to do with the merger. Do you report your discovery to the attorney? Explain.
3. You are considering accepting an engagement to investigate a fraud in which your wife's cousin is the prime suspect. You disclose your relationship to the retaining attorney, but the retaining attorney indicates that she trusts your objectivity. Given this, should you accept the engagement? Explain.
4. You work for a public accounting firm. The audit committee for one of your best audit clients wants you to investigate the CFO for possible corruption fraud. You have been asked by your client to explain the impact of the investigation on the ability of your firm to continue to serve as the company's auditor. What is your response?
5. You bill at the rate of $500 per hour for your expert witness services, but for your junior assistants you bill at the rate of only $200 per hour. You hire your assistants right out of college, so you always have all the assistants that you need. The result of this system is that you make the most money in cases that bill lots of hours of assistant work. Now you are being offered an engagement that has the potential to earn you $1 million dollars over the next 12 months. However, despite the possible earnings there are 2 concerns with the case: (1) you will be testifying for the state against a large, violent organized crime ring, and (2) the case will take up all your time, so you will be forced to decline any other engagements for at least 1 year. What are your thoughts in accepting this case?
6. You are being offered an engagement by a local contractor who wants to investigate its purchasing manager for possible fraud. The owner of the business is rather eccentric and is willing to pay very well, but he does not want to sign any kind of engagement letter or contract. He says that such formalities are not needed for good, honest people. How do you respond? Can you accept an engagement with no written engagement letter?

7. You are a well-known forensic accounting expert who has testified in over 100 civil cases involving fraud, with a good balance of cases in support of the plaintiff versus the defense. A local attorney tells you that your reputation is so strong that just your presence in a case causes parties to settle. You know this is true, because you very carefully pick the cases that you accept, and you do not like testifying for the losing side. However, the attorney tells you that without your consent, other attorneys are putting your name on their witness lists, and just by doing that they get the opposing side to make a generous settlement offer. You ask the attorney to give you names, but she said that she cannot do that; she has only heard rumors. What can you do in this situation?
8. You are being offered an engagement to investigate an internal fraud. The retaining attorney offers you a large bonus if your investigation leads to the trial and conviction of anyone guilty of fraud within the company. Do you accept or decline the bonus? Explain.
9. You are being hired to serve as an expert witness in a corporate corruption case. The company has already conducted an internal investigation and concluded that a particular purchasing officer has been running a kickback scheme spanning a 13-year period. Estimated losses are in the millions of dollars, and the company wants to recover. Immediately after accepting the engagement, you sit down with the retaining attorney to discuss the documentation that you will need to prepare your report and testimony. To your surprise, the retaining attorney tells you that you have free access to all company employees and records. However, you are not to review any e-mail as part of your investigation. How do you respond to this attorney?
10. You have just started a new forensic accounting practice and you have to do a lot of work as an expert witness, so you hire an advertising agency to help. They are very expensive, but they have excellent ad designers with access to many different media channels, including radio, television, newspapers, e-mail, and so on. Your account manager with the agency has asked you to explain some of the most important considerations in selling your practice. How do you respond?

Cases

1. You have been retained by the attorney for Tazita Inc., a maker of hand-painted coffee mugs. Tazita is a creditor for Fracasa Enterprises. Tazita believes that the owners of Fracasa "bled out" the assets of Fracasa in the previous 2 years. Fracasa appears to be completely gutted of assets, but the holding company for Fracasa has started a new company that also manufactures coffee mugs. Tazita believes that the new company is prospering at the expense of Fracasa, and now Fracasa is over 90 days overdue in paying a large amount of money it owes Tazita on account. At the beginning of your engagement, the attorney for Tazita asks you to develop and propose a complete legal strategy for going after both Fracasa and the new company. It is the feeling of the retaining attorney that going after Fracasa alone will likely be a fruitless exercise.

   Required

   Is developing a case strategy within the scope of work something that a forensic accountant should engage in? Explain. How might you assist in this case?
2. You have just finished a six-month investigation of an embezzlement fraud for the Muerto insurance agency. From the very beginning, Tom Cans was your main suspect. Mr. Cans served as a general accountant until he was fired right before your investigation began. You were never able to interview him because his lawyer would not permit it, but you managed to find a series of bank deposits in which Mr. Cans had stripped off the cash and threw the checks away. Your careful investigation of the accounting records revealed that Mr. Cans had credited many customers for their policy payments, but had never deposited the money in the bank. To prove this, you had the bank send you image copies of all deposit slips in recent years. You compared these deposit slips to credits that Mr. Cans had made to customers' accounts. There was no question that Mr. Cans had made the customer credits because the audit log showed that they had all been made with Mr. Cans's login and were mixed in with legitimate transactions also made by him. Given this strong evidence, you indicate in your report that there was strong evidence of fraud. You did not specifically point to Mr. Cans as the culprit, but it was clear that the

investigation only centered on his activities. As soon as you filed your investigative report with Muerto, Muerto immediately filed suit against Mr. Cans, and the suit included a copy of your report. Only a week after that, Mr. Cans filed suit against you for defamation.

Required

Is there anything you could have, or should have, done differently? Do you think that Cans has a possibility of winning his defamation suit against you? Explain.

3. You are a well-known forensic accounting expert. You have been engaged by Wilson Isquierda, a nationally renowned attorney who represents Tom Wilco, a medical doctor who owned many pain clinics in Florida until he was charged with Medicare fraud, mail fraud, and money laundering in a federal indictment. Wilson is very good at what he does and knows the federal prosecutors well, as well as the actions and items needed to win cases. He hires you to build a forensic accounting case to show that Tom Wilco's business was all legal and proper. At the beginning, you caution Isquierda to the effect that your findings might not be helpful to his client's case. He told you not to worry about it; you were "totally free" to seek the truth.

   In conducting your investigation, your review of medical claim records revealed many claims in which Dr. Wilco billed insurance companies for visits that never took place. You were very disappointed with such a finding because you knew that you had to quickly break the bad news to Isquierda and withdraw from the engagement. Before you could even call Isquierda, you were met by a shady-looking man in the parking garage next to your office. The man walked straight up to you and pressed a shiny revolver into your forehead, right between your eyes.

   The man spoke, "In the Wilco case, you'll say that you found nothing wrong. If you don't do exactly as I say, I promise you will be very sorry."

   You were terribly shaken by the experience and did not have any idea of what to do. You went and told your story to Isquierda, but to your surprise Isquierda seemed totally undisturbed by your story, as though it was something he had been expecting to hear.

   "You have to understand," said Isquierda. "I don't always represent the cleanest clients."

   Isquierda then told you that your best bet would be just to write the report the way the gunman instructed. "It's not worth getting killed over," he said. "It won't really matter because we will plea bargain the case. We always plea bargain the case. Only dumb politicians go to trial, so your report will never see the light of day."

   Required

   What should you do? Explain.

4. You have been hired to provide expert testimony for the Pura company, a national retailer of consumer hardware goods. Pura suffered a $2 million embezzlement loss. The problem is that the loss was supposed to be covered under the employee theft coverage in Pura's insurance policy; however, the insurance company refused to pay. This all happened despite the fact that you performed a six-month investigation and found plenty of evidence that suggested fraud. The insurance company pointed out that the police were unwilling to charge anyone with the crime, so it felt compelled to continue its own investigation, which appeared to be just an excuse not to pay.

   Pura suffered considerable consequential damages as a result of the loss of funds and available cash flow. Net income dropped in half in the subsequent eight quarters and eventually Pura suffered total financial collapse.

   Pura won its lawsuit against its insurance company. The judgment was favorable for deceptive trade practices, breach of contract, and bad faith. After the trial, the judge ordered both sides to prepare briefs regarding the consequential damages. However, Pura was completely out of money and was still unable to collect the insurance because of pending appeals.

   Pura has asked you to assist in preparing a case for consequential damages based on a total loss of the business. You know that unless you provide such assistance, there is little chance that Pura will ever have the funds to pay you the six-digit bill in fees that it owes you, but your specialty is fraud and not business valuation. Still, you are a CPA, and you can certainly argue that, based on that credential alone, you are qualified to testify.

   Required

   Should you assist in providing expert testimony regarding the consequential damages?

5. You have just completed a fraud investigation for the XYZ Cement Company. You found that a production manager had been collecting pay for phantom employees. The evidence was clear; the production manager signed the time cards for nonexistent employees and you managed to get a video recording of him doing so.

   When you wrote your report you indicated that the production manager signed the time cards and that the time cards in question were for nonexistent employees. Your report was simple, direct, and clear. However, the CEO of XYZ was unhappy because your report never stated that a fraud was committed or that the production manager had done anything wrong. The CEO went to the police with the report and they refused to give the case any serious attention; they said that the report was not strong enough to get a conviction.

   The CEO was very angry and began pressuring you to revise the report to at least indicate that a fraud had been committed. You discussed the issue with a loss management person from your professional liability insurance company. The loss management person advised against changing your report; they said that, given the narrow investigation, any claim of fraud would expose you to a lawsuit.

   Consequently, you advised the CEO that you would not change your report. When you told him that he became angry and indicated that he was not going to pay the remaining balance on his account with you. You told him that you understood his feelings, and you indicated that although you both knew in your hearts the production manager was guilty, you were not at liberty to change your report.

   To your surprise, you realized that the CEO's secretary was standing in the open doorway behind you, listening to the whole conversation. An hour later, the CEO sent out a memo to all the staff indicating that you had advised him that the production manager was guilty of fraud.

   Two days later, you received a call from your professional liability insurance company. You were told that an attorney for the production manager had opened a claim against you for defamation.

   Required

   Analyze this case and make suggestions for how you might have handled the CEO differently. Also, indicate the extent that you think the defamation suit has a chance of succeeding.

Internet Research Assignments

1. Research online and find three forensic accounting firms that provide services for divorce, fraud, and business valuation. Write a brief report on your findings.
2. Research online and find a marketing company that specializes in marketing forensic accounting practices.
3. Not all financial forensics experts are CPAs. Search online to find a fraud expert who is a CFE but not a CPA. Write a brief report of your findings.
4. Robert Half publishes annual salary surveys for finance and accounting. Visit www.roberthalf.com to identify average salaries for forensic accountants. Next, research online to find out typical fee rates for forensic accounting experts. How do forensic accounting salaries compare to those of forensic accounting experts? Write a brief report of your findings.
5. Research online and find an example of an engagement letter. The letter can be for any financial service, but one for forensic accounting services would be best. What provisions exist in the engagement letter that you have found that are in addition to those included in the chapter?

Section III

Specialized Forensic Knowledge

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Chapter 8
Fraud Prevention, Detection, and Response

Learning Objectives

- Understand how fraud risks are managed within the organization
- Explain the fraud risk assessment process
- Explain the major options for standards-based information security management
- Apply the major approaches to fraud detection
- Understand the basics of fraud detection systems
- Identify the major objectives of a fraud investigation
- Apply the fraud theory approach to a fraud investigation
- Explain the issues associated with different types of evidence
- Understand the interviewing process
- Understand advanced methods for assessing honesty

Introduction

Fraud can be defined as an intentional act or omission that is designed to deceive and results in a loss to a victim and a gain to a perpetrator. From an organizational standpoint, fraud is managed as one risk among many risks as part of the organization's overall enterprise risk management strategy.

Managing Fraud Risk

General components of managing fraud risk include maintaining a proper corporate governance structure along with effective policies and procedures for fraud risk assessment, fraud prevention, fraud detection, and fraud investigation. A proper corporate governance structure begins with the board of directors, whose job is to

- implement an effective business ethics program;
- understand fraud risks;
- maintain oversight of fraud risk assessment;
- monitor management fraud and control-related activities;
- oversee internal controls established by management;
- set the appropriate tone at the top;

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

- have the ability to retain and pay outside experts; and
- provide to external auditors evidence of active involvement.

Achieving these objectives requires a strong commitment, fraud awareness, an affirmation process, disclosure of conflicts of interest, active and ongoing fraud risk assessment, fraud reporting procedures (for example, hotlines) and whistleblower protection, corrective actions, ongoing process evaluation and improvement, and continuous monitoring.

The board typically delegates its fraud risk management responsibilities to the audit committee. The audit committee should comprise independent board members, include at least one financial expert (preferably an accountant), and meet regularly alone with the internal auditor and out of the presence of management.

The audit committee must be proactive in overseeing fraud risk management. It must have a good, open dialog with the external auditor, especially with respect to fraud issues and risks. It should also have good, open lines of communication with legal counsel with whom it should consult when fraud is suspected.

Although the audit committee serves as the overseer, management is responsible for designing and implementing the fraud risk management program. As part of this task, management must set the correct tone at the top for the organization, implement adequate internal controls, and report to the board regarding fraud management policies and procedures to evaluate their effectiveness. In many companies, one representative of management (for example, a chief ethics officer) reports to the board of directors regarding fraud risk management efforts. All levels of management (and staff) should

- understand fraud and its red flags;
- understand their roles in the internal control framework;
- read and understand policy and procedure manuals;
- participate as required in creating and designing a strong control environment;
- participate in monitoring activities;
- report suspicions or incidences of fraud; and
- cooperate in investigations.

The role of the internal auditor is especially important. The internal auditor should provide assurances to the board (via the audit committee) that fraud controls are sufficient for the risks and are functioning effectively. As part of accomplishing this task, the internal auditor should review the adequacy of identified risks, especially risks relating to management override.

The internal auditor's role and responsibilities should be expressed in a written charter approved by the board. This charter should spell out in detail the internal auditor's roles and responsibilities for fraud risk management, including those in relation to investigations, monitoring whistle-blowing reports and processes, providing ethics training, and maintaining a code of conduct.

Fraud Risk Assessment

Given a strong governance structure, the focus should be on effective processes for **fraud risk assessment** (which, in turn, must be followed by a focus on fraud prevention, fraud detection, and fraud investigation). Fraud risk assessment must be considered within the larger context of enterprise risk management. The three key elements of fraud risk assessment are (1) identifying inherent fraud risk—the risk of frauds, (2) assessing the likelihood and significance of each inherent fraud risk, and (3) responding to likely and significant inherent risks.

Management should appoint a **risk assessment team** that includes accounting and finance personnel, legal counsel, risk management personnel, internal audit staff, and any other persons who may be helpful. The team should brainstorm to identify fraud risks. In order to accomplish this task, the team must understand the population of fraud risks as such risks relate to fraudulent financial reporting, misappropriation, and corruption.

When surveying the population of fraud risks, the team should consider the following:

- Incentives, pressures, and opportunities
- The risk of management override of controls

- Information technology as it relates to fraud risk
- Regulatory, legal, and reputation fraud risks

When assessing the likelihood and significance of identified inherent fraud risks, the fraud risk assessment team should consider the following:

- The past history of the fraud in the organization
- The incidence of the fraud in the industry
- The complexity of the risk
- The risks for particular individuals or departments
- The number of people and transactions involved

When estimating significance, the team should consider significance to the organization's operations, brand value, reputation, and legal liability (criminal, civil, and regulatory). Normally, an adequate procedure is to assign one of three likelihoods to each identified inherent risk: remote, reasonably possible, or probable.

The team should discuss with management and the board the appropriate responses to residual risks—risks that cannot be accounted for by the absence or failure of controls. Options include accepting residual risks based on their perceived likelihood and significance or increasing the level of controls to compensate.

The team's fraud risk assessment should be documented using a structured framework, and the team should discuss its findings with the audit committee. The entire process should be iterative and ongoing, with a focus on continuous improvement.

Standards-Based Information Security Management

Many organizations use a formal, standards-based **information security management system (ISMS)** as a key element in managing fraud risks. Such a system focuses on protecting information confidentiality, integrity, and availability (CIA). One important set of standards for ISMS development is the **ISO/IEC 27000 series**,[1] which includes a large number of individual ISMS-related standards that deal with issues ranging from best practices to risk management and network security.

Control objectives for information and related technology (COBIT) represents an alternative to the ISO/IEC 27000 (ISO27K) series of standards. ISACA provides COBIT Online,[2] a large set of resources to assist management with COBIT implementations.

In the United States, COBIT is more widely accepted than ISO27K. However, COBIT represents a high-level umbrella framework that is consistent not only with ISO27K, but also other standards and frameworks such as the internal control framework published by the Committee of Sponsoring Organizations (COSO).[3] The **COSO internal control framework** is especially significant to accountants because it is a fundamental framework that describes internal control as a process; is effected by an entity's board of directors, management, and other personnel; and is designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- Effectiveness and efficiency of operations
- Reliability of financial reporting
- Compliance with applicable laws and regulations
- Safeguarding of assets

Published frameworks and standards-based ISMSs not only assist in managing fraud risks, they also provide a means for public companies to document compliance with section 404 of the **Sarbanes-Oxley Act (SOX 404)**. SOX 404 requires management to produce an internal control report that, subject to criminal penalties, must be certified by the CEO or CFO as part of the periodic financial reports filed with the SEC. Guidance published by the SEC and by the PCAOB suggests that management's evaluation of its internal control structure be based on a **top-down risk assessment**.

[1] www.27000.org
[2] www.isaca.org/cobitonline
[3] www.coso.org

The basic theory of top-down risk assessment is that the scope and quantity of evidence gathered in assessing internal control is based on assessed risks. This approach is perfectly consistent with ISO27K and COBIT, and with the assessment of inherent and residual fraud risks, as previously discussed.

Assessing Risks of Fraud

The process of assessing risks involves identifying and inventorying threats, vulnerabilities, and related loss exposures. Threats are potential vectors of attack on the system. Vulnerabilities are weaknesses that expose the system to threats. Loss exposures represent potential losses from threats acting on vulnerabilities.

Loss exposures must be identified for all the organization's assets (and potential liabilities that may result from fraud), including, for example, for equipment, human resources, the company's brand, documents, and software assets. Fraud prevention involves implementing controls to limit loss exposures in a way that is consistent with the organization's appetite for risk.

As previously discussed, risks (associated with loss exposures) may be identified in qualitative terms (that is, as remote, reasonably possible, or probable). Similarly, the magnitude of possible losses may also be identified in qualitative terms (for example, small, medium, large, and catastrophic).

In some cases it might be desirable to use a **quantitative approach to risk assessment**. Estimated probabilities and dollar losses can be combined to produce either expected estimated losses or estimates of probability distributions for losses. However, from an organization-wide perspective, quantitative risk assessments typically devolve into sophisticated-looking guesswork. This is because the probabilities of catastrophic losses (and at times, small ones as well) are frequently impossible to estimate with any degree of certainty. Fraudsters are frequently highly-intelligent individuals who can, and frequently do, defeat controls that management may view as having a very low probability of being defeated.

Information Security Assurance

An **information security assurance (ISA)** is an evidence-based statement regarding the ability of a particular security-related deliverable's ability to withstand specified security threats. For example, an ISA might state that a particular password system can stop a dictionary-type attack against it at a level of 99.999 percent confidence.

The auditor's traditional attestation is a type of ISA applied to financial statements, one that is couched in language of reasonable assurance. However, in general, ISAs can be applied to ISMSs and their components. Further, such assurances can be provided by a wide range of assurance authorities, including by internal auditors, managers, consultants, certification authorities, and even users. Moreover, there exist published standards regarding security assurances for IT and security deliverables. For example, **ISO/IEC 15443** provides a general framework for security assurance, and it classifies many different security methods that are in turn based on their own published standards. **ISO/IEC 15408** (also called common criteria and is endorsed by the National Security Agency and the National Institute of Standards and Technology) sets forth evaluation assurance levels numbered from 1 to 7, which represent progressively higher levels of assurance.

Fraud Prevention

The first line of defense in minimizing fraud risk is **fraud prevention**. Prevention is typically the most cost-effective component of a fraud risk management system because it poses barriers to fraud, deters fraud, and can eliminate costly investigations.

Fraud prevention is implemented through preventive controls that possibly derive from a standards-based information security management system. Such controls function as treatments for identified risks. As with all controls, they must continuously be monitored for effectiveness. Fraud preventive controls include human resource (HR) procedures (for example, job applicant background investigations, antifraud training, HR programs for employee evaluation and compensation, authority limits, and transaction-level procedures).

To be successful, a fraud prevention program must be carefully documented, integrated into the organization's fraud management effort, and continuously monitored and improved. Program awareness is required at all levels of the organization.

Fraud Detection

Fraud can never be fully prevented; therefore, an effective **fraud detection** system must be in place to detect frauds as they occur. In the same way that the fraud prevention system requires preventive controls, the fraud detection system requires detective controls.

Detective controls are generally matched with **identified risks**, and they tend to be clandestine. In some cases, it may be more cost effective to implement controls to detect rather than prevent fraud. Further, detective controls can have a preventive effect through deterrence.

One of the most important fraud detection controls is the whistle-blower hotline. Such hotlines are mandated by SOX and are generally the most likely means of detecting fraud. To be effective, hotlines should

- be promoted.
- provide for anonymity (or at least confidentiality) of the whistle-blower.
- provide for reporting to senior management or the audit committee.
- work under a single case management system.
- be continually reviewed for effectiveness by an independent evaluator.

Fraud detection is also enhanced by process controls. Such controls are designed to detect both fraud and errors and include

- reconciliations,
- independent reviews,
- physical counts and inspections,
- analyses, and
- audits.

Specific controls should be implemented, along with proactive fraud detection procedures that include data analysis, continuous auditing, and other supporting technologies.

As with all other components of the fraud risk management system, fraud detection processes and techniques must be carefully documented. Documentation should generally exist for all detection controls and processes and should specifically exist for monitoring processes and results, for testing procedures used to assess controls, and for the roles and responsibilities that support fraud detection.

Continuous monitoring of fraud detection is essential. The organization should develop ongoing monitoring and measurements to evaluate, remedy, and improve the organization's fraud prevention and detection techniques. All violations of the organization's code of conduct should be reported and dealt with in a timely manner. Appropriate punishment should be applied, even if senior management is involved.

Fraud Versus Errors, Waste, and Inefficiency

Fraud detection systems detect not only fraud but also waste and inefficiency. In many cases, the fraud detection system simply raises a red flag. It is then necessary to follow up with an investigation to determine the underlying issue. For example, a fraud detection system might flag irregular production orders on the basis of the excess amounts of materials being applied to particular work in process jobs. A follow up of these irregular orders might then lead to either waste or fraud.

Sources of Fraud Detection

Tip Lines

As previously discussed, fraud may be discovered through anonymous tips. An anonymous tip line (or website or hotline) is one of the most effective ways to detect fraud. In order to ensure that tips are independently investigated, it is desirable that tips go directly to the internal auditor, the inspector general, the legal department, or even to outside legal counsel.

Tip lines should provide a disclosure policy that sets forth the following:

- The types of items for which tips are accepted. Tips that do not fall within the scope of accepted items are rejected, ignored, or referred to a different authority. Many tip lines accept tips for not only fraud, but also ethics or policy violations.
- The rights of the accused.
- Protections for the tipster (that is, anonymity, confidentiality, and whistleblower protection).

To be effective, tip lines must be promoted and incorporated into employee training. For example, some companies provide information about their tip lines on employee pay stubs.

Fraud Detection by Accident

On average, a very significant portion of fraud is discovered by accident. Fraudsters frequently make mistakes by failing to adequately cover their tracks. For this reason, all employees should be trained to spot and report irregularities.

Fraud Detection by the External Auditors

AU-C section 240, *Consideration of Fraud in a Financial Statement Audit* (AICPA, *Professional Standards*) requires that financial statement auditors conduct their audits in such a way so as to have a reasonable possibility of detecting any fraud that may materially impact the financial statements. Consequently, some frauds, especially large ones, are detected by the auditor of the financial statements.

AU-C section 240 provides substantial guidance regarding the auditor's responsibility to detect fraud. Some specific aspects of the guidance include the auditor's need to consider risks of misstatement in light of the organization's existing programs and controls, the likelihood of management override of controls, management's retrospective reviews of unusual transactions, fraud indicators, and the applicability of the fraud triangle to fraud risks.

The **fraud triangle** suggests three factors that generally apply to fraudsters: pressure, opportunity, and rationalization. Pressure typically exists in the form of a non-sharable problem, such as a large (secret) gambling debt, medical bill, or money to support an excessive lifestyle. Pressure can also come from the organization itself in the form of pressure to perform or in covering up negative results in order to look good.

Opportunity is generally much more obvious than pressure and generally applies when company employees violate trust. In order for any organization to function, a certain level of trust must be placed in employees, but such trust must be counterbalanced by an effective fraud detection system.

Rationalization is typically the excuse for committing the fraud. In many cases, fraudsters rationalize by telling themselves that they are only temporarily borrowing from the company. In other cases, fraudsters rationalize with thoughts like, "They won't miss the money," or They deserve what they are getting."

Fraud Detection by Internal Auditors and Inspector Generals

The internal auditor does a lot of the same work as does the external auditor, except the internal auditor is concerned with all fraud rather than just the fraud that impacts the financial statements. As such, the internal auditor will discover some frauds as a routine part of internal auditing work. Further, the internal auditor plays a key role in developing a system of fraud indicators, so that suspicious activities are flagged and investigated. Finally, internal auditors may be concerned with violations of the organization's policies and procedures even when they do not involve fraud.

In many governmental organizations (for example, federal agencies), an **inspector general** monitors for, detects, and investigates fraud. Inspector generals and internal auditors often work together in managing fraud risks.

Fraud Detection by Dedicated Departments

Many organizations have departments devoted to information security and fraud detection. For example, a bank may have an internal security department (that is, a loss management department) devoted to customer account fraud. Such departments may operate independently in their functional areas or under the control of a chief information officer, the controller, or the internal auditor.

Fraud Detection Systems

Within the organization as a whole, fraud detection is part of the larger internal control process. As such, it is also part of the organization's overarching **enterprise risk management (ERM) process**. Accordingly, the organization manages fraud risk within the general context of the organization's appetite for risk.

The fraud detection process represents one important component of the process to manage fraud risk. The complete process to manage fraud risk includes processes for prevention, detection, investigation, and correction. A fully optimized **fraud risk management system** will balance the costs of all these processes against fraud losses. The optimal balance will depend on the particular organization and industry, and many factors unique to the organization.

Fraud detection is a process that involves identifying and reviewing fraud indicators that suggest the possibility of fraud and the need for further investigation. Given that fraud detection is typically an imperfect process, fraud indicators frequently produce false positives and false negatives. False positives occur when a fraud indicator signals possible fraud when there is no fraud. False negatives occur when the fraud detection process fails to generate a fraud indicator when there is fraud. Optimal fraud detection requires balancing false positives and false negatives. Failure to detect fraud can be costly, but so can some fraud investigations.

Types of Fraud Indicators

Four types of fraud indicators exist: **single-factor indictors, composite indicators, random indicators**, and **pattern-based indicators**. Single-factor fraud indicators, often called red flags, can be represented by any type of apparent error, internal control violation, or unusual transaction. Although all red flags may signal possible fraud, some may be deemed more serious and deserving of investigation than others. For example, AU-C section 240 requires auditors to presume that improper revenue recognition is a fraud risk because improper revenue recognition is a common source of financial statement fraud. In general, fraud risks must be identified, synthesized, and incorporated into fraud indictors. The process of defining fraud indictors for internal fraud detection closely follows the process that external auditors use to define audit tests, except the scope of internal fraud detection is broader than the scope of auditor tests in financial statement auditing.

Composite fraud indicators involve the combination of more than one individual indicator. Ratios represent a classic example of composite indicators. For example, in a hotel an unusually high ratio of linens laundered relative to room revenues might indicate that someone is skimming revenues. An interesting aspect of composite indicators is that they are based on individual numbers that considered alone might not indicate possible fraud. Composite indicators can be anything from simple ratios to complicated formulas developed using sophisticated statistical methods such as multiple regression analysis.

The third type of fraud indicator is a random fraud indicator. Strictly speaking, random numbers do not in of themselves indicate fraud. However, they are included in the current discussion to emphasize that reliance only on red flags and composite indicators is not sufficient to develop a comprehensive fraud detection system. Fraudsters are often highly intelligent persons who design their frauds so as to make them difficult to detect. For example, fraudsters might be able to underreport the uses of linens in order to normalize the ratio of linens used to room revenues. Consequently, the only way to detect some frauds is to randomly select and investigate some transactions in detail.

The fourth type of fraud indicator is a pattern-based indicator. Pattern indictors work by analyzing patterns to establish normal behavior. Any type of transaction that does not fit within the pattern of normal behavior is deemed

suspicious or unusual and in need of possible investigation. One simple way to define normal behavior is to set limits on transaction sizes. For example, any materials requisition in excess of $5,000 might be considered suspicious and deserving of investigation.

However, pattern indicators may be much more sophisticated than simple transaction limits. They may instead be based on the context in which transactions occur. For example, an employee using a company credit card during his vacation might be considered suspicious. In this case, the employee's use of the credit card might be for a legitimate purpose and totally within company policy, but inconsistent with the employee's normal pattern of usage.

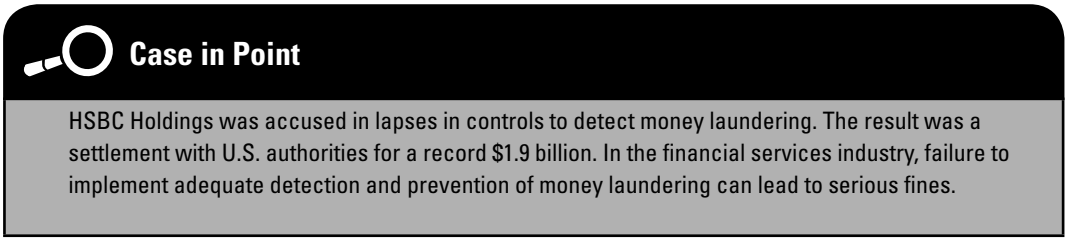
Commercial Fraud Detection Systems

Various fraud detection systems are commercially available. Some exist for specific types of fraud and specific industries, such as for credit card fraud in the banking industry or insurance claims fraud in the insurance industry. However, there are also commercially-available fraud detection systems that focus on employee fraud and regulatory compliance. For example, the Actimize Integrated Fraud Management solution[4] delivers real-time fraud detection in areas that range from money laundering to embezzlement.

There are also commercially-available software platforms that focus on continuous controls monitoring. For example, Infor Approva Continuous Monitoring[5] incorporates fraud risk scoring into its reporting system. ACL[6] also provides continuous monitoring, and its audit exchange product facilitates risk assessments and sharing fraud analytics.

Audit management systems represent another class of software that can be helpful in fraud detection. One example is CCH TeamMate.[7] This product includes functionality to assist in risk assessments, including risk scoring. Products such as this one may be used in conjunction with continuous controls monitoring tools.

Still another class of software includes data mining platforms. These types of tools can exploit complex, multidimensional patterns to detect fraud. For example, the Microstrategy Business Intelligence Platform[8] uses a very sophisticated type of database processing called Online Analytical Processing (OLAP) to simultaneously analyze very large numbers of interactions between data items. This type of processing is thousands of times faster than processing available in standard accounting systems.



Although the platforms discussed so far are mainly for large businesses, there are also many tools available for small businesses. For example, AuditMyBooks[9] works directly with Intuit QuickBooks. There are also Microsoft Excel plugins available for generating fraud indicators in Excel.

[4] www.niceactimize.com
[5] www.infor.com
[6] www.acl.com
[7] www.arlogics.com
[8] www.microstrategy
[9] www.auditmybooks.com

Developing an In-House Fraud Detection System

A **complete fraud detection system** involves five components as shown in box 8.1.

Box 8.1 Five Components of a Fraud Detection System

Component	Description
1. Risk analysis	Threat and vulnerability analysis.
2. Exploitation of expert knowledge	Involves developing a database of existing controls and expert opinions. The resulting database should take the form of rules that can be fed into a controls monitoring system such as ACL, using ACL's scripting language.
3. Knowledge discovery	Involves adding more rules to the database using brainstorming, business processes analyses, and data mining approaches.
4. Scoring and assessment	Involves mathematical and statistical modeling based on the rules developed from studying actual or simulated data. The typical approach to modeling includes five steps: sampling, exploration, modification, modeling, and assessment (SEMMA). In the first two steps, historical data is collected and explored using charts, diagrams, spreadsheets, statistical summaries, and any simple method available to gain more insight into the data. The final product of the exploration process is a preliminary model used to generate risk scores for fraud. The modification step involves refining the preliminary model with more sampling and exploration, as needed. In the next step, a formal model is developed for testing. The model is then tested in the assessment step, preferably with a different data set than the one used to develop the model.
5. Implementation	The final model is inserted into the organization's working live systems. Constant reporting and feedback are needed to keep the model up-to-date, with the goal being continuous improvement. The entire SEMMA process never ends.

Case in Point

Most credit card issuers rely on automated fraud detection systems. FICO® Falcon® Fraud Manager[10] is used by the majority of the top 20 credit card issuers. FICO's system generates fraud scores for individual card payment transactions.

Special Modeling Approaches

Alternatives to mathematical and statistical modeling include **social network analysis**, content analysis, and **Benford analysis**. Social network analysis relies on mapping relationships in social networks. Examples of such relationships include telephone calls, memberships in groups, transfers of funds between accounts, and exchanges of e-mail. The goal is to uncover relationships that might produce evidence of groups of persons working together in committing a fraud. For example, a bookkeeper might collaborate with a cashier to siphon off cash while "cooking the books." Exploring intra-company phone records might reveal an unusually large number of phone calls between these two individuals.

[10] www.fico.com

Social network analysis has been used to uncover fraud schemes not only within organizations, but also schemes perpetrated by terrorists and organized crime groups. Various commercially-available software platforms exist to perform social network analyses. For example, NodeXL[11] is an open-source Microsoft Excel template for generating social network graphs.

Content analysis involves analyzing the content of documents and messages. Special algorithms can interpret and even score such content for fraud risk. In many cases, content analysis may be used in conjunction with social network modeling and mathematical or statistical modeling.

Benford analysis approaches fraud detection by examining the frequency of numbers 1–9 as they appear as the first number in certain random data sets. Benford analysis is based on Benford's law, which says that in the first digit the number 1 is more likely to appear than the number 2, the number 2 is more likely to appear than the number 3, and so on.

In many cases, fabricated data (as part of a fraud scheme) will fail to match the random Benford distribution. For example, Benford's law predicts that the number 1 will appear about 30 percent of the time in the first digit. So in practice, its appearance of, say, only 10 percent of the time might suggest the possibility of fraud. Of course, Benford's law does not apply when the first digit is constrained to predetermined amounts, and a reasonably large sample (that is, more than 500 numbers) is required for it to be applied in a meaningful way. Benford's law can be generalized to more than just the first digit.

Fraud Investigation and Response Protocols

Fraud prevention and detection activities are never perfectly devised and implemented, so procedures and policies must be in place for investigating possible frauds. As such, response protocols are needed for the following:

- Categorizing issues and determining their severity
- Escalating or referring issues
- Investigating and closing cases
- Documenting cases
- Protecting confidentiality

A plan should be documented and approved by the board.

The investigation process begins with the handling of complaints or allegations. The following actions take place in sequence:

- Receive the complaint or allegation, which may come from a variety of sources
- Analyze the complaint for its nature and severity
- Determine the departments that should be consulted
- Advise the external auditor if financial statements are affected
- Notify other parties (for example, the board and legal counsel)
- Decide whether an investigation is warranted
- Assign the investigation to a high-level person

The specific process for conducting investigations includes the following steps:

- Develop an investigation plan based on board-approved investigation protocols
- Assemble an investigation team (with members from various departments)
- Refer the case to outside investigators, as appropriate
- Collect evidence
- Report results
- Take corrective action

[11] nodexl.codeplex.com

Evidence collection is the heart of the fraud investigation process and must proceed in a particular way. It begins with reviews of internal records, including e-mail and computer files. These reviews are coupled with reviews of external records, including customer records, news reports, detective reports, and other sources.

Once all the reviews are complete, attention shifts to interviewing individuals relevant to the investigation. It is important to begin with those least connected to the suspects, with the prime suspect being the last person interviewed. Special forensic interviewing techniques should be used in all the interviews.

Investigations should always end with a report of the investigation. The report should include only the facts and never contain opinions of guilt, even if the suspect confesses. Opinions of guilt are unnecessary and simply open the door to lawsuits for defamation.

Unified Case File

All communications and documentation regarding a fraud investigation should be kept in a **unified case file**. Access should be granted to the file on a need-to-know basis. It should be assumed that everything in the case file will eventually be subpoenaed for a civil or criminal trial.

Legal Issues Regarding Fraud Investigations

In order to reasonably develop an investigation plan, it is necessary to first consider various legal issues and the desired objectives of the investigation. Together, these considerations may affect the extent of the evidence collected.

Various legal issues that should be considered are discussed as follows:

- *Legal rights of employees under investigation.* Investigations of union employees may be subject to a collective bargaining agreement. Such agreements typically require that the employee be notified of the investigation and have the right for union representation. Investigations of state or federal employees might be subject to administrative codes.
- *Attorney-client privilege.* It is frequently best that investigations be conducted under the oversight of an attorney, thus putting details of the investigation under attorney-client privilege. This gives the organization control over how and when any case-related information may be released to third parties.
- *Justification to fire or change the duties of a worker.* Legal counsel should give the green light for any actions taken against employees who are suspects. This is true no matter how strong the initial evidence. Suspects can and do sue their victims.
- *Rights of the employer to investigate.* Consideration should be given to the types of evidence that may be collected in an investigation. Some areas of consideration should include the right to open employees' mail, monitor or record phone conversations, search employees' desks, and search employees' vehicles parked in the company parking lot. Legal counsel should give written approval for these types of activities.
- *Government involvement.* When any government agency is involved, those being investigated possess various constitutional protections that limit the power of the government to investigate. For example, evidence collected without probable cause might not be admissible in criminal proceedings. Criminal proceedings can be of financial significance to the employer because criminal courts have the power to order restitution. Further, investigations done by government agencies can spare the employer the cost of the same.
- *Reporting obligations.* Consideration should be given regarding any obligations to report the incident to law enforcement or government regulators.

Objectives of Fraud Investigations

Each fraud investigation has its own unique set of objectives. These may include the following:

- Stopping an ongoing fraud
- Providing support for an insurance claim
- Documenting a tax loss
- Deterring future frauds
- Controlling embarrassing reports in the news media

- Discovering and repairing internal control weaknesses
- Punishing the guilty and obtaining restitution

Clarifying the objectives in fraud investigations is essential because the emphasis placed on particular objectives can determine the scope of a particular investigation. Further, the objectives themselves may conflict with each other. For example, punishing the fraudster via criminal prosecution may lead to embarrassing disclosures in the news media, which in turn may lead to the loss of confidence from customers or clients. Consequently, punishment of the fraudster is not always of primary concern.

Consider a case in which the suspected fraudster is no longer with the company. The company might simply opt to accept the loss without pursuing civil or criminal prosecution; however, at the same time the company might want develop sufficient documentation to support a tax loss. An investigation into the amount of a loss is quite different from an investigation that seeks to develop strong forensic proof regarding the guilt of a particular suspect. Along similar lines, the standards of documentation needed to support insurance recovery (that is, proof of loss) may be different still.

Stopping an Ongoing Fraud

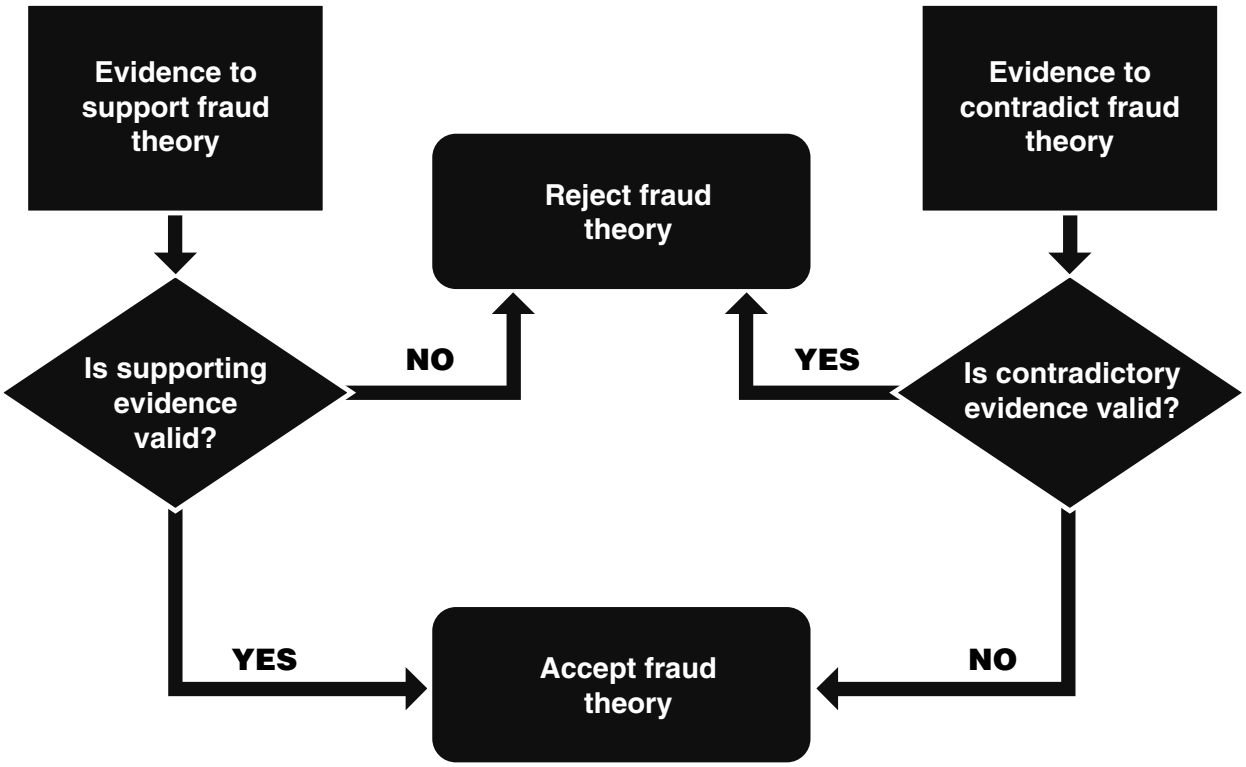
Immediately stopping an ongoing fraud is not always the optimal approach. Consider, for example, a case in which a company is aware of an ongoing fraud within a particular department, but the company does not know which employees may be involved. In a case like this, the company can send a team of auditors to the department and, with a lot of fanfare, announce that a fraud investigation is underway. This approach is likely to trigger an immediate halt on the fraud. However, because the fraudster is alerted to an investigation, the audit team might then end up conducting a long investigation without ever proving the identity of the perpetrator or even fully understanding the control weakness that led to the fraud.

In some cases where the fraud losses are large it may be necessary to immediately stop the fraud without regard to tipping off the fraudster. A company cannot sit by and just watch its resources being drained away by fraud. On the other hand, there is no better way to prove fraud than by catching the fraudster in the act using legal surveillance methods.

Law enforcement is frequently very reluctant to prosecute internal frauds such as in cases of embezzlement. Embezzlement investigations can require many months of hands-on forensic accounting work. The standard of proof in criminal cases is "beyond a reasonable doubt." Practically speaking, this means that the investigator and prosecutor must prove that no one else besides the accused could have possibly absconded with the missing funds.

Typical defenses against embezzlement charges include arguments that the funds could have disappeared in a prior period, that an accounting error was made, that others with access to the account could be the guilty ones, or that missing records could explain the missing funds. In some cases an account in question involves transfers to and from other accounts, leaving open an argument that the funds must be in a related account, but the related accounts may involve transfers to and from still other accounts. In many cases of fraud, the fraudster either deletes transactions, files, records, or documents whose absence can be used by a defense attorney to argue that their presence could explain the missing funds. The prosecutor is then left with the burden of "reverse proof" to disprove each and every possibly alternative explanation for the missing funds, as shown in figure 8.1.

Figure 8.1
Reverse Proof



Given the burden of reverse proof, and given that developing such proof can be very time consuming and expensive, it is frequently much simpler to catch the fraudster in the act. Prosecutors and police love video recordings that clearly show guilt. On the other hand, the same individuals typically show little interest in spending months wading through complicated accounting records. Further, in most cases law enforcement does not have the resources to do detailed forensic accounting investigations even if they want to. As a result, a primary consideration in many fraud cases should be with respect to the possibility of catching the fraudster in the act.

Providing Support for an Insurance Claim

Insurance policies generally require that the company do everything it can to mitigate losses. As a result, permitting a fraud to continue, even for a reasonable time to conduct an investigation, may prevent the company from recovering a fraud loss from its insurer. On the other hand, insurance policies normally require that the insured provide proof of loss, which might be difficult to provide if the fraudster has done significant damage to the financial records. The best proof of loss might come from catching the fraudster in the act and obtaining a confession. In any case, insurance policies may require that the insured notify the insurer as soon as fraud is even suspected.

Determining a Tax Loss

In some cases, a fraud loss may represent a tax deduction or adjustment to reported revenues. Internal Revenue Service rules of documentation may permit merely estimating losses rather than precisely determining them. The burden to produce estimates is considerably lighter than that required for reverse proof in a criminal case.

Deterring Future Fraud

If the primary objective of a fraud investigation is to make an example of the fraudster, then the company may expend much more on the investigation itself than is lost in the fraud. However, as already discussed, the simplest route to success is to catch the employee in the act or obtain a confession.

Controlling Embarrassing Reports in the News Media

A very large percentage of frauds are never even reported to law enforcement. Companies do not like to admit to their customers, vendors, and business partners that they have permitted themselves to be robbed. As a consequence, the company may fire the employee for not following procedures with no mention of the fraud. Accusing an employee of fraud can too easily lead to the employee suing the company. As a result, many companies like to handle internal frauds as quietly as they can. In such cases, very little investigation may be called for.

Discovering and Repairing Internal Control Weaknesses

In most cases, companies are going to at least seek to understand how the fraud was committed. Such knowledge is necessary to close up any control weaknesses and prevent future frauds. In many cases, the investigation requirements may be minimal and only seek to understand how the fraud was committed. However, in some cases, considerable expense may be required to fully unravel a fraud scheme.

Punishing the Guilty and Obtaining Restitution

It is generally possible to sue the perpetrator. However, in many cases the perpetrator will not have significant assets to pay a judgment, so an expensive investigation with the objective of recovering from the fraudster may prove unfruitful. On the other hand, if the company can persuade law enforcement to investigate and prosecute the case at the government's expense, a prosecutor can incorporate restitution into a plea arrangement, or a criminal court can order restitution. To avoid charges of extortion, a company should carefully avoid threatening a suspect with demands to pay or be punished. Any settlement negotiations with a suspect should be handled by legal counsel.

Evidence Gathering

Evidence is anything that may clarify the truthfulness or falsity of any assertion that may be relevant to the case at hand. For the investigator, evidence generally includes tangible objects, documents, and results of observations and interviews. For an attorney in a court setting, the investigator's evidence may be presented in the form of tangible objects, exhibits, and fact-based testimony. In addition, evidence in a court setting may also include expert opinions.

Of course, relevancy issues and the rules of evidence provide that not all evidence gathered by an investigator may be used in court. Further, attorneys may gather additional evidence after the investigation is completed. By and large, it is the investigator's responsibility to use the investigation as a vehicle to gather the evidence that the attorneys need to build a court case. Given a reasonably complete body of evidence, the attorneys will then use the opinions of experts to assist the court in interpreting evidence. Attorneys may also hire expert consultants to assist attorneys in interpreting evidence out of court.

Generally speaking, the fraud investigator will gather and organize evidence regarding a particular fraud scheme. In a particular case, the elements of a fraud scheme will answer the questions regarding who, what, when, where, how, and perhaps why. Among these questions, the question of "what" must be addressed first: What happened? Was there a fraud?

Generally speaking, if there is no good reason to suspect that a fraud has been committed, then there is no good reason to launch a fraud investigation. Further, once an investigation is launched, there is no good reason to continue an investigation unless sufficient evidence exists to confirm the suspicion. This need to justify launching and continuing an investigation is called the **predication principle**.

The issue of predication is especially important to law enforcement. Without some reasonable basis to believe that a crime has been committed, law enforcement policies generally prohibit investigations. A reasonable basis must

exist in the form of probable cause, a fairly low threshold. An anonymous tip may be considered probable cause. Probable cause is especially important to law enforcement because officials generally need to demonstrate probable cause in order to obtain search warrants, subpoenas, and make arrests.

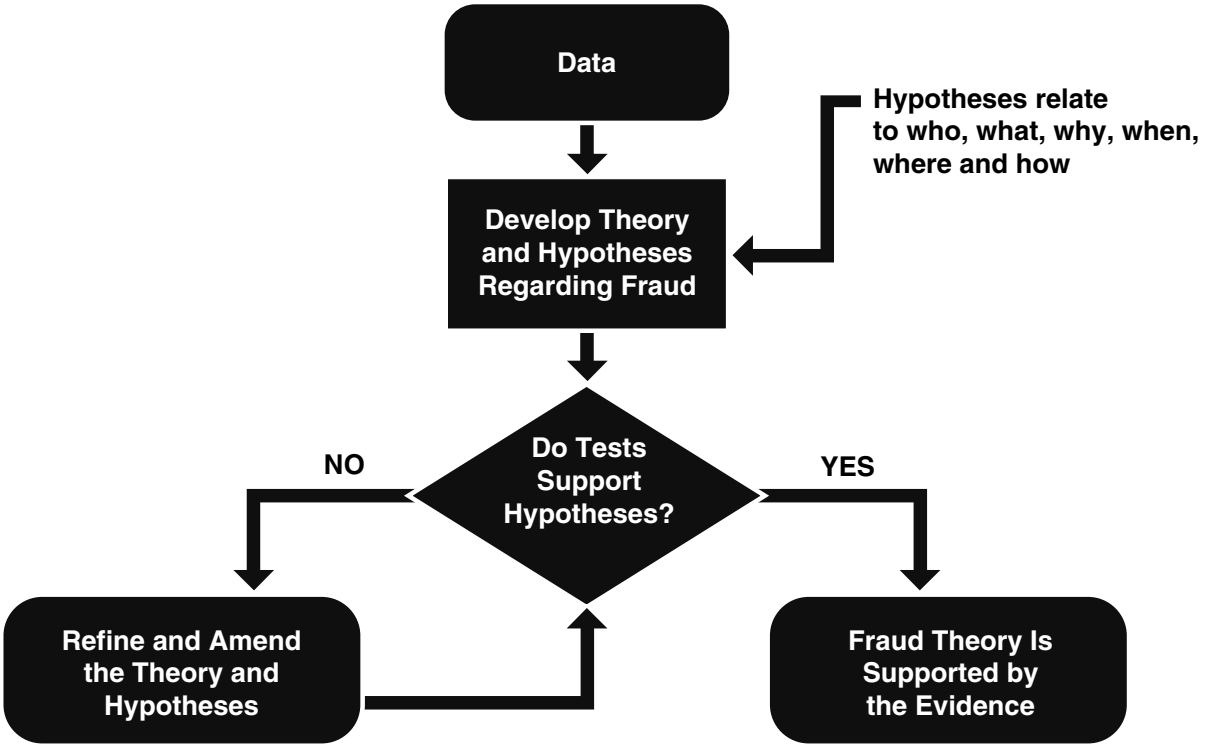
The applicability of a probable cause requirement to law enforcement stems from the Fourth Amendment to the U.S. Constitution, which limits the rights of the government with respect to search and seizure (including arrest). Under the exclusionary rule, evidence obtained without sufficient probable cause (and in many cases, a court order) may be excluded from criminal proceedings. Further, evidence gathered by law enforcement as a result evidence previously obtained in violation of the Fourth Amendment may be excluded as "fruit of the poisonous tree."

The issue of predication is a bit different for a forensic accountant, especially an independent forensic accountant hired to investigate a fraud. The Fourth Amendment restrains only government officials and not accountants serving as investigators. However, economic, ethical, contractual, and legal considerations constrain forensic accounting investigators from investigating without sufficient predication. Economic constrains may apply because investigations are costly; ethical constraints may apply because billing clients for unnecessary investigations may be improper; contractual constraints may apply because union contracts may limit management's rights to investigate; and legal constraints may exist that restrict the types of investigatory activities available to investigators.

Fraud Theory Approach

Given that sufficient predication exists, the investigator develops a **fraud theory**—a theory of the fraud scheme shown in figure 8.2. Initially the investigator might not have evidence to support all the details of the fraud theory, and the prime suspect might initially be unknown, but the initial fraud theory provides a beginning point for the investigation.

Figure 8.2
The Fraud Theory Approach



As the investigation commences, the fraud theory simply hypothesizes a particular fraud scheme. Evidence is then collected and examined and used to accept the theory, or to modify it and gather more evidence as indicated by the modified theory. The process may iterate until the investigator is satisfied with both the theory and evidence collected.

At the end of the evidence collection process, there may be sufficient evidence for a trier of fact to conclude that a particular suspect is guilty. Regardless of how strongly the evidence may point to a suspect's guilt, the investigator's responsibility is limited to simply collecting sufficient evidence so that a trier of fact can determine guilt or innocence. An investigator expressing an opinion of guilt would not only usurp the function of the trier of fact, it would also invite lawsuits from suspects. In fact, there have been cases in which off-hand verbal comments by investigators have led to them being sued by suspects. Further, professional ethics codes may specifically prohibit members from expressing opinions relating to guilt or innocence. The ethics code for Certified Fraud Examiners states, "no opinion shall be expressed regarding the guilt or innocence of any person or party."[12]

The Fraud Theory and Court

In preparing the court case, the attorney might adopt a fraud theory that differs from the fraud theory that guides the investigator. For example, in a case of embezzlement, the perpetrator may destroy large portions of the accounting records in order to cover up the crime. However, due to the strength of the evidence, the prosecutor might focus only on the destruction of the records in trial, and completely ignore embezzlement. Instead of presenting an embezzlement scheme to the court, the prosecutor may present a case of electronic vandalism by a disgruntled employee.

Consequently, in order to avoid being sued, and to avoid limiting the ability of attorneys to present their own theory in court, the forensic accountant may opt to avoid mentioning any particular fraud scheme in the fraud investigation report. A common approach is for the investigator to simply provide evidence that can help explain a loss. The investigator might completely avoid terms such as "fraud," "theft," or "suspect," except perhaps to the extent that the use of these terms relates to the motivation to conduct the investigation.

Evidence Collection Process

Particularly important is that evidence collection should not begin by interviewing or confronting any suspects, even if there is very good reason to believe that a particular suspect is guilty. In fact, approaching a suspect too soon can completely ruin an investigation. It may lead to the suspect destroying evidence, to providing the suspect an opportunity to concoct a narrative that appears to be consistent with the facts, or cause the suspect to "lawyer up" and be of no help in the investigation.

The goal is to obtain as much evidence and knowledge of the case as possible before approaching a suspect, and, when possible, not let the suspect know what evidence the investigator has. Even better yet, it is best that the suspect not even realize that he or she is a suspect. This way, a guilty suspect may feel the need to cooperate with the investigation in order to avoid appearing to be guilty of any wrongdoing.

As has been previously mentioned, catching a suspect in the act, or getting a confession, is a highly desirable way to solve a fraud case. The very best evidence is a signed confession that is obtained under proper conditions. Therefore, to the extent possible, the entire evidence collection process should be conducted in such a way so as to maximize the chances of getting a confession.

In many cases, the cover up itself may be the best evidence of the fraud. The goal is to get the prime suspect to cooperate and go on record with lies designed to cover up the fraud. The investigator allows the suspect to lie freely without any awareness that the investigator already has solid evidence to the contrary. Then, after the suspect has gone on record telling many lies, the investigator springs the trap and confronts the suspect with proof of the lies. At this point, the suspect may be inclined to confess. Methods for interviewing suspects and obtaining confessions are discussed in the following sections.

[12] www.acfe.com/code-of-ethics.aspx

Issues Associated With Gathering Specific Types of Evidence

As previously discussed, various categories of evidence include physical (tangible) documents, observations, and interviews. Issues associated with the gathering of each of these categories of evidence are discussed as follows.

Physical Evidence

Physical evidence is evidence that is tangible; that is, it can be touched. Therefore, physical evidence can be anything from a fingerprint to a computer. Documents may also be classified as physical evidence, but for the purposes of the present discussion, documents are considered to be a separate category of evidence. This is because documents can be either physical (that is, on paper) or electronic.

The most important considerations with respect to physical evidence are preservation and the chain of custody. A first step in any investigation is safeguarding and protecting evidence from loss or damage. In some cases it may be necessary to quickly seize computers, storage devices, equipment, and other physical evidence. In any situation, consideration should be given to not spoiling finger prints and trace evidence.

As physical evidence is collected, it should be carefully inventoried and logged using serial numbers and other identifying information. Small items should be stored in sealed evidence bags. All items should be moved to a secure storage location where they cannot be accessed by anyone without authorization from the investigator.

Maintaining a careful chain of custody is essential. Transfers of items from one person to another must be carefully documented, all the way from their initial gathering to the courtroom. Any gaps in the documentation or times when the items are not under the secure control of an authorized person can render the evidence inadmissible in court.

Documentary Evidence

Documentary evidence (paper and electronic documents) is frequently relevant to fraud investigations. Important considerations include maintaining the chain of custody and organizing and cataloging documents logged into evidence. Cataloging and organizing are critical in order to build a case for court and comply with discovery requests.

Bates numbers are typically used to assist in cataloging documents. Bates numbering involves marking or stamping documents with arbitrary identification numbers or codes. The common practice is to stamp the original documents and then work with scanned images or copies while keeping the original documents in secure storage. Optical character recognition and computer indexing may be used to assist in cataloging and organizing scanned images.

In handling original documents, consideration should be given as to whether they may contain fingerprint evidence. In order to preserve fingerprints, documents should be handled as little as possible and touched only in areas least likely to contain fingerprints.

Ideally, fingerprints should be lifted from documents prior to the documents being examined and stored. However, critical documents can be stored before complete examination by individually placing them in cellophane or in a manila envelope. The manila envelope can then be sandwiched between two sheets of rigid cardboard for mailing.

General Sources of Documentary Evidence

There are four general sources of documentary evidence:

- *Documents in the public domain.* These documents include all public records and trash. Public records generally include civil and criminal court records, property tax records, regulatory filings, professional licensing databases, vehicle registrations, driver's license data, vital statistics records (for birth, death, marriage, divorce, and so on), and all official government records. The public domain also includes anything publicly available on the Internet, including social media sites.

  Trash may also be considered to be in the public domain. Documents that have been discarded or left in a location for which there is no reasonable expectation of privacy are said to be left in an area referred to as **curtilage**. The curbside area used for trash pickup is a good example of curtilage.

The public domain contains some gray areas. Many types of information, such as those relating to insurance and employment, may be sold by information brokers but not otherwise available. Regulations for these types of data may vary from one jurisdiction to the next, but in some cases such information is legally available without any subject consent requirement.

- *Documents released by consent.* Many documents can be obtained by consent of the owner. Examples include tax returns, credit reports, school records, bank records, and medical records.
- *Documents obtained by **subpoenas duces tecum** (commonly referred to more simply as subpoenas).* Attorneys in criminal and civil proceeding generally have the power to subpoena documents from both opposing parties and third parties, although discovery requests instead normally apply to opposing parties. The subpoenaed party may refuse to comply with the subpoena for various reasons, such as because the documents are protected by privacy laws, because the requests are over burdensome, or they are not relevant to the case at hand. In the event of a party's refusal to comply with the subpoena, the opposing party may file a motion to compel with the court. The court may then enter an order to compel. The court may use sanctions within its power to enforce its order. In civil cases, sanctions can involve fines against the attorney's themselves, an order to pay the opposing party's discovery costs, or even a summary judgment against the noncompliant party.

  In some jurisdictions, law enforcement officials or regulators have subpoena powers. Depending on the jurisdiction, officials may or may not need a court order to obtain a subpoena. In some jurisdictions, an internal probable-cause memo or authorization of a prosecutor may be all that is needed to issue a subpoena.

  Subpoenas from law enforcement officials can sometimes be silent, meaning that the individual who is a target of the subpoena may be completely unaware of its existence. In other cases, the law may require that the target be notified in order to give the target an opportunity to have the subpoena quashed by a court.

  In cases involving the Foreign Intelligence Surveillance Act (FISA), subpoenas may be issued by a secret FISA court, and a third-party recipient of subpoena may be ordered not only to comply with the subpoena, but to also keep secret its existence.
- *Documents obtained by **search warrant**.* Search warrants are orders from courts that empower law enforcement officials to seize evidence, including documents. The normal basis for the issuance of a search warrant is a probable-cause affidavit signed under oath by the official requesting the warrant.

  Unlike with subpoenas, search warrants must always be authorized by a court. Further, search warrants can be executed immediately, whereas the processes of issuing a subpoena and obtaining compliance can take weeks or months. Search warrants are normally issued for a particular designated place (a geographical location, a person, or a vehicle) and purpose, and are only valid for a specified narrow window of time. Law enforcement must leave a copy of the search warrant at the place of execution, along with an inventory of items removed.

  There are various exceptions that permit officials to sometimes seize documents without a warrant. For example, an official who has a right to be in a particular place may at that time seize evidence that is in plain sight and suggests illegal activity. Various other exceptions also exist, such as those relating to exigent circumstances and vehicle searches in conjunction with certain traffic stops.

Derived Document Evidence

The forensic accountant can also derive evidence, possibly with the help of expert opinions, from existing records using various audit and investigatory methods. Examples include financial ratios, horizontal and vertical comparisons of financial data, confirmations, and reconciliations. Techniques such as tracing, vouching, and statistical sampling can be used to identify individual transactions and account balances of interest. Surprise inventory counts can also be helpful.

Specific techniques apply to specific types of fraud theories. For example, in cases of embezzlement, reconciliations of bank accounts, accounts payable, and accounts receivable may be of help, along with confirmations.

Questioned Document Analysis

Questioned documents are documents in which the authorship or authenticity is in question. Documents may be questioned for a variety of reasons that include apparent alterations (additions and erasures), sequence numbers that appear to be out of order, missing signatures, unusual data, missing originals, inconsistent fonts or styles, and so on.

Analysis of paper documents can include handwriting analysis, fingerprint extraction, and detailed analysis of inks, fonts, and the paper itself. Such analyses are typically conducted by a forensic scientist in a laboratory. In some cases, viewing documents under ultraviolet light can review alternations or irregularities in the ink or paper that may not be visible to the naked eye. Microscopic analysis of fonts and chromatography of ink samples may also be helpful.

Handwriting Analysis

The main issue in **handwriting analysis** is verifying whether a handwriting sample in question was authored by a particular person of interest. Samples of handwriting, called exemplars, are obtained from the person of interest and compared to the handwriting sample in question.

Handwriting analysts look carefully at specific characteristics of the handwriting, including the shapes of the letters, spacing between letters, the ways in which the letters are connected together, and even pen pressure. A special type of handwriting analyst, a forensic stylist, compares exemplars to questioned documents while considering syntax, choices of words, spelling, punctuation, grammar, and so on.

Handwriting analysis is not an exact science. Expert opinions from handwriting analysts may be admissible in court, but their conclusions may involve statements like, "The handwriting in the exemplar is consistent with that in the exemplars." Of course, the reverse may be true, and handwriting analysis may be used to argue that the author of the exemplars is not also the author of the questioned document.

Digital Forgeries

Desktop software is readily available to generate convincing forgeries of almost any document. Forgeries created using a product like Adobe Photoshop® may show traces that betray their authenticity. For example, the image file itself may show evidence that it was constructed in layers. Layers are commonly used to create images from multiple sources. For example, one might take an image of an invoice and overlay on top of it a separate image of someone's signature. The two images could then be combined to appear as a single image. The result is a document with two layers collapsed into a single layer. So, at first glance, the resulting document may appear just like any other. However, a very careful analysis might reveal that the layers do not line up exactly as they should, or under very high resolution analysis, the pattern of pixels may shift at the boundary of the two layers. Further, some image processing software maintains an internal history of changes to the image. In some cases a fraudster might be unaware that the change record exists and neglect to delete it after creating the image.

Observation Evidence

Observation involves monitoring the conduct of persons of interest in an investigation. The monitoring can be via visual, audio, or electronic means. Laws vary in different jurisdictions, but as a general rule employers have a right to monitor the work-related activities of their employees, especially in cases when the employer informs employees of the monitoring. However, because of constantly changing and complex laws, all monitoring actives should be approved by legal counsel.

Observation can be one of the most powerful tools available to the investigator. A visual, audio, or electronic recording of a suspect's improper activities can provide the type of evidence that prosecutors love to present in court. A video recording of employees stuffing money in their pockets is infinitely easier for a jury to understand than expert testimony regarding the complex accounting maneuvers that may be associated with an embezzlement scheme. Further, a highly-incriminating recording of improper activity can greatly increase the likelihood of obtaining a confession, which in turn can greatly help in solving and unwinding a fraud scheme.

Surveillance involves surreptitious observation. In forensic investigations, surveillance is almost always surreptitious. The surveillance is normally done only on company property, but in some cases it is necessary to monitor employee conduct that occurs outside of company property, such as on the Internet with social media activities.

Invigilation is a special observation technique used by investigators that monitors employees' conduct first when they believe they are being observed, and then again when they believe they are not being observed. The investigator looks for changes in behavior between the two sets of circumstances. For example, employees stealing from the company might only work after hours as part of the fraud scheme. When they believe they are being observed they might leave work at the normal time.

Invigilation alone might not lead to a complete unraveling of a fraud scheme, but it can assist the investigator in identifying suspects for further investigation and help narrow the scope of the investigation. The entire thrust of gathering documentary and observation evidence should be to narrow the scope of the investigation by developing a strong fraud theory and identifying prime suspects in preparation for **interviewing**.

INTERVIEWING

Interviewing (sometimes called interrogation, especially when conducted by government officials) is a process of asking questions, giving feedback, and listening to responses. The ultimate goal in interviewing is to obtain a confession. Related goals include collecting as much useful information as possible and getting the stories of suspects on record.

The best way to get suspects on record, and to get a confession, is to interview them without their even realizing they are suspects. In this way, they may feel free to speak freely in order to give the appearance of innocence. Investigators use several techniques to get suspects to speak freely:

- They tell the suspect they are just asking some routine questions.
- They approach the suspect in a very relaxed and friendly manner.
- They act distracted and bored.
- They establish rapport with the suspect.
- They mix sensitive questions along with routine questions to avoid telegraphing suspicions.
- They are careful not to ask questions in a way that would make the suspect uncomfortable.

If the investigator's work has been thorough prior to the interview, he or she may possess a considerable amount of information in the case. He or she might even have strong proof that the suspect is guilty, but nevertheless the investigator will still seek to get the suspect to speak freely and go on record. The suspect might say many things the investigator knows to be lies, but the investigator will continue the interview without giving the suspect even the slightest hint of what he or she already knows.

After the suspect is fully on record, the investigator will confront the suspect's lies, one a time, with facts that prove the suspect's guilt. Given that the suspect is caught in many lies, and given the evidence on the table, the suspect may be inclined to confess. A skilled interviewer will know how much coaxing and how much pressure to apply to get the confession. In many cases, the investigator will maintain a friendly, supportive, and nonjudgmental stance and even help the suspect rationalize the crime. For example, he or she might say something like, "I really understand what you did. You were in a tight spot and needed the money to help your family." A really skilled investigator can get into the mind of the suspect and develop so much empathy that the suspect will confess to everything, just being happy to share his or her story with someone who is of like mind.

Case in Point

In practice, the time and money are not available to prosecute most financial frauds without a confession. Law enforcement and forensic accountants rely heavily on interviewing methods, with an eye on obtaining a confession. In other words, cases are won or lost based on the forensic accountant's interviewing skills. As a result, one of the worst things that can be done is to prematurely confront a suspect at the onset of an investigation. That can cause a suspect to lawyer up and eliminate the possibility of a confession.

Order of Interviews

As previously discussed, non-suspects and those least associated with the primary suspect should be interviewed first. The primary suspect should be interviewed last. If there is more than one suspect, the primary suspect should be interviewed after the other suspects. Following this sequence permits the investigator to gather the maximum amount of information for the interview with the main suspect.

Preparing for Interviews

Proper preparation for interviews requires studying the interviewees' resumes, work histories, and consideration of the fraud triangle as it applies to each employee. The fraud triangle can be a very powerful tool in narrowing down a pool of suspects. For example, any sign that an employee may be living beyond his or her means or could be suffering financial problems can indicate that he or she is experiencing sufficient pressure to commit fraud.

Any change in an employee's normal behavior may be an indication of guilt. In many cases, a dishonest employee will become withdrawn and distant from other employees. In some cases, the employee might become unfriendly or even hostile.

The Set and Setting for Interviews

Interviews are best conducted in a neutral location. Interviewing suspects in familiar locations is not recommended. Generally speaking, it is better that suspects feel at least a bit outside of their normal comfort zone. Further, in a neutral location the investigator can simply get up and leave an uncomfortable situation when necessary.

Interview rooms should be devoid of any distracting objects. Suspects skilled at deception can focus on objects in the room to help mask changes in their demeanor. Further, it is best that suspects not be seated behind a desk or table in order to reveal all changes in their body language.

The door to the room should be unlocked at all times. This prevents suspects from claiming that they have been held prisoner. Normally one investigator needs to be present for routine interviews, but the presence of a second investigator is advisable when there are admission-seeking questions. However, the second investigator should sit off to the side to avoid an appearance of ganging against on the suspect. Finally, the room temperature should be comfortable. Uncomfortable conditions can affect the suspect's body language.

In general, it is best not to record interviews, although taking careful notes is recommended. The mere fact that an interview is being recorded can make a subject uncomfortable to the point of not cooperating. On the other hand, law enforcement frequently records interviews.

Individual Interviews of Suspects

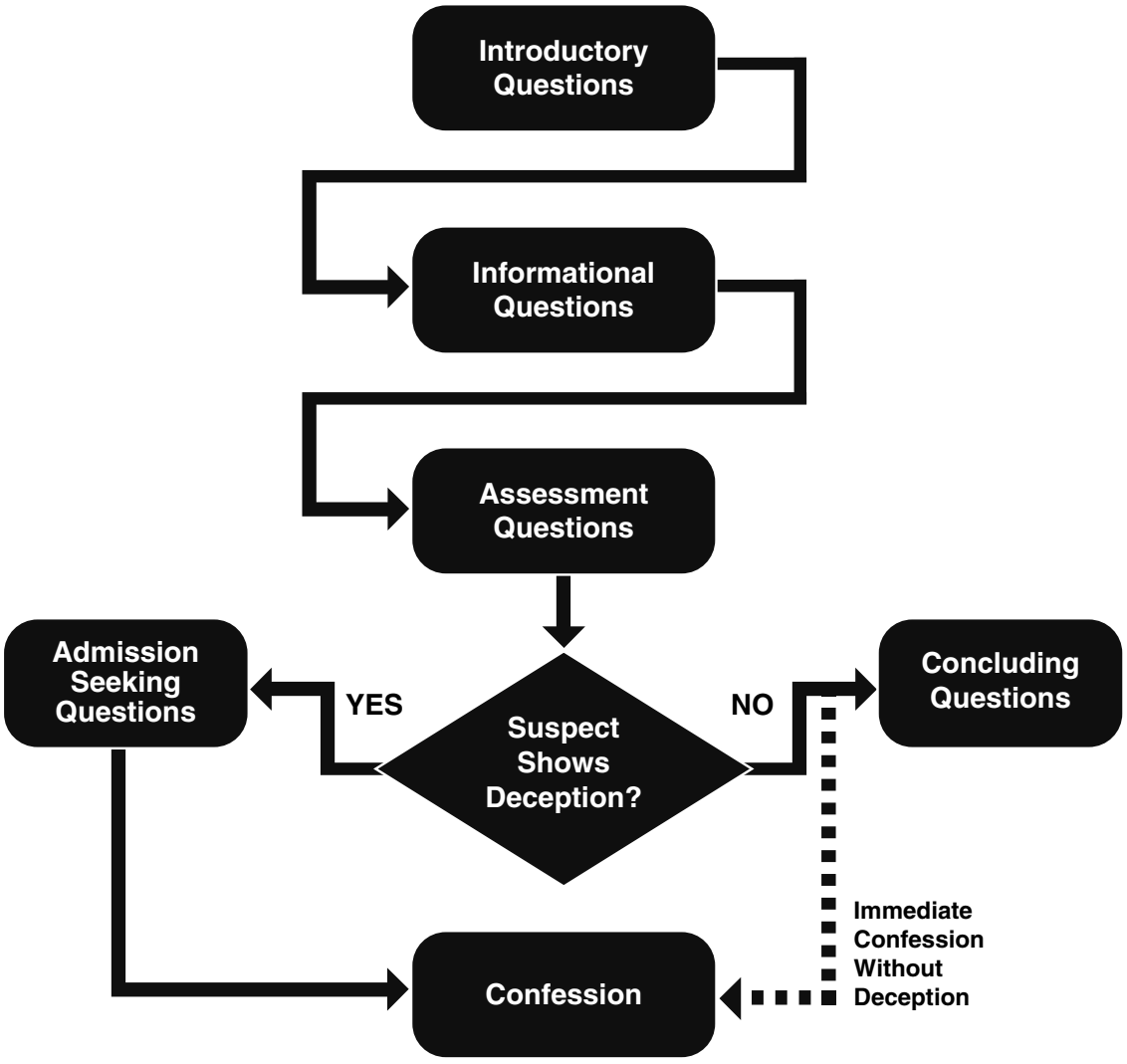
Interviews with suspects begin with general **introductory questions** intended to establish rapport with the suspect, obtain the suspect's cooperation, state the purpose of the interview, and gain an understanding of the suspect's demeanor in a non-confrontational context. Gaining such an understanding in a non-confrontational setting is referred to as calibration. The idea is to have a base point from which to gauge the suspect's change in demeanor and thereby assess deception later in the interview when, having asked a question, the suspect's answer may suggest guilt.

Rapport can be established by engaging in small talk and downplaying the importance of the investigation and interview. A really good interviewer can engage suspects in conversation so natural that the suspect forgets that he or she is even being interviewed as part of an investigation.

Introductory questions are followed with **informational questions** designed to obtain information relevant to the investigation, and possibly eliminate the interviewee as a suspect. See a depiction of the process in figure 8.3. Although it is best practice to determine who a suspect is before any interviews, answers to interviewee questions can always change the investigator's mind, one way or the other.

Introductory questions should seek to cement the investigator's understanding of internal control practices, individual responsibilities, and specific events that are relevant to the case and that the interviewee may be aware of. The investigator's primary concern in collecting informational questions is simply to collect facts rather than to evaluate the honesty of the suspect. The investigator is also concerned with getting the suspect on the record. At this point, the investigator does not reveal to the suspect the incriminating evidence that the investigator is holding back.

Figure 8.3
The Interviewing Process



The investigator's next step is to ask **assessment questions**, which are questions designed to determine if the suspect shows signs of deception. Such questions will focus on the sensitive aspects of the case, and the investigator may begin to reveal incriminating information that he or she has been holding back thus far. The goal is to carefully observe changes in the suspect's demeanor when pressed on sensitive matters and when confronted with incriminating information. Such changes can typically be observed in the suspect's voice, body language, and manner of answering. Some indicators of deception are as follows:

- Hesitancy to answer, sometimes accompanied with words like "ah" or "um."
- Pointing feet or other body parts towards the door, and assuming a "fleeing position."
- Fidgeting and nervousness.
- Moaning and groaning.
- Answering questions with questions.
- Dropping eye contact.
- Certain eye movement patterns (subsequently discussed).
- Unreasonable lapses of memory
- Partially covering the face or mouth with the hands.

- Answering with qualifiers. For example, when asked the question, "Have you ever stayed in the office after hours in the last month?" A suspect might respond, "No, not normally." In this case, the suspect's use of "normally" may be an attempt to evade answering the question.
- Pleas of innocence or for credibility. For example, "I'm not lying. Just ask any of my friends and they'll tell you I'm an honest person."
- Any change in body language or demeanor from the baseline that was obtained in calibration. For example, a suspect might scratch his or her head or rub an eye when lying.

After the investigator has determined that the suspect exhibits deception, the investigator will begin with **admission-seeking questions**. By this time, the investigator may have dropped all available incriminating evidence on the suspect, including evidence of lies in the earlier part of the interview. If that is the case, the suspect may be somewhat confused and vulnerable, leaving a good opening for the investigator to go for a confession.

Admission-seeking questions represent a preliminary step in obtaining a confession. Rather than directly asking the suspect to give a complete confession, the investigator may seek to get the suspect to admit to specific acts. Such acts might be tantamount to the suspect accepting some responsibility for the fraud. For example, the investigator might ask the suspect to admit to having made an error in, say, failing to make a single bank deposit when many such deposits were not made over a period of months. Using this approach, the investigator will refrain from using words like "fraud" or "crime."

A related type of admission-seeking question is a compound question that leads to an admission of guilt regardless of how it is answered. For example, the investigator might ask, "Is this the first time you ever put the cash receipts in your pocket?" Asking a question like this can make it easier for the suspect to admit to the crime because answering does not require the suspect to directly come out and say, "I stole the money."

A **confrontational question** is best asked right after telling the suspect that the investigation has revealed solid evidence to justify asking such a question. For example, the investigator might say, "I have absolutely solid evidence that you put the money in your pocket." The suspect is likely to believe this statement if the investigator has already shown the suspect proof that the suspect has lied earlier in the interview. A suspect is likely to give up lying after being caught in one lie after another.

Another type of admission-seeking question provides the suspect with rationalizations. This involves asking a leading question like, "Did you take the money because you were in a tight spot financially, or because you just wanted to have more money in your bank account?" As with a compound question, this type of question can make it relatively easy for the suspect to admit guilt. Generally speaking, the goal is to make it as easy and painless as possible for the suspect to admit guilt.

Once the suspect begins to admit guilt, the investigator can help the confession process along by sounding sympathetic to the suspect. For example, if a suspect claims that he or she stole the money to pay medical bills, the investigator can reply with something like, "Yes, I understand. This is something that could happen to anyone."

The Confession

Once the suspect makes a verbal confession, the investigator should seek to get it in writing. The best way to do that is to have the written confession ready before the interview. Having it ready for the right moment eliminates giving the suspect time to have second thoughts.

The written confession should carefully identify the suspect, clearly state the crime in detail, certify that the confession was given freely and voluntarily, and provide for release of the information to third parties. The suspect should sign a separate document for each crime committed. Each document should also be signed by a witness and dated.

Concluding Questions

After the admission-seeking questions (and possible confession), suspects should be thanked for their cooperation and asked **concluding questions**. Such questions may include a thank you for the cooperation, an offer for the suspect to add any additional information, and a request for continued cooperation. The investigator may help calm the suspect's fears be promising to let management know how much the suspect cooperated.

For non-suspects, concluding questions immediately follow the informational questions and involve thanking the interviewee, verifying the information provided by the interviewee, offering the interviewee the opportunity to provide any additional information, and making a request for continuing cooperation. The investigator might also ask the interviewee not to discuss the interview with others.

Flow of the Interview

In theory, the interview begins with introductory questions, proceeds to informational questions, moves on to assessment questions, and then finally progresses to admission-seeking questions and a confession. In practice, deception may be apparent from the beginning, and the suspect might begin to confess at any time.

Another thing that can happen is that the suspect may suddenly stop cooperating. This problem is least likely to happen if the investigator does not drop any evidence of the suspect's guilt until the suspect is fully on record. Up to the point that the suspect is fully on record, the suspect will have a very strong incentive to cooperate in order to maintain an appearance of innocence.

However, if at any point in the interview the suspect declines to answer questions, the investigator should say something like, "I will have to report to management that you have refused to cooperate in this investigation." This tactic can effectively persuade the suspect to continue with the interview.

Another motivation for a suspect to continue with an interview may be that the suspect wants to know how much the investigator knows. Therefore, plain curiosity can keep a suspect talking. A skilled investigator can use such curiosity to gain an advantage by dribbling details so as to peak the suspect's interest.

Advanced Methods for Assessing Honesty

The ability of the investigator to assess the interviewee's honesty is key to not only conducting good interviews, but to solving cases. Skilled investigators are very good at detecting deceit and recognizing honesty. The ability to discern the honest from the dishonest means the investigator has the ability to eliminate suspects. As previously discussed, developing a fraud case from financial records can be very time consuming and expensive, so interviewing can be thought of as a shortcut to solving a case.

Eye Movements

Suspects' patterns of **eye movements** when answering questions can signal deception. The theory is that individuals move their eyes in one direction when they honestly recall answers to questions from memory, and in a different direction they deceptively construct answers that do not exist in memory. According to the theory, the exact pattern of eye movements for honest recollection versus deceptive construction depends on whether the individual's dominant manner of communication is visual (sight), auditory (hearing), or tactical (touch).

As shown in figure 8.4, a visually-dominant person looks up and to the left, or straight ahead, when recalling something from memory. The same person will look up and to the right when constructing an image of something that never occurred.

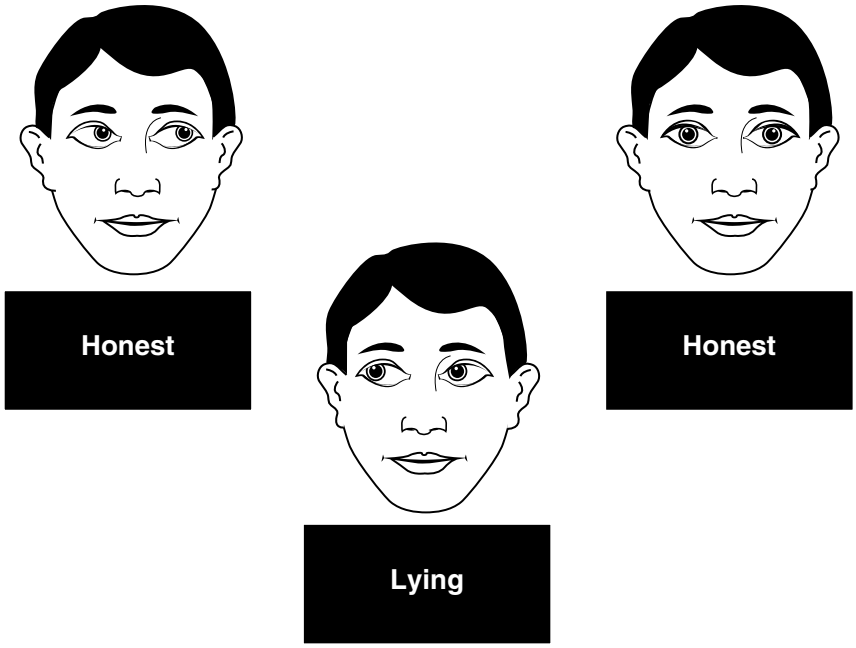
An auditory-dominant person looks down to the left, or straight ahead to the left, when recalling from memory. The same person will look to the right when constructing a story about something that never occurred.

A tactically-dominant person may exhibit a relatively more complex pattern that may include looking downward, downward to the right, blinking rapidly, or closing the eyes. The exact pattern of eye movements may vary considerably across different individuals, and may differ from any of those presented here. Therefore, it is important that the investigator carefully observe truthful patterns of eye movements as part of the calibration process in the early part of the interview.

Surprising the Suspect

This technique works best when the suspect has no idea that a fraud investigation is underway. For example, the marketing department may announce that it is conducting a staff survey, and the investigator may be introduced by the marketing manager.

Figure 8.4
Typical Eye Movements for a Visually Dominant Person



Under this scenario the investigator will carefully calibrate the suspect's responses with honest answers and establish strong rapport. Then, out of nowhere, the investigator will drop a comment regarding the fraud. Because of the surprise, the suspect will not be prepared to control his or her shock or surprise, and his or her change in demeanor will be obvious to the investigator.

Accusing the Suspect

Generally speaking, an innocent person will strongly deny a direct accusation from an investigator. On the other hand, a guilty suspect's denials are likely to be relatively muted.

Persuasive Techniques

Investigators use a wide range of persuasive techniques to get suspects to talk. Some of these are as follows:

- Flood the suspect with evidence of the suspect's guilt
- Bluff and pretend to possess a critical piece of evidence
- Rapid questioning
- Silence

Types of Questions

There are many types of questions that an investigator can ask a suspect. These range from open-ended questions to forced-choice questions. Investigators frequently use positive-reaction questions, for which the expected answer is generally "yes" or positive. Such questions can help build a sense of cooperation and forward movement in the interview. Other types of questions, such as those previously discussed (compound questions and leading questions), may also be used.

Summary

Fraud can be defined as an intentional act or omission that is designed to deceive and results in a loss to a victim and a gain to a perpetrator. From an organizational standpoint, fraud is managed as one risk among many risks as part of the organization's overall enterprise risk management strategy.

General components of managing fraud risk include maintaining a proper corporate governance structure, along with effective policies and procedures for fraud risk assessment, fraud prevention, fraud detection, and fraud investigation. A proper corporate governance structure begins with the board of directors. The board typically delegates its fraud risk management responsibilities to the audit committee. The audit committee should comprise independent board members, include at least one financial expert (preferably an accountant), and meet regularly alone with the internal auditor and out of the presence of management.

The role of the internal auditor is especially important. The internal auditor should provide assurances to the board (via the audit committee) that fraud controls are sufficient for the risks and are functioning effectively. As part of accomplishing this task, the internal auditor should review the adequacy of identified risks, especially risks relating to management override.

Given a strong governance structure, the focus should be on effective processes for fraud risk assessment. Fraud risk assessment must be considered within the larger context of enterprise risk management. The three key elements of fraud risk assessment are (1) identifying inherent fraud risk, (2) assessing the likelihood and significance of inherent fraud risk, and (3) responding to reasonably likely and significant inherent risks.

Many organizations use formal, standards-based ISMSs as a key element in managing fraud risks. Such systems focus on protecting information confidentiality, integrity, and availability. The basic theory of top-down risk assessment is that the scope and quantity of evidence gathered in assessing internal control is based on assessed risks. The process of assessing risks involves identifying and inventorying threats, vulnerabilities, and related loss exposures.

Fraud prevention involves implementing controls to limit loss exposures in a way that is consistent with the organization's appetite for risk. Risks may be identified in qualitative terms (that is, as remote, reasonably possible, or probable). Similarly, the magnitude of possible losses may also be identified in qualitative terms (for example, small, medium, large, and catastrophic).

Fraud prevention is implemented through preventive controls that possibly derive from a standards-based information security management system. Such controls function as treatments for identified risks. To be successful, a fraud prevention program must be carefully documented, integrated into the organization's fraud management effort, and continuously monitored and improved.

Detection controls are generally matched with identified risks, and they tend to be clandestine. One of the most important fraud detection controls is the whistle-blower hotline. Such hotlines are mandated by SOX and are generally the most likely means of detecting fraud.

On average, a very significant portion of fraud is discovered simply by accident. Fraudsters frequently make mistakes by failing to adequately cover their tracks. For this reason, all employees should be trained to spot and report irregularities.

Fraud detection is a process that involves identifying and reviewing fraud indicators that suggest the possibility of fraud and the need for further investigation. Given that fraud detection is typically an imperfect process, fraud indicators frequently produce false positives and false negatives. AU-C section 240 provides substantial guidance regarding the auditor's responsibility to detect fraud. Fraud may also be detected by internal auditors, inspector generals, and internal departments dedicated to detecting fraud.

Four types of fraud indicators exist: single-factor indictors, composite indicators, random indicators, and pattern-based indicators. Single-factor indicators, often called red flags, can be represented by any type of apparent error, internal control violation, or unusual transaction. Composite indicators involve the combination of more than one individual indicator. Strictly speaking, random numbers do not in of themselves indicate fraud. However, they are included in the current discussion to emphasize that reliance only on red flags and composite indicators is not sufficient to develop a comprehensive fraud detection system. Pattern indictors work by analyzing patterns to establish normal behavior.

A complete fraud detection system involves five components: risk analysis, exploitation of expert knowledge, knowledge discovery, scoring and assessment (based on SEMMA), and implementation.

Fraud prevention and detection activities are never perfectly devised and implemented, so procedures and policies must be in place for investigating possible frauds. The specific process for conducting investigations includes the following steps: develop an investigation plan based on board-approved investigation protocols, assemble an investigation, refer the case to outside investigators as appropriate, collect evidence, report results, and take corrective action.

Review Questions

1. Which type of question seeks to assess the interviewee's honesty?
   a. Informational.
   b. Assessment.
   c. Admission-seeking.
   d. Introductory.

2. Only suspects who show deception are asked _____.
   a. Informational questions.
   b. Assessment questions.
   c. Admission-seeking questions.
   d. None of the above.

3. Which type of question is used to calibrate the subject's response?
   a. Informational.
   b. Assessment.
   c. Admission-seeking.
   d. Introductory.

4. Repeating an interviewer's questions may be best described as a sign of _____.
   a. Cooperation.
   b. Deception.
   c. Guilt.
   d. None of the above.

5. Subjects who show deception _____.
   a. Are asked concluding or closing questions after admission-seeking questions.
   b. Are asked concluding or closing questions after assessment questions.
   c. Are asked concluding or closing questions depending on the results of the admission-seeking questions.
   d. None of the above.

6. From an organizational standpoint, fraud is managed as part of the _____.
   a. Enterprise risk management strategy.
   b. Audit and review process.
   c. CFOs' and CFE's explicit obligation under SOX.
   d. None of the above.

7. In an effective corporate governance structure, _____ should be responsible for implementing an effective business ethics system.
   a. The CEO.
   b. The CFO or controller.
   c. The board of directors.
   d. None of the above.

8. The board typically delegates its fraud risk management responsibilities to the audit committee. The committee should comprise independent board members, with at least one financial expert (preferably an accountant), and should regularly meet _____.
   a. With the internal auditor alone.
   b. With the internal auditor and a designated representative of management.
   c. With the internal auditor and the controller or CFO.
   d. With the internal auditor and the controller.

9. The primary person the audit committee should consult when fraud is suspected is _____.
   a. The external auditor.
   b. Legal counsel.
   c. The controller.
   d. None of the above.

10. Red flags indicating fraud should be understood by _____.
   a. Top management.
   b. Top management and middle management.
   c. All levels of management and staff.
   d. None of the above.

11. _____ should provide assurances to the board (via the audit committee) that fraud controls are sufficient for the risks and are functioning effectively.
   a. The CEO.
   b. The CFO or controller.
   c. The internal auditor.
   d. None of the above.

12. Given a strong governance structure, the focus should be on effective processes for _____ (which, in turn, must be followed by a focus on fraud prevention, fraud detection, and fraud investigation).
   a. Enterprise risk management.
   b. Fraud auditing.
   c. Fraud risk assessment.
   d. None of the above.

13. Management should appoint a risk assessment team to include accounting and finance personnel, legal counsel, risk management personnel, internal audit staff, and, in general, anyone who may be helpful. The team should brainstorm to identify fraud risks. In order to accomplish this task, the team must understand _____.
   a. The likelihood of each relevant fraud.
   b. The population of fraud risks.
   c. A reasonable sample of fraud risks.
   d. None of the above.

14. When estimating significance of a given fraud risk, the team should consider _____.
   a. The significance to the organization's operations, brand value, and reputation.
   b. Legal liability (criminal, civil, and regulatory).
   c. Both (*a*) and (*b*).
   d. None of the above.

15. Which of the following is not an option for management in dealing with residual fraud risk?
   a. Simply accept a given risk.
   b. Increase the level of control to compensate for a given risk.
   c. Both (*a*) and (*b*) are options for management.
   d. None of the above.

16. Normally, it is adequate to assign _____ likelihoods to each identified inherent risk: remote, reasonably possible, or probable.
   a. Two.
   b. Three.
   c. Four.
   d. Many.

17. The first line of defense in minimizing fraud risk is _____.
    a. Fraud detection.
    b. Fraud investigation.
    c. Fraud correction.
    d. None of the above.

18. Which of the following is not a standard area or type of fraud preventive control?
    a. Human resources.
    b. Antifraud training.
    c. Authority limits.
    d. All of the above are standard areas or types of fraud preventive controls.

19. Generally speaking, which of the following is most likely to detect fraud?
    a. Internal audits.
    b. External audits.
    c. Hotlines.
    d. None of the above.

20. Fraud detection is furthered by process controls. Such controls are designed to detect _____.
    a. Fraud only.
    b. Errors only.
    c. Both fraud and errors.
    d. None of the above.

21. All violations of the organization's code of conduct should be reported and dealt with in a timely manner. Appropriate punishment should be applied _____.
    a. To all violators, except for the CEO.
    b. To all violators, except for the internal auditor.
    c. To all violators, except the CFO.
    d. None of the above are correct.

22. The process of evidence collection must proceed according to a correct sequence. Which of the following is a correct sequence?
    a. Review documents and other relevant information and then conduct interviews.
    b. Conduct interviews and then review documents and other relevant information.
    c. Conduct interviews while reviewing documents and other relevant information.
    d. None of the above.

23. Investigations should always end with a report of the investigation. If a suspect has confessed to fraud, it would _____.
    a. Be appropriate to indicate the suspect's guilt in the report.
    b. Be appropriate to indicate the suspect's guilt in the report if the suspect has freely signed a written confession that is absolutely clear, properly drawn, and witnessed.
    c. Not be appropriate to indicate the suspect's guilt in the report.
    d. None of the above.

Short Answer Questions

1. The board of directors typically delegates its risk management responsibilities to whom?
2. Who is responsible for designing and implementing the fraud risk management program?
3. What are the three key elements of fraud risk assessment?

4. What is an ISMS?
5. What is the relationship between COBIT and ISO27K?
6. Describe the process of risk assessment.
7. Why are information security assurances (ISAs) needed?
8. What are matched with identified risks?
9. What does AU-C section 240 require with respect to fraud?
10. How is optimal fraud detection developed in terms of false negatives and false positives?
11. What are the components of a complete fraud detection system?
12. What are some legal rights that must be considered before initiating a fraud investigation?
13. What is evidence?
14. What is a fraud scheme?
15. What are questioned documents?
16. What is the order of interviews?
17. What are assessment questions?
18. How should seating be arranged in an interview room?
19. What is the theory of observing eye movements as a means of detecting dishonest answers to questions?
20. What is invigilation?

Brief Cases

1. You are assigned to a fraud risk assessment team. You are trying to estimate the expected loss that may result from a hacker breaking into the company's bank accounts and withdrawing all the funds. How would one go about assessing such a risk and loss exposure?
2. You are engaged as a fraud prevention consultant. You have carefully studied your client's inventory control system. After identifying the risks and recommending controls, you are left with residual risk. You explain to your client that you have treated all identifiable risks, but some residual risks always remain in any system. Your client is unhappy with your explanation and wants to know what the residual risks are. How do you answer?
3. You have been engaged as a fraud management consultant for a small manufacturing firm. Your client company wants to know if it should implement a standards-based control system. Can you suggest any options?
4. You are engaged as a consultant for a large hotel. Your client wants you to implement a tip-line system for reporting fraud. What would be some of the main elements of your recommendation?
5. You are an internal accountant in a regional chain of restaurants. You have just uncovered a massive purchasing fraud scheme involving two of your purchasing managers. The CEO is very angry with you because the entire company just passed an audit done by an accounting firm that you recommended. How do you respond?
6. You have been engaged as a fraud management consultant for a large clothing store in the local mall. What are some fraud indicators that might be applicable to your client?
7. You have been engaged to investigate a fraud scheme involving several accounts receivables clerks in a large international magazine company. How might you use social media methods to help with your investigation?

8. You are an internal fraud investigator for a regional construction company that has offices and jobs spread out over the northeast. You have been presented with very solid evidence that one of your contractors has been engaging in bid rigging and taking kickbacks. Your CEO is suggesting that you should immediately call the police, but the CFO disagreed and suggested that you first conduct your own investigation. What is your recommendation on this issue?
9. You are an internal fraud investigator and you discover that the ex-CEO of your client embezzled $25,000 by paying himself an unapproved consulting fee. You have iron-clad proof that it was fraud because he forged the CFO's signature. The client has annual revenues of $200 million per year. How should you proceed? Should you give the case to law enforcement? Why or why not?
10. You are an internal auditor charged with investigating fraud in your company. You have a mid-level manager who has purchased large-ticket personal items on the company credit card. Should you interview her immediately or should you first interview others in her department?

Cases

1. You are hired as a fraud management consultant for the Fusia Import Company. Fusia imports specialty ceramics from all parts of the world. It has warehouses in all major regions of the United States. It has been a very successful company, but success has come with weak controls, with the focus instead having been on sales and growth.

   Fusia recently went through its first major financial statement audit. The auditor declined to render an opinion, due to excessive problems with controls. Further, the auditor discovered internal frauds in several areas, including inventories, payroll, and sales.

   Required

   What would you recommend for Fusia?

2. The AGC Electronic Parts Company sells electronic parts to distributers throughout the state of Texas. The CFO has hired you to help put in place a fraud detection system in AGC's Houston warehouse. The warehouse contains several main areas: incoming deliveries, outgoing shipments, and inventory stores.

   Required

   Develop a list of fraud indicators that might be applicable to AGC's Houston warehouse.

3. You have been hired to investigate possible fraud losses in Greenwor Manufacturing Company. Greenwor's attorney contacted you in confidence and told you that she has had many tips indicating that Chad Wits, the CFO, is somehow stealing large sums of money from the company. Wits earns a good salary of $300,000 per year, but company employees report that he has recently purchased a $4 million house, a sail yacht worth at least $2 million, and one employee said that he spends his weekends in Las Vegas, where he loses very large sums of money on a regular basis. Some employees have seen him driving a new Maserati sports car near a local shopping mall, but he always arrives at work with a plain, aged family car.

   Required

   What steps would you take to conduct your investigation? What information would you need to develop a fraud theory? Does the information you currently have provide sufficient predication for an investigation?

4. You are hired as a consultant by Leely Inc., a large chain of retail bookstores. Barbara Weston, Leely's controller, is concerned about heavy losses of inventory in the Miami store. The store has both receiving and customer-sales areas. Incoming shipments of books are received in the secure receiving area, and after checking them against order lists, books are carted into the customer sales area. The customer sales area has a single entrance with four cash registers a few feet away.

   Leely uses an antiquated accounting system, so a lot of the paperwork and recordkeeping is done manually. The accountants are unable to say how many books may have been stolen or lost. They only do a complete inventory once a year, and even then they are unable to accurately estimate shortages.

Barbara Weston has a gut feeling about the losses. She has a rough feeling for sales of some of the best-selling hardbacks, and just a quick visual inspection of the shelves tells her that she should be seeing a lot more books than are actually there.

Required

Explain how you would help Barbara Weston.

5. Mary Jewell, the controller of the Comita restaurant chain, has engaged Barbara Buena to conduct a fraud investigation. She believes that Steve Malo, the manager of their South Beach restaurant, is somehow embezzling funds. The restaurant's monthly financial reports from the company's headquarters in Chicago have been showing large downturns in sales and increases in expenses.

   Mary has received several anonymous tips indicating that Steve Malo has been making bad decisions such as eliminating popular items from the menu and firing the reliable head cook. Further, he has done various things that no one seemed to agree with. For example, he repainted the entire dining room without changing the color of the paint, when no one thought it needed repainting.

   Barbara began her investigation by traveling to South Beach. When she arrived on site, she found Steve Malo to be very likeable. He personally went into the kitchen and cooked for her his special pasta dish, something that was not on the menu and reserved for important guests.

   Barbara observed operations for two days and overall she was very impressed with everything she saw. Incoming deliveries were well-controlled, food was served hot and promptly, and all cash-handling functions were properly executed.

   Barbara conducted interviews with all the employees, one at a time, and she could not find any hint of impropriety. Steven Malo became somewhat defensive when she questioned him about the store's weak financial reports, but he blamed the problem on a need to remodel the store. There were many other restaurants competing in the same area, and they were all very up-to-date with the latest in architectural and design features. Three times he asked corporate for money to remodel, but each time they turned a deaf ear.

   Barbara returned to the Chicago office to give her report to Mary Jewell in person. Barbara told her that she found nothing wrong and that she did not see any reason to continue investigating, but Mary was not pleased and became angry.

   "You're not a real forensic accountant," said Mary. "You just let that guy fool you."

   Mary insisted on continuing the investigation, but Barbara was concerned about a lack of predication to do so. Still, Mary continued to insist.

   "If you don't continue the investigation, I'll find someone else who will," said Mary.

   Required

   Evaluate Barbara's investigation. Should she agree to continue investigating?

Internet Research Assignments

1. SAS Institute (www.sas.com) provides a data mining platform. Visit SAS's website and write a brief report on how SAS's offerings can be used for fraud detection.
2. Research ISO27K certifications. What countries have the largest numbers certified?
3. ACL (www.acl.com) provides fraud management solutions. Write a brief report on the solutions offered by ACL.
4. Research Control Objectives for Information and Related Technology (COBIT) online and write a brief report on what tools are available with COBIT to assist in its implementation.
5. Research the "fraud tree" online. Write a brief report about the fraud tree.

Chapter 9
Fraud Schemes and Applications

Learning Objectives

- Define the major types of fraud and explain their related elements
- Explain the applicability of the fraud triangle to individual frauds
- Identify the various employee fraud schemes and their related elements
- Identify the main types of vendor frauds and their related elements
- Identify the elements of identity theft fraud and it's relation to other frauds
- Explain the money-laundering process and basic money-laundering schemes
- Explain fraud activity among organized crime groups
- Explain the role of fraud in terrorist groups

Introduction

This chapter deals with different fraud schemes. As discussed in the previous chapter, the investigator develops a theory of the fraud under investigation and then hypothesizes a particular fraud scheme to test and refine the theory. The focus of this chapter is on different fraud schemes, their mechanics, and the types of evidence related to their investigation.

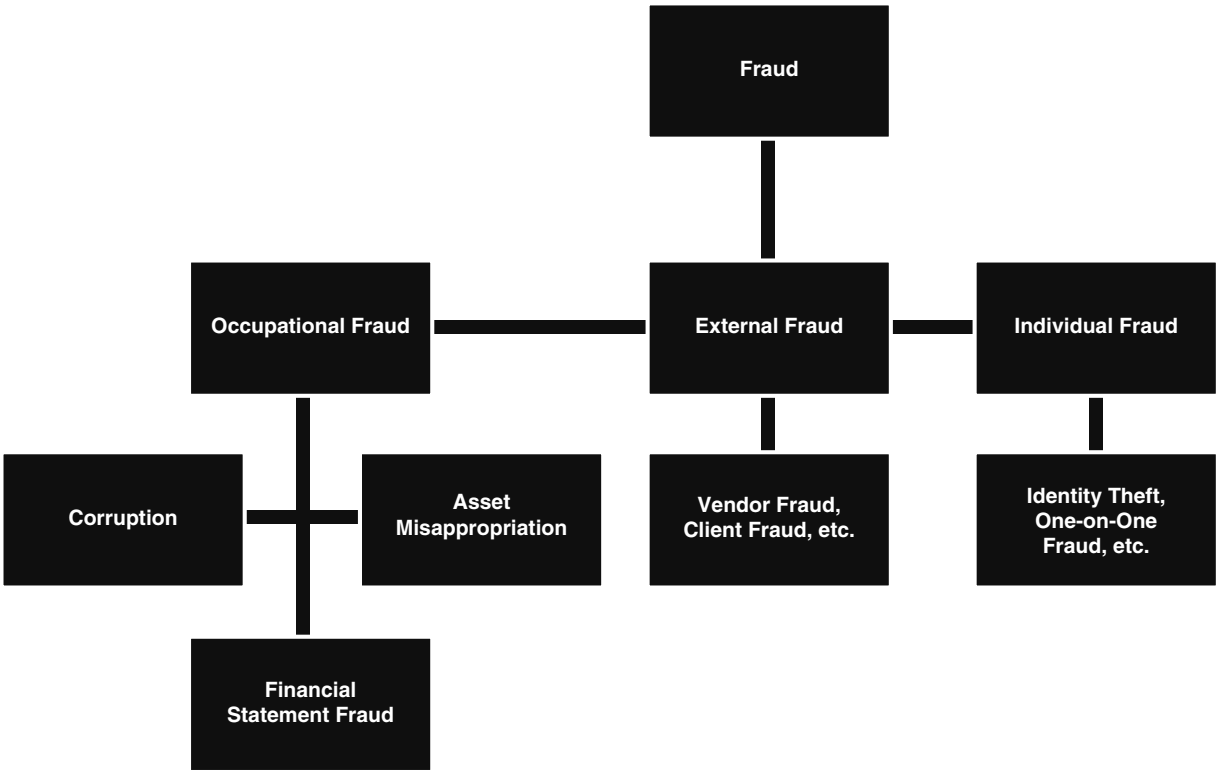
It would be impossible to list all possible fraud schemes. There are just too many ways that one person can take unfair advantage of another person, group, or organization. That said, it is possible to classify most frauds and related fraud schemes into three general classes. The first class is *internal fraud*, also called *occupational fraud*, in which employees defraud their employer. The second general class of fraud is *external fraud,* which involves frauds committed against an organization by outsiders. Examples include vendor fraud, hacker fraud, and supplier fraud. Finally, the third class involves frauds in which individuals are the victims.

Occupational Fraud

There are three types of **occupational fraud**: corruption, asset misappropriation, and fraudulent financial statements as shown in figure 9.1. The primary component of corruption is the exercise of undue influence. The major types of undue influence include conflicts of interest, bribery, improper gratuities, and economic extortion.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Figure 9.1
The Fraud Tree



CORRUPTION

The elements of **corruption fraud** involve an employee committing acts that are not in the best interest of the organization because of some type of improper influence that affects the employee's conduct. For example, a purchasing agent might purchase goods from relatives at above-market prices due to the improper influence of the relatives. Alternatively, the purchasing agent might accept kickbacks from a vendor. An example of economic extortion might involve an employee threatening to disclose company secrets in order to gain a pay raise.

ASSET MISAPPROPRIATION

The main element of **asset misappropriation** is the improper conversion of an asset for personal use. Misappropriation doesn't require that the employee actually steal an asset; just "borrowing" an asset or misusing it for personal reasons suffices. At the most general level, employees may misappropriate cash, inventory, or other assets. Cash is subject to the highest risk of misappropriation given that it can readily be converted into other assets. Two of the most common fraud schemes involving cash involve the skimming of revenue receipts and fraudulent disbursements. Simple theft of cash represents still another form of asset misappropriation.

In addition to cash asset misappropriation, when considering inventory and other assets, many possible fraud schemes exist. Lack of proper control over any asset can simply lead to an asset's disappearance. If accounting controls are weak, identifying the perpetrator can prove difficult or impossible. Weak accounting controls can even lead to frauds that are never detected.

Case in Point

Ausaf Umar "Omar" Siddiqui engaged in one of the largest embezzling schemes in history. He used a dummy company to facilitate kickbacks totaling over $80 million. A significant portion of the funds he embezzled went to pay for his heavy gambling in several casinos. In addition to a six-year federal prison sentence, he was ordered to pay $65 million in restitution.

Financial Statement Fraud

Although financial statement fraud may damage the company, it also damages shareholders, potential shareholders, creditors, and other users of the financial statements. **Revenue recognition fraud** is the most common form of financial statement fraud. For this reason, AU-C section 240, *Consideration of Fraud in a Financial Statement Audit*, (AICPA, *Professional Standards*), requires that when auditors spot revenue irregularities they should assume that fraud exists until evidence shows otherwise. Financial statement fraud is covered separately in chapter 13, "Financial Statement Misrepresentations."

External and Individual fraud

External fraud can be perpetrated by any party with whom the organization comes into contact, including customers or clients, vendors, business partners, and the general public. Examples include customers opening accounts with false credit information; vendors shipping substandard supplies; business partners leaking secrets; and the general public hacking into the organization's computer network. The focus of this chapter is on external frauds committed by vendors. Frauds perpetrated by customers and hackers are equally important but tend to be dealt with via information security and internal control rather than forensic fraud investigations. Frauds from business partners tend to arise from a betrayal of trust in the business relationship. Cases in which business partners disclose proprietary information (for example, trade secrets) to third parties are notoriously difficult to investigate and develop solid evidence of guilt.

Individual frauds include many well-known schemes, including Ponzi schemes, e-mail phishing schemes, security frauds, and identity theft.

Occupational Fraud Schemes

Profile of a Typical Fraudster

In short, there is no **profile of a typical fraudster**. Those who commit fraud against their employer generally have no prior criminal record. In many cases, the fraudster is basically an honest person who turns to fraud due to financial pressures.

The most widely recognized predictor of occupational fraud is the fraud triangle, which suggests that fraud tends to occur when there is a "perfect storm" of opportunity, (financial) pressure, and rationalization. Opportunity is very much under the control of the company and, hence, somewhat predicable. Weak internal control processes and fraud detection systems tend to increase the likelihood of fraud. On the other hand, pressure and rationalization tend to be more internal to the employee and less subject to the control of the company. Some sources of employee pressures can stem from credit problems, gambling habits, drug addiction, and excessive lifestyles. In some cases, the employee may face a large sudden financial need, perhaps for a major medical procedure. Any of these things can tempt an employee who has the opportunity to commit fraud.

The fraudster generally rationalizes the fraud before committing the act. Typically, rationalizations include an intention to repay the organization. The intention might even be an honest one. Other rationalizations include the

mindset, "I need it more than they do," or "they are so big, they won't miss it." A distorted desire for justice (that is, revenge) is also sometimes a rationalization.

Of course, sometimes, the fraud is committed by someone considered a sociopath or by a professional criminal. This type of person makes crime a habit and is likely to need little pressure or rationalization. Human resources departments do their best to screen out this kind of person in the hiring process. Nevertheless, this type of person may exhibit some characteristics of a pressured individual, possibly exhibiting an excessive lifestyle.

The organization does have some control over pressure and rationalization. Pressure can come in the form of management placing excessive demands on employees to perform or hiring and reward structures that are perceived as unfair. Organizations can also foster rationalizations for fraud when corruption is part of the corporate culture. For example, a company than defrauds its customers is more likely to be defrauded by its own employees.

Many organizations continually educate and train their employees in the organization's code of ethics. Such education and training may be coupled with services such as professional counseling, good medical insurance plans, and even employee loan programs. Such services, coupled with best practices in human resource policies, may help to lower pressures and minimize rationalizations.

Employee Fraud Schemes

Employee Corruption Schemes

The most common employee corruption schemes involve **bid rigging** and kickbacks. The common element in bid-rigging schemes is the manipulation of a bidding process so that the outcome of the bidding and the related awarding of a purchase or service contract is secretly predetermined. There are many ways that bids can be rigged. Most involve one or more bidders, who receive some type of reward for either withholding bids (bid suppression), entering fake bids that are excessively high (complementary bids), or entering bids in some other predetermined way that results in the organization paying more than it otherwise would.

Case in Point

A National Business Ethics Survey[1] found that 49 percent of the respondents indicated observing misconduct at work. Further, over one-third of those who did observe misconduct did not report it. Among those who did report misconduct, 15 percent reported experience retaliation. *Misconduct* was defined in the survey to include things like lying to stakeholders, document alteration, and misrepresenting financial data.

Not all bid rigging is associated with employee corruption. For example, company vendors may agree to take turns obtaining the winning bids (bid rotation); however, employee corruption comes into play when a purchasing officer participates in the bid-rigging scheme.

Purchasing officers may be motivated to participate in bid rigging either because of kickbacks from vendors or a desire to award contracts to friends or family. A purchasing officer could also be motivated to award a contract to a particular vendor due to blackmail or extortion.

Bid rigging and kickbacks are generally criminal offenses. However, gathering evidence in such cases can be difficult. The problem is that most indicators of purchasing fraud are merely circumstantial and may be consistent with either fraud or normal competitive bidding.

Examples of indicators for purchasing fraud include unusually high bids from certain bidders, multiple bids that are nearly identical, and multiple vendors winning bids in rotation. However, all of these indicators may simply indicate honest competition among the bidders. The result is that purchasing fraud is easier to prevent than prove. However, in cases that involve a Sherman Act violation, direct evidence of a conspiracy is not required, and circumstantial evidence may be used in court.

[1] www.ethics.org

When investigating purchasing fraud, the investigator should identify weaknesses in the purchasing controls and investigate public records to identify possible conflicts of interest between the purchasing officer and vendors, especially any vendors who consistently win bids or sell to the company. Confirmations of bids and interviews with vendors can be helpful. Given enough circumstantial evidence, especially coupled with evidence that the purchasing agent has violated company policies, the investigator may be able to obtain a confession from the perpetrator.

Asset Misappropriation Schemes

Anytime cash on hand is not properly protected and controlled, it is subject to theft, but aside from the simple theft of unprotected cash, misappropriation schemes can be classified as belonging to the revenue cycle (that is, to cash receipts) and to the expenditure cycle (that is, to cash disbursements), and the production cycle.

Revenue Cycle Frauds

Various revenue-skimming schemes are used to perpetrate revenue cycle fraud. *Skimming* suggests schemes in which the perpetrator absconds with some portion of incoming cash receipts with the goal of remaining undetected. In a typical case, the fraudster avoids detection by skimming sufficiently small amounts so that the loss will remain unnoticed by management.

Sales Skimming Schemes

Sales skimming schemes involve misappropriation of incoming cash. Such schemes can be classified according to the point in the cash collection process when the cash is stolen. This point can be at any time from the point of sale (POS) until the cash is properly deposited in the bank.

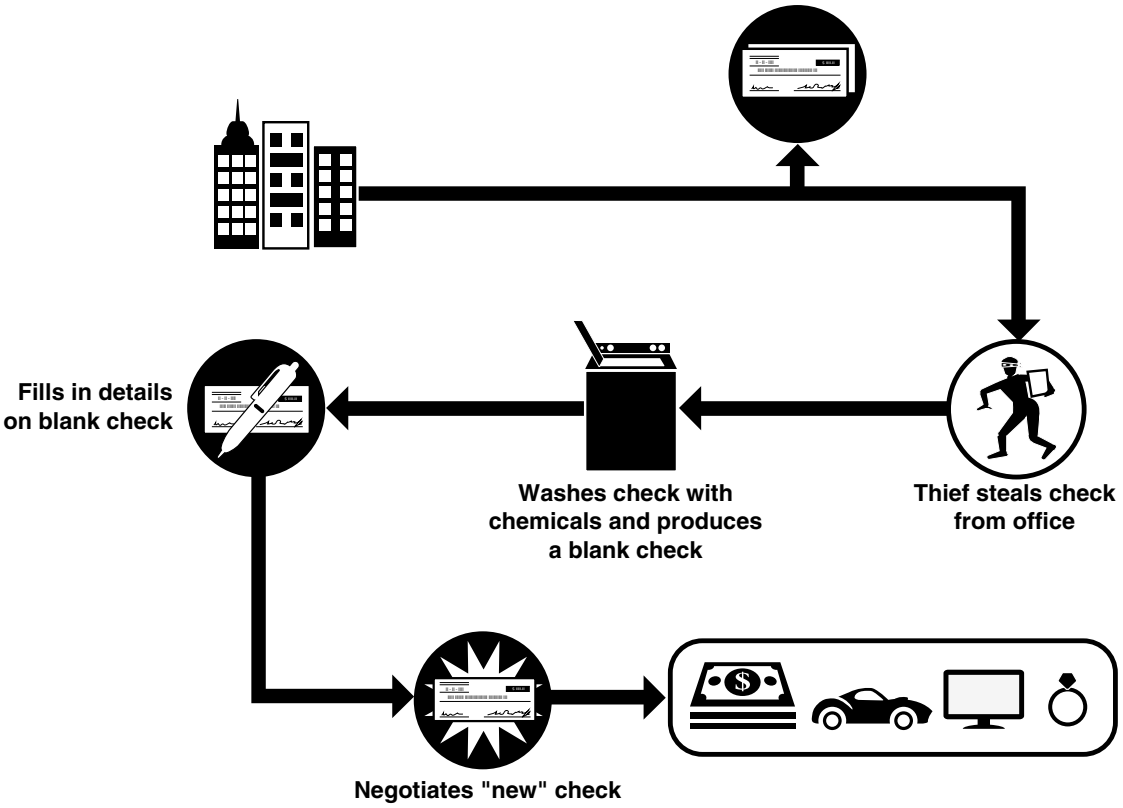
- *POS schemes.* The most basic **POS skimming scheme** simply involves the employee pocketing cash and not recording the sale. A more advanced version of this scheme involves the employee giving the customer a forged or off-the-books receipt. An even more sophisticated version involves the employee swapping cash for phony checks. The employee keeps the cash, and the company realizes a loss when the checks bounce.

  Other POS schemes involve employees pocketing cash receipts with impunity when there is a failure to reconcile cash receipts and sales. Weak internal control over cash receipts should be considered an invitation for employees to steal.
- *Mail-handling schemes.* Most organizations instruct their customers to never send cash in the mail. Cash in the mail provides an opportunity for a dishonest employee to strip off the cash and forward checks for further processing. Some companies use two employees to open each piece of incoming mail. Video recording of mail processing is also common.

Checks may also be stolen when processing incoming mail. However, most fraudsters won't bother stealing customer's checks unless they have a way of cashing them. Banks will normally refuse to deposit a check to a personal account when a company is named as a payee. However, in some situations, a high-level employee with sufficient authority (such as a vice president of finance) may have the authority to open bank accounts in the company's name. In such cases, it is possible for a high-level employee to open a secret bank account and deposit checks to that account. However, such a scheme will lead to complaints from customers whose checks have been cashed without them receiving credit for their payments. For this reason, the scheme of diverting checks to a secret account is relatively unlikely. Still, as part of any type of embezzlement investigation, it is common practice to send letters to all financial institutions in the area with a request for information regarding any accounts in the company's name.

A second way that skimmed checks can be cashed is through **check washing**. Check washing involves using chemicals to erase from checks data such as the name of the payee, the date, and the check amount. The check washer typically fills in the blank check as desired and cashes it using a false or stolen identity as depicted in figure 9.2.

Figure 9.2
Check Washing



Check laundering is a sophisticated scheme in which the thief submits via mail the stolen check in payment of an account balance the thief owes under a fake name or stolen identity. Many banks don't carefully check payee information when processing batches of checks being deposited. As a result, the thief's account is credited for the amount indicated on the check. Of course, the customer who wrote the check may eventually complain and produce the cancelled check as evidence. If the company doesn't carefully check the bank's machine-imprinted codes on the check, it might apologize and issue the customer a credit. However, if the company does investigate, it may have a difficult time discovering the identity of the thief because that information would likely exist only in the hands of the third party to which the thief mailed the check.

Cash Transmission Schemes

Cash (or checks) may be stolen as they are transferred from one individual to the next or while in transit to the bank. Standard controls, such as double counting cash as it changes hands and documenting all transfers, can minimize cash leakages as cash is being moved. However, swapping phony checks for cash may be possible if cash and checks aren't separately itemized in detail.

The short bank deposit is another possibility. The person making the bank deposit may skim part of the cash and return with forged or altered bank deposit receipts. Of course, this type of scheme can easily be detected simply be reconciling deposit credits to bank deposit slips.

Accounts Receivables Fraud

- *Lapping.* The classic accounts receivables fraud scheme is **lapping**. For this scheme to work, the fraudster must have control over both the accounts receivable records and the bank deposits. The fraudster steals a customer's incoming payment on account. The fraudster then diverts a second customer's incoming payment to cover the first customer's outstanding account balance. The fraudster then diverts a third customer's incoming payment to cover the second customer's outstanding account balance, and so on.

Lapping is a fairly simple fraud scheme to unwind simply by reconciling credits to customers' accounts with bank deposits per bank records. However, gathering evidence of a lapping scheme can be very difficult or impossible if cash receipts or accounts receivable records are incomplete. Any apparent cash shortages might be explained by correcting the erroneous records. In such cases, the only way to prove guilt might be by catching the suspect in the act or by obtaining a confession. Unfortunately, a lack of segregation of the duties of cash handling and record keeping not only makes lapping possible, it also makes it possible for the perpetrator to destroy or alter the accounting records in order to cover up the crime.

- *Improper credit approvals.* Credit reviews are supposed to ensure that credit is granted only to qualified customers. But, improper influences can compromise the credit approval process. The result can be credit granted to fictitious persons who never pay their account balances and who don't satisfy the company's criteria for the given level of credit approval.

  In some cases, undue influences may come from within. For example, a credit manager might make bad credit decisions that result in substantial write-offs. Then, when seeking to compensate for the losses, the credit manager might, in turn, approve questionable loans. So, in this case, the undue influence is the pressure to perform by showing good net sales numbers. Undue influence can also result from kickbacks or by granting credit to related parties.

  When investigating improper credit approvals, the focus should be on verifying the supporting documents for credit approvals. The absence of proper supporting documentation would not prove guilt but, rather, support a circumstantial case. As with bid rigging, solid proof of a crime may be difficult to obtain, but with enough circumstantial evidence, getting a confession might be possible. Still, circumstantial evidence may be sufficient to subject the suspect to disciplinary action or hold the subject civilly liable for losses.

Improper Credits to Customer Accounts

In the absence of a strong system that requires independent approval for credits and refunds, an accounts receivable clerk (or customer service department) is free to give credits or refunds to friends, family, and the whole world. When investigating a credit-to-account or refund scheme, the investigator should review and confirm all the required approvals. Attention should be given to the possibility of forged approvals. In an electronic system, an individual with access to an approver's account may log in and create unauthorized approvals.

Frauds involving cash refunds may be more appropriately considered to be an expenditure fraud because they involve the disbursement of funds. However, they are included in this discussion because the economic distinction between a credit to a customer's account and a cash refund to a customer is minimal. Both types of fraud generally result from weak authorization and approval controls.

Improper Write-Offs

Schemes involving fraudulent write-offs of customer accounts are similar to those involving improper credits to customer accounts. The fraudster will either execute the write-offs without proper authorization or cause a fake or fraudulent authorization to be made.

Expenditure Cycle Frauds

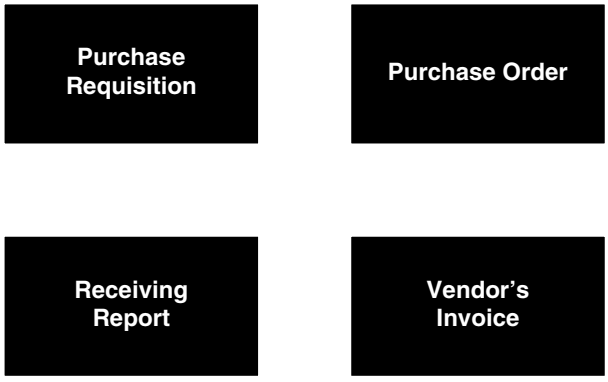
Expenditure cycle frauds fall into three broad categories that include improper purchases, payroll frauds, and improper payments. Each category is discussed in the following sections.

Improper Purchases

Improper purchase schemes involve fraud when the purchase itself is not made in accordance with company policies and procedures. In many cases, improper purchases will involve collusion, management override of controls, or lax authorization and approval processes. Ideally, all purchases and their related payments should require multiple independent approvals associated with a purchase requisition, purchase order, receiving report, and vendor's invoice. These separate documents and their approvals (whether on paper or electronic) by different persons together form a voucher package as depicted in figure 9.3. An authorized individual under the treasury function will then verify that

all the approvals are present before approving a check. Given such a voucher system, fraud schemes are nearly impossible in the absence of collusion or laxities in the review and approval process.

Figure 9.3
A Voucher Package



Given a solid voucher system, the major risk for purchasing fraud is with possible corruption on the part of the purchasing officer, as previously discussed. Therefore, unless corruption of the purchasing officer is suspect, the investigator must consider the possibility of collusion or laxities in the review and approval process.

There is, however, a possibility that the person writing the checks could forge or modify the voucher package. For example, this person might simply pay the vendor more than is authorized in the purchase order; but, evidence of such a scheme can easily be uncovered merely by reconciling payments with copies of purchase orders obtained directly from the purchasing department.

Misappropriation of Petty Cash

Best practices call for treating petty cash as an imprest fund. Under an imprest system, the sum of the receipts on hand plus the amount of cash on hand always adds to a fixed sum. In such a system, fraud may occur if employees "borrow" from the fund without documenting the cash withdrawal or if they forge or alter cash receipts. Evidence of unapproved borrowing can be gained with surprise audits of the fund. Careful confirmation of the receipts can also uncover irregularities.

Petty cash withdrawals should periodically be approved by a supervisor. One possible fraud scheme exists when an employee takes advantage of a supervisor who is not diligent in reviewing and approving all cash withdrawals. Finally, if physical custody of the cash is not maintained at all times by a single, responsible individual, cash leakages may occur without any possibility of the investigator determining who takes the missing money, except possibly by using surveillance methods.

Case in Point

One international survey by the ACFE[2] found that the typical organization loses 5 percent of its revenues to fraud. The median fraud loss was $140,000 with 20 percent of the cases involving losses in excess of $1 million. Further, worldwide, corruption and billing schemes pose the greatest threats to organizations.

[2] www.acfe.org

Abuse of Company Credit Cards and Expense Accounts

Corruption-type frauds can occur with company credit cards and expense accounts. For example, an employee may pay a padded hotel bill in order to get a kickback from the hotel owner. In some cases, for example, a hotel or airline might give rebates or reward points directly to the employee and not to the company.

With purchasing corruption in general, gathering evidence in expense-account corruption may prove difficult. However, an investigator can confirm with vendors the amounts indicated on receipts. Most hotel chains and airlines have published policies on reward points, cash rebates, and so on. This public information can guide the investigator when checking to see whether the benefits of such programs accrue to the company.

Unauthorized Payments

In the absence of a functioning voucher system, the person who signs checks can write checks based on anyone's instructions, any invoice that appears in the mail, or with no instructions or invoice at all. In this case, fraud may be proven—or at least exposed—using simple reconciliations. For example, a reconciliation that matches vendors' invoices to purchase orders would expose a fraud scheme in which the treasury function pays fake invoices. As discussed previously, a voucher system is practically impossible to defeat in the absence of collusion or lax controls.

Theft of Company Checks

Theft of company checks represents a special category in that a fraudster can use company checks to make withdrawals from the company's bank account without the knowledge or approval of the company. The employee may fill in the amount, forge a signature, and negotiate the check using a stolen identity. In many cases, the employee will sell the check to an individual who specializes in negotiating forged checks. The buyer of the check is typically part of an identity theft ring.

Investigating cases in which checks are negotiated by members of an identity theft ring is very difficult without the assistance of law enforcement. The only effective way to obtain sufficient evidence for a conviction is to catch one of the perpetrators in the act. Law enforcement prefers to catch such fraudsters using "controlled delivery," which means arresting one of the fraudsters at the bank or post office (in cases when U.S. mail is involved).

Payroll Fraud

Payroll fraud includes improper hiring, improper changes to employee personnel files, and improper reporting of employee activities. Improper hiring usually involves hiring employees without proper review and approval, for the appropriate position, and at the appropriate pay rate. In theory, review and approval by an independent human resources department serves as a check on improper hiring by management. However, at times, the human resources department may not fully understand the technical requirements of a job posting or have the capacity to match such requirements with the resumes of potential employees. Further, the human resources department may have no choice but to trust management not to hire friends and relatives when doing so is against company policy.

Depending on the situation, improper hiring may be illegal, especially for government agencies and in highly regulated industries. The bottom line is improper hiring results in conflicts of interests (for example, nepotism) or paying employees more than they are worth to the company, or in some cases, even paying for phantom employees that don't exist. A potentially more serious issue is the damage that an underqualified employee can do. An underqualified employee can make mistakes that can lead to critical lapses in internal control, safety issues, or low-quality or damaging services or products for customers. Such mistakes can lead to lawsuits or fines against the company or damage to the company's reputation.

When investigating cases of possible hiring frauds, the investigator should review all documents that support hires. Consultations with third-party industry experts can be helpful. Confirming education and work experience on employees' resumes should be done to confirm that the human resources department is doing its job. Finally, public records databases should be checked to confirm the absence of unreported familiar relationships. As in all corruption-type investigations, obtaining anything more than circumstantial evidence may prove difficult, but with enough circumstantial evidence, including evidence of failure to follow company policies and procedures, it may be possible to obtain a confession in the interview process.

A second type of payroll fraud involves improper changes to employees' personnel files. Cases have occurred when personnel officers have summarily given pay raises to their friends. Also possible are things like improper altering of supervisor evaluations, unauthorized promotions, and so on. Such frauds are generally preventable by proper authorization and approval controls, but with lax controls, such frauds can easily occur. Further, in the absence of proper documentation and controls, developing evidence of fraud may be an impossible task. However, when adequate documentation and controls do exist, the investigator can generally find evidence in the record that shows violations of the controls. Whether such violations in a specific case rise to the level of a punishable offense is a question for personnel experts, lawyers, and courts of law.

A final type of payroll fraud involves employees misreporting their activities. For example, an employee might take a "vacation" without completing a company leave form. Such fraud is normally a consequence of poor supervision or poor recordkeeping of employee activities, or both. As with other types of fraud, in the absence of clear documentation requirements and appropriate internal controls, it can be difficult to prove that employee reports are inaccurate, let alone fraudulent. On the other hand, if clear documentation and appropriate controls do exist, fraud is unlikely to occur in the absence of collusion or breaking into the company's computer system.

Production Cycle Frauds

The main **production fraud scheme**, aside from payroll fraud, involves theft of inventory. If physical security is lax, production employees can abscond with either raw materials or finished goods.

Aside from payroll-related problems, the biggest problem in the production cycle involves theft of raw materials and finished goods. Most thefts can be prevented by good physical security and accounting controls that track all raw materials (via requisitions) to specific work orders. Finished goods are tracked via job orders and production schedules. Reconciliations are conducted and goods are counted to insure that all goods are accounted for. Chain of custody for goods is maintained at all times.

One common area of weakness is accounting for waste, scrap, and spoiled goods. If these things are not carefully accounted for, they can serve as a conduit for theft. Employees may deliberately "spoil" jobs in process, discard them, and later retrieve them from the company's trash bin. However, as with many types of fraud, simple reconciliations will point to the source of the leak if proper accounting records are maintained.

When investigating production frauds, the investigator should **reperform** existing reconciliations and perform any missing ones. Video surveillance may also help. Inventory theft is a good example of an area where simply adding missing controls is all that is needed to develop the necessary evidence to complete a fraud investigation.

Fraud Schemes, Electronic Systems, and Attack Vectors

Electronic systems designed with good controls all maintain an unalterable audit trail of all transactions (including approvals and authorizations). As a consequence, electronic systems generally provide a solid evidence trail of who did what and when. The problem comes when transactions are entered into the system by a hacker or imposter. In such cases, computer forensics techniques (discussed in chapter 11, "Digital Forensics") are needed to develop the required evidence. That said, hacker attacks are typically performed by highly skilled individuals who are quite capable of covering their tracks. Many such individuals are offshore and are, for all practical purposes, beyond the reach of the law. Further, the law has very limited reach (due to a lack of the resources needed to investigate) for all but the very largest computer crimes.

The five **vectors of attack in electronic systems** are input manipulation, direct file alteration, program alteration, data theft, and sabotage. Each of these categories is discussed in the following list.

- *Input manipulation.* This attack is accomplished by manipulating the normal stream of inputs into the organization's system. For example, an accounts receivable clerk may fraudulently enter an account credit for a friend into a batch update stream. Such attacks are normally caught by performing simple reconciliations. In this example, a batch total of all the credits to customer accounts should match the total of related bank deposits and credits to the bank account. On the other hand, however, reconciliations will be of no help in cases of improper authorizations and approvals. The main way to detect authorization or approval fraud is by carefully reviewing the documentation used to support the approval or authorization. (Authorizations generally apply to the initiation of transactions, whereas approvals apply to their continued processing and acceptance.)

- *Abuse of access privileges*. This is a form of input manipulation, except it is also possible that an administrator, IT person, or even a systems vendor may abuse an account with special administrative access rights. Such a person with sufficiently high-level access privileges might even be able to erase or modify any log files and make it impossible for an investigator to discover who made unauthorized changes in the system.
- *Unauthorized access.* This is the typical hacker attack. It can also come from someone who steals another user's login and password. This type of attack is especially nefarious because it can point guilt to an innocent person.

- *Direct file alteration.* This involves a highly-skilled person bypassing the normal accounting system and directly altering the accounting or other important database. Given that the attacker never logs into the accounting system, the system logs will not show who made the alterations. However, to carry out such an attack, the fraudster must first penetrate the organization's network in order to gain access to the critical files. So, network access logs may prove helpful. Direct file alteration only works if the targeted database files are not well-encrypted.
- *Program alteration.* Many organizations develop their own software or customize vendor-supplied software. This creates an opportunity for software engineers and computer maintenance persons to modify or configure the software in such a way to bypass normal security. In one famous case, a programmer added a "patch" to a payroll program so that payment amounts rounded off to the nearest penny were credited to his benefit. He managed to steal thousands of dollars with his scheme before being caught.
- *Data theft.* Data theft can be the objective of any of the preceding schemes. However, in many cases, an employee simply copies critical data to a portable storage device and walks out the door. The Edward Snowden case is a perfect example and represented one of the largest security leaks of National Security Agency secrets in the history of the United States. He simply copied large numbers of critical files onto a thumb drive and walked out the door with it. Such security breaches may be relatively easy to investigate, but once data gets outside the organization's secure system, there may be no way of getting it back.
- *Sabotage.* This is usually caused by disgruntled employees but can also be caused by competitors or anyone in the public. One common form of sabotage is the "distributed denial of service" attack. In the past, the organization called Anonymous has carried out such attacks against the websites of major corporations. The attack takes place by flooding the target's website (or other Internet service) with so much traffic that it can't keep up and, as a consequence, crashes.

Fraud Schemes and Collusion

With good internal controls and documentation, many fraud schemes are either impossible or quickly detected. With internal control weaknesses, the investigator should first consider evidence that an employee has exploited a weakness. If such evidence is not readily available due to weak documentation, the investigator should ensure that the proper controls and documentation are put in place to prevent the fraud from occurring in the future. If the added controls and documentation are surreptitious and unknown to the fraudster, and the fraud is ongoing, it is likely that sufficient evidence will become available to incriminate the fraudster.

Surveillance may also be helpful in that it can produce quick results; it works well in the absence of good internal control; and it produces the type of evidence that law enforcement likes to use to make arrests and prosecute cases.

Another advantage of surveillance is that it can sometimes be helpful in cases of collusion. When collusion exists, the paper (or electronic) trail for a suspected fraud may look perfectly normal. For example, in a warehouse setting, a product supervisor might collude with an employee to fraudulently report a batch of finished product as spoiled and then convert the batch for personal use. In this case, the accounting records will be of little help to the investigator in discovering the fraud, but a carefully-placed video camera could provide all the evidence needed.

Other Types of Employee Fraud

Most of the major asset misappropriation fraud schemes have been discussed so far, but, in practice, a nearly infinite number of possible schemes exist. Any asset of the company may be misappropriated, and fraudsters can be very creative when conjuring up new fraud schemes. Some additional areas of fraud include financial statement fraud

(discussed in chapter 13, "Financial Statement Misrepresentations"), insider trading, improper transactions with creditors, improper use of company assets for collateral, and improper guarantees to customers, creditors, or vendors.

External and Individual Frauds

Various types of external, or outside-the-company, fraud schemes include those committed by vendors, customers, and competitors. In addition, many possible fraud schemes involve individuals, rings of individuals, organized crime groups, and even terrorist groups. Many of these frauds are committed in conjunction with other frauds. For example, vendor fraud may be committed in conjunction with corruption in the company's purchasing or receiving department or with the internal misappropriation of assets within a company. An employee of the company may steal company checks and work with an identity theft ring to negotiate them.

Vendor Frauds

Generally speaking, vendors are not in a position to defraud a company that has good purchasing practices, uses a voucher system, and carefully counts and inspects incoming shipments in the receiving department. However, vendors can exploit any internal control weaknesses. Some of the most common exploitations are short shipments, balance billing, and fraudulent cost-plus billing.

Short shipments involve the vendor shipping incomplete orders but billing as if the orders are complete. This scheme only works if the company doesn't carefully count goods in incoming orders and match the counts against the original purchase order and vendor's invoice.

Balance billing involves the vendor simply billing the company for the "balance on account," rather than invoicing for specific orders. Given such a billing scheme, along with many orders and payments, the vendor may "accidentally" fail to credit a returned shipment, credit a payment, overcharge for an order, and so on. Unless the company keeps very careful records, it will not be in a position to know if the vendor's statement for the balance on the account is inflated.

Uncovering evidence of balance billing fraud simply involves ensuring that the accounting records are correct and up to date, but, finding evidence of inflated balance-billing statements doesn't prove fraud. However, overbilling the U.S. government may give rise to a civil action under the 1863 **False Claims Act**. The False Claims Act permits any whistleblower to initiate a civil action against a company that falsely bills the U.S. government and receive an award in the amount of 15 percent to 30 percent of the amount overbilled. Such claims are filed under seal and served on the government and not the defendant.

In another vendor fraud scheme, a vendor may supply substandard goods. This scheme can cause very serious damage to a company. For example, consider the case in which a bridge collapses because a supplier sells the contractor inferior quality concrete or steel. Expert consultants may be needed to gather evidence in such cases. Generally speaking, the evidence in a substandard goods case is the substandard goods themselves. Further, collusion is always possible, for example, a company inspector may accept a batch of substandard goods in exchange for a kickback from the supplier.

Frauds From Customers and Competitors

Customers can defraud companies in various ways. Accounts receivable fraud (as already discussed) and returns fraud are good examples. In returns fraud, customers may purchase an item and return a completely different and substandard item in its place. As with vendor fraud, most customer fraud schemes work by exploiting weaknesses in the company's internal control system.

Finally, there are fraud schemes perpetrated by competitors. Two such schemes include sabotage and theft of proprietary information. There is almost no end to the ways in which companies can sabotage competitors. For example, in one scheme, the competitor seeks to damage a company's brand by flooding the market with substandard imitations of the company's products.

Theft of proprietary information falls under the general category of corporate espionage, for which the number of fraud schemes is near endless. Competitors can steal company secrets using techniques that range from wiretapping to bribery.

Investigating cases of corporate espionage often involves highly sophisticated perpetrators, such as ex-military intelligence officials, ex-CIA officers, and so on. Therefore, investigating such cases frequently requires the assistance of high-tech counterintelligence specialists.

Identity Theft Fraud

Identity theft involves one individual fraudulently obtaining goods, funds, or services under someone else's name. Most identity theft is perpetrated by organized crime rings who steal very large numbers of identities. Further, identity theft is frequently more than an isolated crime. For example, identity theft is often associated with tax-refund fraud, in which identity thieves file tax returns and obtain refunds using stolen identities. The refunds may then be cycled through the financial system using money-laundering techniques. The result is an assortment of crimes: federal tax fraud, money laundering, identity theft, wire fraud, and mail fraud. Many other crimes are possible as part of identity theft schemes. Examples include conspiracy, racketeering, and obstruction of justice.

In addition to tax fraud, some other major identity theft fraud schemes are associated with insurance fraud, mortgage fraud, bank fraud, real estate fraud, and credit fraud. The common element in these schemes is that the perpetrator engages in a transaction using an assumed identity and then appropriates for personal use funds from the transaction. The source of the appropriated funds (and, hence, the victim) differs according to the scheme. If it's insurance fraud, the insurance company becomes a victim of a false claim. If it's bank fraud, the bank becomes the ultimate victim when it replaces funds stolen from a customer. The mortgage company becomes the victim when it funds a fraudulent mortgage transaction due to mortgage fraud. The owner becomes the victim when his or her house is sold by someone using his or her name due to real estate fraud. If it is credit fraud, someone becomes the victim when he or she receives credit card bills for charges he or she never made.

The damage caused by identity theft is often much more than a financial loss. In many cases, it has the effect of totally destroying the lives of its victims. For example, consider an individual who files for a tax refund only to find out his or her request is a duplicate (because an identity thief has already received the refund). Next, assume that without the refund the victim is unable to pay bills on time and ends up with ruined credit. The victim may resolve the issue with the IRS, but that won't repair the victim's credit.

Identity theft is illegal under many federal and state laws. The **Identity Theft and Assumption Deterrence Act** provides criminal penalties of up to 15 years in prison. In addition, the **Identity Theft Penalty Enhancement Act** adds additional penalties for **aggravated identity theft**, which is identity theft committed in conjunction with certain other crimes, including, for example, mail fraud, wire fraud, bank fraud, certain thefts relating to employee benefit plans, and for crimes relating to obtaining consumer information under false premises.

The **Internet False Identification Prevention Act** makes it a crime to sell various types of government-issued identification cards. Such false identification cards are sometimes used by identity thieves to impersonate their victims in banks and other places in which they carry out their illegal schemes. Unfortunately, very authentic-looking false identification cards are sold on the Internet. Various underground Internet sites also sell stolen account numbers, credit card numbers, passwords, and complete identity information.

The **Fair and Accurate Credit Transaction Act of 2003** (FACTA) updated the Federal Fair Credit Reporting Act and added many specific, related obligations for businesses and protections for consumers. For example, only the last five digits of credit and debit card numbers may appear on billing statements. Businesses are required to put in place systems to prevent and detect identity theft and provide certain notifications to victims and credit bureaus. Consumer credit reports must be disposed of in a secure manner.

Of particular importance to forensic accounting investigators is a provision of FACTA that applies to consumer reports and communications between an employer and a credit-reporting agency. The provision provides an exemption for workplace investigations for suspected misconduct relating to employment for a suspected violation of state or federal laws or for a violation of a preexisting written company policy. Further, the provision permits employers and their outside investigators to investigate a wide range of workplace issues without having to notify the target of the investigation. Not notifying suspects minimizes the risk of their destroying evidence or unduly influencing any witnesses.

Types of Identity Theft

Identity theft can include the theft of a victim's identity (such as a credit card number), in part or in entirety. If the theft is in part, the thief may simply steal a credit card number or information that gives the thief control of a limited portion of the victim's credit or assets. The common theme is that the thief gains control over the victim's assets or credit. However, simple access to an individual's assets or credit is not always sufficient for the thief to establish the control he or she seeks. Therefore, in many cases, access is a stepping stone to control. For example, access to a victim's Social Security number and address might be sufficient for the thief to gain control of the victim's credit account in a department store.

The amount of information that a thief needs to gain control over a given portion of a victim's assets or credit depends on the specific asset or credit account. As a general rule, gaining access to a victim's Social Security number, date of birth, and address is sufficient to gain a considerable amount of control. Such information may permit "hit-and-run" schemes in which the thief opens accounts in the victim's name and proceeds to run up bills, but such schemes are likely to be detected as soon as the bills start arriving. As a result, identity thieves sometimes seek to gain control over victims' mail. The thief either steals the victim's mail right out of the victim's mailbox or finds a way to divert the mail to an address under the thief's control. Such time-consuming and complicated tactics are most likely to come from a small, local ring, but some identity-theft rings move from one city to the next when their operations become too "hot" in a given location.

The most common types of identity theft are more of the hit-and-run variety, such as credit card theft and theft of account logins and passwords. Losses from such thefts usually end up being borne by financial institutions, although there may be considerable inconvenience to the consumer.

In some cases, thieves will steal someone's identity and then alter it before using it. For example, a thief might steal a victim's Social Security number and birth date, but then use a slightly altered version of the victim's birth date to obtain credit. In a different case, when opening a credit account, the thief might change the day portion of the birthdate from 21 to 12, but otherwise use the victim's correct name, address, and so on. Such frauds can escape notice because credit reporting agencies sometimes put accounts that don't quite match in a credit file that is separate from but linked to the correct credit file.

Investigating Identity Theft

In order to investigate identity theft, the investigator must understand the ways in which identity information can be stolen (also see figure 9.4):

- *Hackers and phishers.* The vast majority of identities are stolen using the Internet.
- *Insiders.* Companies that grant credit can have employees that leak customers' identity information.
- *Trash.* Companies with insecure document disposal practices may leak customer identity information via their trash.
- *Shoulder surfers.* Some identity thieves literally look over people's shoulders to view card numbers, pin numbers, and so on.
- *Social engineers.* Social engineers are adept at convincing companies to disclose privileged information, such as account numbers, passwords, and so on.
- *Mailbox thieves.* Mail can contain tax returns, account statements, and almost any kind of personal information.
- *Street thieves.* Thieves will break into cars to steal purses or simply grab them from pedestrians.
- *Public records and social media.* Public records may contain birth, marriage, divorce, and driver's license records. Further, some people put too much of their personal information on social media sites. It's not uncommon for some individuals to publically post their phone number, birth date, the names of relatives, and so on.

Warning signs (i.e., red flags) for identity theft include bills for things not purchased, loans not made, unauthorized account transactions, incorrect information on credit reports, and unauthorized address changes.

Figure 9.4
Identity Thieves Have Many Ways to Steal Identity Information

Identity theft is not limited to crimes against individuals. Nefarious individuals may illegally gain control of a company's assets or credit. Further, companies with large bank accounts and credit lines can be especially lucrative targets. For example, in a single year, the FBI investigated fraudulent wire transfers in which fraudsters attempted to transfer approximately $20 million by compromising the online banking credentials of 11 U.S. small- to medium-sized companies. Actual losses totaled $11 million.

Case in Point

The United States Office of Justice Programs[3] defines three types of identity theft incidents: unauthorized use or attempted use of an existing account, unauthorized use or attempted use of personal information to open a new account, and misuse of personal information for a fraudulent purpose. There are over 15 million cases of identity theft in the United States each year.

Identity Theft Investigation Methods

In many cases, identity thieves are impossible to catch. Many are offshore and use sophisticated techniques (such as proxy servers, which are discussed in chapter 11, "Digital Forensics") that make it impossible to trace their Internet activities. But, in some cases, Internet connections can be traced to those of employees, which creates an opportunity for a forensic accountant to develop the evidence needed for a civil or criminal case.

When a company insider is involved, surveillance methods can prove fruitful. Insiders that have access to stolen information automatically become candidates for suspects. The problem is that simply knowing who is involved isn't evidence. For example, if it can be shown that an employee's computer is used to leak identity information, then there is no guarantee that someone else besides that employee didn't access the employee's computer. Nevertheless, as with all internal computer crimes, system logs may be helpful.

[3] www.bjs.gov

Probably the most serious issue when investigating identity theft lies in discovering the thief's true identity. In many cases, one can identify the exact time of the crime, the exact methods used, and even where the fraud was committed. But none of that puts a name to the "invisible" thief; so, to counter the issue of invisibility, law enforcement officials use a method called "controlled delivery" to catch identity thieves. Controlled delivery catches the thief at some physical point in the thief's scheme, such as when the thief picks up mail from a commercial mail center, enters a bank to withdraw cash, or visits a loan or insurance office to pick up a check or close a deal. Identity thieves are often aware of this tactic, so they may go to great lengths not to be identified in person. For example, in one Florida case that was nicknamed "Felony Lane," identity thieves withdrew funds from drive-through windows at local banks, but before approaching the banks, they would put on wigs, hats, and sunglasses to mask their identities.

In some cases, investigators will make up excuses to convince identity thieves to appear in person. In a case of insurance fraud, the investigator may tell the fraudster over the phone that the claim has been approved but requires the fraudster to appear in person to pick up the check.

In general, controlled delivery seeks to exploit a point of weakness in many schemes that involve identity theft: At some point in the scheme, the thief must make a physical appearance. A second major weakness in many identity theft schemes is time. Many schemes require a long period of time to fully execute, such as stealing personal information, obtaining credit under a victim's name, and then exploiting the victim's credit. The amount of time involved to commit the scheme can accrue to the benefit of investigators if they learn about the scheme early on.

How Identity Theft Rings Work

Identity thieves tend to work in small groups. Some of the functions of the group may be outsourced to affiliates or other groups. The typical identity theft ring involves the following "job positions:"

- *Procurer.* This person may purchase the information from "specialists" on the Internet or obtain it directly from hacking and phishing schemes, street sources, or leakers from insider an organization. Many schemes exist for stealing identity information. One fraudster put a fake ATM machine in a shopping mall. The machine recorded the card numbers and pin umbers of everyone who tried to use it. To mask its true purpose, the machine produced an error message that served to minimize suspicions.
- *Document forger.* This person specializes in things like check washing and making false identification cards.
- *Sales manager.* This person may sell some or all of the stolen identity information.
- *Shopper.* This person is the one who actually goes out and does things like pass stolen checks and use fake or stolen credit cards.
- *Money launderer.* This person specializes in putting the group's money into the financial system. In some cases, group members just "sit" on the cash.

Money Laundering Fraud Schemes

Money laundering is the process of placing illegally-obtained funds into the financial system. The goal of the expert money launderer is to make it appear as though the laundered funds have come from legitimate sources.

Money laundering is much more of an all-encompassing crime than most people believe. For example, money laundering would include a case in which someone robs a convenience store of $100 and then deposits the ill-gotten money into a bank account. Therefore, many crimes ranging from embezzlement to narcotics trafficking frequently involve money laundering.

The penalties for money laundering are severe. Each individual money-laundering transaction can produce a separate prison sentence of up to 20 years. Further, any funds associated with money laundering are subject to forfeiture. In many cases, fraud schemes involve many transactions subject to money-laundering penalties.

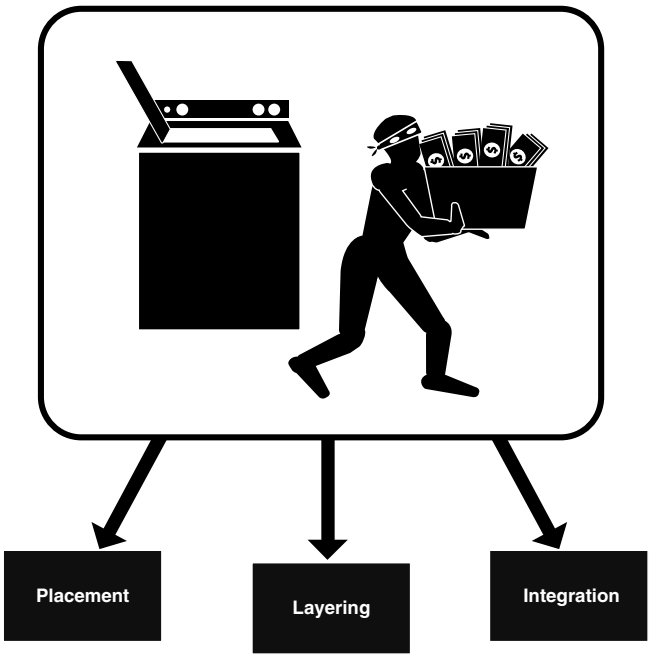
The **money-laundering process** involves 3 steps: **placement, layering**, and **integration** as depicted in figure 9.5.

- *Placement.* The placement step involves depositing the illegally-obtained funds into some type of financial institution. The money launder seeks to deposit the funds in such a way to avoid suspicion.
- *Layering.* The layering step involves moving money, typically from one account to another, in such a way that it can't be traced back to the initial deposit made in the placement step.

- *Integration.* The integration step involves making the funds available for use by the money launderer. If the money launderer has succeeded in layering, funds that have been integrated will be completely beyond suspicion.

The problem that money launders face is that financial institutions generally have strong controls to detect money-laundering activities. As mentioned in the text that follows, financial institutions have systems in place to detect things like unusually large deposits or other transactions that are inconsistent with a client's previous account history. Consequently, money launderers resort to various methods to disguise their actions.

Figure 9.5
Money Laundering



PLACEMENT TECHNIQUES

The most difficult problem money launders face is placement of ill-gotten cash into the financial system. This is because governments worldwide have anti-money-laundering laws that require their financial institutions to have systems in place to prevent, detect, and report money-laundering activities. As a result, money launders seeking to deposit large amounts of cash find it difficult to open accounts or make large deposits without risking detection.

Some commonly used placement techniques are as follows:

- *Smurfing.* **Smurfing** is a commonly used technique. It involves splitting large amounts of money (currency) into individual deposits less than $10,000 each. The size of each deposit is limited to less than $10,000 because financial institutions are required to report to the federal government cash deposits larger than $10,000. This limit makes smurfing unattractive for drug traffickers or others seeking to launder millions of dollars.
- *Currency structuring.* This technique involves the money launder exchanging large numbers of prepaid debit cards or negotiable instruments (such as money orders) for illegal (or sometimes legal) goods or services. Examples include exchanging illegal drugs or diamonds (that have been purchased with cash) for debit cards.
- *Front businesses.* This is a favorite technique of money launderers for large organized crime groups. The group buys or builds a legitimate business and then deposits illegally-obtained cash, along with cash from the legitimate business.

- *Corrupt bank.* In some cases, money launders have been known to buy a bank, create their own bank, or bribe officials in an existing bank. This technique is most effective in countries with relatively high incidences of corruption and weak oversight of the financial system.

Layering Techniques

- *Informal value transfer systems.* One way that money launders move money from one place to another, including across international borders, is through **informal value transfer systems** (IVTSs). Such systems function much like formal systems like Western Union. With Western Union, one person sending cash to another gives the cash (including a fee) to a Western Union representative and designates the name and location of the recipient. The representative then notifies a second representative near the recipient. The second representative then gives the money to the recipient.

  The IVTS functions the same way as Western Union, except the representatives may be replaced by, say, members of the same family or tribe. Examples of such systems include the *hawala* in Afghanistan, Pakistan, and the Middle East and the *fei ch'ien* in China.
- *Off-shore accounts.* Banks in some countries may have loopholes in their laws that permit money launders to move funds through their financial systems without the United States learning about it. Such countries may also be attractive to tax evaders.
- *Trusts.* Some countries may permit anonymous trusts that hide the identity of the beneficiary. Money launders may move money through such trusts in order to obliterate the connection between the source of the funds and its eventual owner of record. However, due to considerable pressure worldwide for all financial institutions to comply with international money-laundering laws, money launderers find fewer and fewer opportunities to use legitimate techniques like trusts to hide their identities.
- *Bearer stock certificates.* A key aspect of the layering process is obliterating the connection between the original source of the money and the ultimate holder of record. Shell companies are sometimes used to help achieve this objective. This is especially true in countries that permit **bearer stock certificates**. In such countries, the officers of the company will be in government records, but the government won't know the names of the owners. The result is that money that goes in or out of such companies will not be traceable to the owners.
- *Walking accounts.* Money launders sometimes set up accounts with instructions that in the event of any type of inquiry, the money is immediately wired to another location, typically in another country.
- *Financial intermediaries.* Money launders sometimes pass funds through financial intermediaries, such as securities brokers and insurance companies.

Integration Techniques

Integration is the final step in the money-laundering process. It is the point that the money becomes available for the money launder's personal use. Various techniques for integration are discussed as follows:

- *Off-shore debit and credit cards.* Money converted to prepaid debit cards or available in the form of secured debit or credit cards can be used by money launders for personal use and consumption. In some cases, the debit and credit cards may originate in a foreign country.
- *Off-shore consulting fees or loans.* The money launderer receives large "consulting" fees (or "loans") from an off-shore company controlled by the money launderer.
- *Gambling.* The money launders disguise illegally-obtained money as gambling winnings. Gambling winnings may be paid out by the casino in the form of a check or wire transfer.
- *Scam transactions.* This technique involves things like selling a worthless piece of real estate to an off-shore buyer for a large sum of money. Import and export sales have often been used to generate scam transactions.
- *Under-the-table cash.* This technique involves things like real estate or yacht sales in which part of the money in the transaction is not included in any of the paperwork for a sale. For example, a buyer of a yacht worth $1 million may agree to pay a seller $1.5 million if the buyer will accept half the money in cash. In this case, the paperwork would indicate a sale of $750k by check.

- *Scam stock purchases.* This scam requires a dishonest stock broker. The money launderer enters both a long and short order for the same number of shares of a given security. This results in a gain in one position and an equal loss in the other. The stock broker then "tears up" the loss, leaving only the gain. The money launderer pays the broker in cash for the amount of the gain and also a "fee" for the dishonest service. This leaves the money launderer with funds available on account to draw from.
- *Legitimate business.* This scam involves the money launderer putting cash into a legitimate business that is under the money launderer's control. The money launder then appropriates money from the business for personal benefit.

Anti-Money-Laundering Laws

Because money laundering is associated with both criminal and terrorist activities, over 35 countries participate in the Financial Action Task Force on Money Laundering (FATF)[4] to combat money laundering. The FATF has published many anti-money-laundering (AML) recommendations and standards for policies, procedures, and laws that member countries have widely adopted. The result has been to make it more difficult for money launderers to find safe harbors for their activities. For example, the FATF standards call for criminalizing the financing of terrorism, freezing money launderers' financial assets, between-country cooperation, and the regulation of IVTSs. The FATF also provides reports about countries that don't fully comply with its standards.

In the United States, the **Financial Crimes Enforcement Network** (FinCEN) is the primary government organization that enforces AML laws. FinCEN operates under the U.S. Department of Treasury. Its enforcement powers primarily originate from the Bank Secrecy Act (also known as the Currency and Foreign Transactions Reporting Act). Other applicable laws also apply, such as those covered under the Money Laundering Control Act and the Money Laundering Suppression Act.

FinCEN requires banks and other financial institutions to file currency transaction reports (CTRs) for cash transactions over $10,000 and suspicious activity reports (SARs) for transactions that might be related to money laundering. These reports are made available to authorized officials through FinCEN's BSA Direct Internet portal. Generally speaking, financial institutions must file SARs for suspected illegal activities and transactions, transactions that do not appear consistent with the client's normal pattern of financial activity, transactions that may be structured to avoid being reported, transactions involving high-risks countries, and transactions related to insider abuse.

Penalties for violation of AML laws are severe—$500,000 plus 20 years in prison per transaction. Funds associated with money laundering activities may be subject to seizure and forfeiture. Various federal regulations require financial institutions to have rigorous programs in place that prevent their systems from being used for money laundering. Regulations also require financial institutions to report certain transactions to FinCEN or other federal agency.

Financial institutions must also file various other reports, such as customs reports for currency and monetary instruments in excess of $10,000 that are moved in or out of the United States and for reports of foreign bank and financial accounts. Financial institutions are also subject to detailed record-keeping requirements and can be severely fined for gaps in compliance.

Organized Crime and Fraud

The United States Federal Bureau of Investigation (FBI) officially recognizes various organized crime groups on its website[5] and classifies them according to their geographical origin:

- African Criminal Enterprises
- Asian Criminal Enterprises
- Balkan Criminal Enterprises
- Eurasian Criminal Enterprises

[4] www.fatf-gafi.org

[5] www.fbi.gov/about-us/investigate/organizedcrime

- Italian Organized Crime/Mafia
- Middle Eastern Criminal Enterprises

The reach of a given criminal enterprise may extend well beyond its origin. This is especially true for hacking and Internet scams. For example, the well-known Nigerian 419 scam has tricked many individuals in the United States into wiring money to someone in Nigeria (or a proxy in another country) in order to facilitate some transaction from which that the victim is supposed to receive a benefit.

In the United States, the FBI recognizes **La Cosa Nostra** (LCN), an Italian organized crime enterprise. The LCN consists of five families, with each family having its own "boss" or head.

LCN Activities

The LCN engages in a wide range of illegal activities. These include, for example, labor racketeering, gambling, and loansharking. A primary goal of the LCN in labor racketeering has been to exert control over unions and, hence, their billions of dollars in health, welfare, and pension funds. Gambling has always been a primary source of business for the LCN, perhaps beginning with the LCN's role in founding the casino business in Las Vegas. Since then, the LCN has run illegal lotteries (called the "numbers" game) and other forms of illegal gambling, with bets being taken by bookies who operate in local bars and other establishments. Loansharking has very much complemented the LCN's gambling operations. The LCN makes high-interest loans, and the interest is called the "vig." Such loans are given with points, each point being 1 percent of the amount of the loan. The typical vig is 3–5 points per week, which is similar to an annual percentage rate of 150 percent to 250 percent. Some such loans do not permit the borrower to buy down the loan amount by making partial payments of principal. The result is that the borrower is forced to keep making the high interest payments. Failure to pay the interest payments on time can result in the borrower suffering serious "physical consequences."

LCN Organization Structure

Membership in the LCN is by invitation only, upon the recommendation of a trusted insider. New members of the LCN are called **associates**. After an associate proves himself and demonstrates that he can "earn" money, he may be invited to become a "made man," or full member of the organization. Very few associates ever become made men, and all made men must be 100 percent Italian on the father's side of the family.

The newly inducted made man begins by taking an oath of silence (the **Omerta**) and total loyalty and obedience to the family boss. Obedience may require carrying out an order to commit almost any kind of crime, including murder. The penalty for refusing an order is death.

Generally speaking, there are four levels within the LCN. At the lowest levels are the first- and second-level soldiers called the **piciotto** and the **sgarrista**. The sgarrista will generally run his own rackets, but he must give a large cut of his earnings to his immediate boss, the **capo**. The capo, in turn, gives a significant portion of his earnings to the family boss.

The family boss makes or approves all important decisions for all levels of the organization. For example, all contract killings of insiders or outsiders must be approved by the family boss. However, it is very rare for the boss to approve any killings of outsiders.

Financial Investigations Involving the LCN

The federal government uses many laws to counter the LCN and other organized crime groups. The primary weapon has been the **Racketeer Influenced Corrupt Organizations (RICO) Act**. This act permits the FBI to intervene even if evidence is only at a state level. The FBI has also used various laws that target specific illegal activities, such as illegal gambling, extortionate credit transactions, extortion, conspiracy, wire fraud, mail fraud, and securities fraud.

In the LCN, money flows upwards, from the associate and soldier to the family boss. It's common for family members to store large amounts of cash in covert locations. Further, LCN members commonly title assets (for example, real estate and automobiles) in others' names. Consequently, surveillance techniques have been especially helpful in developing evidence. However, in cases in which the LCN (or individual or other crime group) uses a

legitimate business to launder money, the FBI has been successful in using net worth tests. Such tests develop evidence by comparing changes in net worth to reported net cash flows. Money laundering may be indicated when net worth increases by amounts larger than end-of-period versus beginning-of-period cash flows.

Other Criminal Enterprise Groups

Each criminal enterprise group tends to have its own fraud specialties, geographical reach, organization structure, and code of conduct. For example, as part of its U.S. operations, Russian Organized Crime specializes in health care fraud and insurance fraud, in addition to a wide range of other criminal activities.

Terrorist Groups

Terrorist groups represent a special type of organized crime. Like all organized crime groups, terrorist groups need money to function. However, funding terrorist groups is generally illegal, so terrorist funding tends to involve money laundering in reverse. With normal money laundering, the objective is to move money from illegal sources to legal sources; but with terrorism, money is often moved from legal sources to illegal terrorism. However, many terrorist organizations engage in illegal activities to fund their operations, which range from programs that seek political influence to terrorist attacks.

Terrorist organizations tend to focus on local and regional issues. However, in the late 1990s Osama bin Laden called for globalization of a general jihad (or struggle) and created the International Islamic Front for Jihad Against the Jews and Crusaders. A main goal of the organization and the affiliates that joined it was to get Muslims everywhere to kill Americans. However, successful operations against his group and its affiliates greatly disrupted his organization. The result became more decentralized funding and more reliance on criminal activities, such as narcotics trafficking.

A major source of funding for Middle Eastern terrorist groups has been from charitable organizations and sympathetic businesses. There have been many cases of government freezing the assets of these groups.

Summary

It is possible to classify most frauds and related fraud schemes into three general classes: occupational fraud, external fraud, and frauds in which individuals are the victims. There are three types of occupational fraud: corruption, asset misappropriation, and fraudulent financial statements.

The most widely recognized predictor of occupational fraud is the fraud triangle, which suggests that fraud tends to occur when there is a "perfect storm" of opportunity, (financial) pressure, and rationalization. Weak internal control processes and weak fraud detection systems tend to increase the likelihood of fraud.

The most common employee corruption schemes involve bid rigging and kickbacks. The common element in bid rigging schemes is the manipulation of a bidding process so that the outcome of the bidding and the related awarding of a purchase or service contract is secretly predetermined.

Aside from the simple theft of unprotected cash, misappropriation schemes can be classified as belonging to the revenue cycle and the expenditure cycle. Various revenue fraud schemes are used to perpetrate revenue cycle fraud including skimming, check laundering, lapping, and improper credit approvals.

Expenditure cycle frauds fall into three broad categories that include improper purchases, payroll frauds, and improper payments. Corruption-type frauds can occur with company credit cards and expense accounts. Theft of company checks represents a special category because a fraudster can use company checks to make withdrawals from the company's bank account without the knowledge or approval of the company.

Payroll frauds include improper hiring, improper changes to employee personnel files, and improper reporting of employee activities. Aside from payroll-related problems, the biggest problem in the production cycle involves theft of raw materials and finished goods. Most thefts can be prevented by good physical security and accounting controls that track all raw materials to specific work orders. Electronic systems designed with good controls will maintain an unalterable audit trail of all transactions (including approvals and authorizations). As a consequence, electronic systems normally provide a solid evidence trail of who did what and when.

Generally speaking, vendors are not in a position to defraud companies that have good purchasing practices, use a voucher system, and carefully count and inspect incoming shipments in the receiving department. However, vendors can exploit any internal control weaknesses. Some of the most common exploitations are short shipments, balance billing, and fraudulent cost-plus billing.

Customers can defraud companies in various ways. Accounts receivable fraud and returns fraud are good examples. For example, in returns fraud, customers may purchase an item and return a completely different and sub-standard item in its place. As with vendor fraud, most customer fraud schemes work by exploiting weaknesses in the company's internal control system. Finally, there are fraud schemes perpetrated by competitors. Two such schemes include sabotage and theft of proprietary information.

Identity theft involves one individual fraudulently obtaining goods or services under someone else's name. Most identity theft is perpetrated by organized crime rings who steal very large numbers of identities. Further, identity theft is frequently more than an isolated crime.

Money laundering is the process of placing illegally-obtained funds into the financial system. The goal of the expert money launderer is to make it appear as though the laundered funds have come from legitimate sources. The process of money laundering involves three steps: placement, layering, and integration. In the United States, FinCEN is the primary government organization that enforces AML laws.

The FBI officially recognizes various organized crime groups and classifies them according to their geographical origin. In the United States, the FBI recognizes the LCN, an organization that engages in a wide range of illegal activities. These activities include labor racketeering, gambling, and loansharking.

Terrorist groups represent a special type of organized crime. Like all organized crime groups, terrorist groups need money to function. However, funding terrorist groups is generally illegal, so terrorist funding tends to involve money laundering in reverse. With normal money laundering, the object is to move money from illegal sources to legal sources. But with terrorism, money is often moved from legal sources to illegal terrorism.

A major source of funding for Middle Eastern terrorist groups has been from charitable organizations and sympathetic businesses. There have been many cases of government freezing the assets of these groups.

Review Questions

1. Which type of question seeks to assess the interviewee's honesty?
   a. Informational.
   b. Assessment.
   c. Admission-seeking.
   d. Introductory.

2. Which of the following is not a type of occupational fraud?
   a. Corruption.
   b. Asset misappropriation.
   c. Conflict of interest.
   d. All of the above are types of occupational fraud.

3. Which of the following is not an example of an external fraud?
   a. An outsider giving a kickback to a purchasing officer.
   b. An offshore hacker stealing customer credit card data.
   c. A customer opens a credit account under a fake name.
   d. All of the above are external fraud.

4. The profile of the typical fraudster in the organizations suggests _____.
   a. A criminal background.
   b. A dysfunctional psychological background.
   c. Antisocial tendencies.
   d. None of the above.

5. POS schemes are a form of _____.
   a. Sales skimming schemes.
   b. Corruption schemes.
   c. Lapping schemes.
   d. None of the above.

6. The absence of a voucher package would most likely be associated with a(n) _____ fraud scheme.
   a. Sales skimming.
   b. Corruption.
   c. Expenditure cycle.
   d. None of the above.

7. Check washing is most likely to associated with _____.
   a. A payroll fraud scheme.
   b. Identity theft.
   c. Fake credit accounts.
   d. None of the above.

8. Generally speaking, the most likely issue in production fraud is _____.
   a. Improper hiring of production employees.
   b. Inventory losses.
   c. A lack of adequate supervision.
   d. None of the above.

9. Which is not a vector of attack in electronic systems?
   a. Input manipulation.
   b. Program alteration.
   c. Sabotage.
   d. All of the above are vectors of attack in electronic systems.

10. A scheme in which a vendor seeks to overbill involves _____.
    a. Balanced billing.
    b. Balance billing.
    c. Invoice billing.
    d. None of the above.

11. _____ provides an exemption for workplace investigations for suspected misconduct relating to employment, a suspected violation of state or federal laws, or a violation of a preexisting written company policy.
    a. The Internet False Identification Prevention Act.
    b. The Fair Credit Reporting Act.
    c. The Fair and Accurate Credit Transaction Act (FACTA).
    d. None of the above.

12. Which of the following is not associated with identity theft?
    a. Hackers.
    b. Shoulder surfers.
    c. Street thieves.
    d. All of the above.

13. Which money-laundering technique involves making many small deposits in different locations?
    a. Currency structuring.
    b. Smurfing.
    c. The use of a financial intermediary.
    d. None of the above.

14. Which of the following is not a traditional area of crime for the LCN?
    a. Loansharking.
    b. Labor racketeering.
    c. Gambling.
    d. All of the above are traditional areas of crime for the LCN.

15. Terrorism represents _____.
    a. A special type of organized crime.
    b. An organization that engages in reverse money laundering.
    c. Both a and b.
    d. Neither a nor b.

Short Answer Questions

1. Why is corruption fraud often so hard to prove?
2. What are some examples of external frauds?
3. How do bid rigging schemes work?
4. What internal control deficiencies are required for a lapping scheme to work?
5. What types of fraud are prevented by a voucher system?
6. What are five vectors of attack in electronic systems?
7. How does balance billing fraud work?
8. What is the most difficult problem in catching identity thieves?
9. What are the elements of the money-laundering process?

10. What role does FinCEN play in defeating organized crime?
11. How does money flow in the LCN?
12. Explain why terrorism involves money laundering in reverse.
13. What is the main legal tool for fighting organized crime in the United States?
14. What is smurfing?
15. What is check washing?

Brief Cases

1. You encounter a possible accounts receivable lapping scheme. Given that lapping is your fraud theory, how would you proceed to investigate?
2. Your client reports to you that its controller has discovered cancelled checks with details in the cash register that don't match those on the check itself. What fraud scheme might this be?
3. You are in the pest control business. You receive a warranty claim for a termite infestation. The problem is that the customer's receipt appears to be official, but you are unable to find a record of the original service anywhere in the company's system. What might you hypothesize for an initial fraud theory?
4. You observe credits to customer accounts without any supporting documentation. What might you hypothesize for an initial fraud theory?
5. You have learned that someone has entered the company's main server room and destroyed all the data storage units, including backups. What might you hypothesize for an initial fraud theory? How would you begin your investigation?
6. Your client begins receiving invoices for items that it never ordered or received, at least according to the company's purchasing and receiving records. What might you hypothesize for an initial fraud theory? How would you begin your investigation?
7. You are a forensic accountant working in an economic crimes unit. You see an individual withdrawing cash from an ATM machine, but the individual keeps using one ATM card after another, and after about the 5th card you are fairly certain that you are watching an identity thief. How should you proceed?
8. You are investigating a mortgage fraud scheme, and you suspect that the borrower is using a false identity. The problem is that the buyer has worked strictly online in completing the loan application. How do you proceed to investigate and catch this suspect?
9. You are a law enforcement investigator, and you have been told by a reliable informant that a particular attorney is laundering money for clients. How might you investigate?
10. Your client reports that all its bank accounts have been "cleaned out," with the money having been wired to various islands. How do you investigate?

Cases

1. Robert Anderson is the CIO for ZonaVerde, a medium-sized lawn maintenance company that services most of western Pennsylvania. ZonaVerde has built up its business over a 25-year period and now has over 8,000 steady clients. In recent years, it has managed to sign up about half its clients for sidewalk and driveway snow removal, thus, expanding its operations into the winter months. So, with the summer and winter business combined, ZonaVerde has been very successful in offering highly reliable services and very competitive prices. In fact, ZonaVerde has been so successful that it has driven most if its competitors out of business.

Just two days ago, Robert Anderson discovered that the company's entire accounting system appears to be somehow corrupted. It will not accept his or anyone else's password, and so it's impossible to even log in and view customer accounts or send out monthly statements. Things are so bad that he is not even able to access the list of customers.

Robert had always been good at keeping backups, so he immediately tried to restore everything to a previous version of the software and database, but he discovered, to his horror, that all the backups were completely empty. This left operations in total chaos. All the customer contracts were lost, and he had no idea of which customers even owed ZonaVerde balances on their accounts.

Just as he was prepared to give the bad news to the CEO, Marty Perez, he received an e-mail from an individual claiming that it had encrypted ZonaVerde's accounting system and that it would provide the unlock keys for a one-time Bitcoin payment of $50,000.

Required

How should Robert Anderson respond? How might you investigate this case?

2. Mary Church, an internal accountant for Wardak Construction Consulting, is investigating a loss of $100,000 via four checks for $25,000 each. It appears that the checks had been stolen from the company's finance office. Unfortunately, Jason Well, the financial manager, had kept the checkbook and register in an unlocked file cabinet, and at least six employees had access to his office.

   The stolen checks had been made payable to Renny Supplier Services. Mary filled out the appropriate fraud affidavits with her company's bank, but the bank would not immediately refund the stolen money because the bank officials wanted to first contact Renny Supplier Services to ask for an explanation. Mary was very unhappy about waiting a whole day to recover the money because she felt that the problem was between the bank and Renny Supplier Services.

   Things got worse. The bank calls Jason and tells him it is suspending Wardak's line of credit. Further, Mary learns that the order to cut off Wardak's credit line came from the bank's loss management department. From further discussions, it became clear that the bank was treating Wardak as if it were guilty of the fraud.

   In a panic, Mary begins her own investigation of Renny Supplier Services. Checking with the Secretary of State's online database she learns that Renny Supplier Services is a registered fictitious name for Martin Renny, and now the telephone number for Renny Supplier Services appears to be disconnected. So, she drives to the address listed with the Secretary of State only to find a lawyer's office. The lawyer indicated that she could accept legal service for Renny but could provide no more information. Finally, Mary searched for and found Renny Supplier's website, and after more digging she found that the site was hosted by a budget hosting company in Dallas, and the domain name, Renny-Services.Com, was registered to an e-mail address that ended in ".RU."

   Required

   How should Mary proceed with her investigation? What fraud is likely involved?

3. Tania Greenbar is the controller for Malwick Department Store. Malwick is a family-run business that has been around for 80 years. Despite the onslaught of discount stores and department store chains, Malwick has managed to maintain a loyal customer base and remain one of the highest-volume retailers of its kind in South Florida.

   Malwick's secret lies very much in its buyers, who constantly roam the world purchasing limited lots of high-end clothing items. Following this formula, Malwick is very acutely attuned to its customer's needs.

   Some of Malkwick's customers spend in excess of $25,000 per month. This is especially true with respect to some of its women customers, who want a guarantee that anything they buy will be one of a kind. This includes items of clothing from big name European designers.

   Although Malwick has remained competitive in its market, it has not kept up in the area of technology. Specifically, it has an antiquated computerized accounting system. As a result, many employees have access to the customer credit and billing system.

   The problem is that recently, eight large customer accounts have gone in arrears to the tune of about $140,000 in total. When Tania asked Barbara Bring, the credit manager, for an explanation, Barbara indicated the she had not approved credit for any of the eight accounts, and she could not tell who had approved the accounts. Further, none the problem accounts had working telephone numbers associated with them.

Required

You have been engaged as an independent investigator to find out who is responsible for the fraud. What fraud scheme appears to be in play in this case? You are not able to use computer forensic technology to identify the employee who approved the bogus accounts. So, you must use the fraud triangle to identify the most likely suspects before conducting interviews. Develop a list of items that you will use to rate each possible suspect with respect to each of the three elements of the fraud triangle.

4. Frans Cutler is in charge of information technology for GreenSpace Manufacturing Inc. GreenSpace manufactures portable office cubicles that can be inserted inside existing office buildings. The cubicles have special features that permit them to be directly connected to existing network, electrical, plumbing, and ventilation systems.

   GreenSpace is a very high-tech company with a large state-of the-art data center, which has some of the best security available, including a double-door entry system, video surveillance, special door locks, and so on.

   GreenSpace recently merged with CubeCasa, a company that manufactures fully functional, but very small, portable houses. As part of the merger, GreenSpace absorbed all the data-processing operations of CubeCasa, and because of the efficiency gains from the merger, GreenSpace was able to reduce the number of its data center employees from 25 to only 14, while keeping 4 out of 18 of the data center employees that worked for CubeCasa before the merger.

   One great benefit of the merger was that GreenSpace was able to update the security of its data center to the very best possible. Frans Cutler felt really good about overall security and business continuity plans.

   But, things went bad. Frans received a text message on Saturday afternoon from a "bot" that monitored data center operations on the weekends. The bot indicated that the entire data center was offline. So, Frans drove in to take a look.

   Frans fell into a state of total shock and horror upon his arrival. Servers everywhere were pulled out of their racks, strewn around the floor, and badly smashed and warped. Wires were ripped up everywhere and shredded into pieces. The main power supply units had large holes in their sides. It looked like a full military assault had been conducted against the entire data center. He found a large lumberjack axe left on the floor in the middle of the room.

   He went to check the video surveillance system, but he was again faced by the unexpected: The video surveillance digital video recorders had been ripped out of the secret place where they had been hidden in the false floor. Finally, the guard at the main entrance had not seen or heard anything suspicious. Further inspection of the complex revealed that the perpetrators had first broken into the adjacent warehouse and then made their way to the data center through a closed-off breezeway that connected the two buildings.

   Required

   How you would investigate this attack on the Greenspace's data center? What initial fraud theory might you consider?

5. You have been contacted by law enforcement to help prepare a case against the owners of Lomares, a large seafood restaurant on the north central coast of Florida. It is believed that the restaurant owners are associated with organized crime and are using the restaurant as a front for drug smuggling and other crimes.

   State investigators have surveilled the restaurant for some time, and in doing so, they have profiled some of the visitors as organized crime members from New York and Chicago. Investigators believe that incoming delivery trucks carry contraband, but as of yet, there has not been sufficient probable cause to attempt to intercept suspected shipments or obtain wiretap orders.

   However, the Department of Revenue received an anonymous tip to the effect that Lomares has not been properly collecting sales taxes in its gift shop.

   Required

   Given access to financial records, as part of a general sales tax investigation, how might you build a case against Lomares for drug smuggling?

Internet Research Assignments

1. Corruption is a fraud especially common among politicians. At least six state governors have been convicted on federal corruption charges. Research the Internet, and make a list of these governors. On what statutes were they convicted? Identify one fraud scheme applicable to a member of this group.
2. Research the history of the fraud triangle. Who was the first person to coin the term, and what research did this person do to help formulate his or her theory?
3. Research the Internet and find a case in which the fraud triangle was been used to solve a fraud.
4. Although many don't realize it, identity theft is common in the health care insurance agency. Visit www.youtube.com/user/ForensicAccountingTV and view the video called "Meet Rebecca S. Busch: Healthcare Fraud Fighter." Explain the ways in which health care identity fraud can hurt the victim.
5. Visit FBI.Gov and write a brief report on organized crime in the United States.

Chapter 10
Bankruptcy and Related Frauds

Learning Objectives

- Explain the six types of bankruptcy proceedings
- Explain the basic flow of bankruptcy proceedings
- Name many of the documents used to discover assets
- Distinguish the factors that require a unique approach to investigating business bankruptcies
- Describe the general elements of bust-out schemes
- Describe the general elements of bleed-out schemes
- Name some specific bankruptcy fraud schemes
- Explain the various civil actions that can be taken to fight bankruptcy fraud
- Explain the relationship between bankruptcy fraud and fraud in divorce and estates and trusts
- Explain the structure of the United States Trustee Program

Introduction

In the United States, bankruptcy is a legal process that is governed by **Title 11, of the *U.S. Code*** and the **Federal Rules of Bankruptcy Procedure** and is designed to resolve debts that a debtor is unable to pay. Bankruptcy cases are filed in United States Bankruptcy Courts, which are special branches of United States District Courts.

Bankruptcy courts have the authority to discharge or restructure debts. Appeals of decisions made by bankruptcy courts are made to the district court or, in some jurisdictions, to a **Bankruptcy Appellate Panel** (BAP). Westlaw[1] provides electronic access to all available bankruptcy cases.

In bankruptcy proceedings, the forensic accountant may serve in one of various roles, such as a consultant, trustee in charge of administering the bankruptcy estate, examiner, or fraud investigator. All these roles share a common requirement to apply the law to the bankruptcy estate while preventing fraud or material errors. Fraud is a serious concern in bankruptcy proceedings. According to U.S. Department of Justice statistics, fraud exists in over 10 percent of bankruptcy cases.

[1] www.westlaw.com

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

For CPAs, Consulting Services (CS) section 100, *Consulting Services: Definitions and Standards* (AICPA, *Professional Standards*), generally applies to all bankruptcy engagements. Attestation (and auditing) standards and Valuation Services (VS) section 100, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*), may also apply, depending on the circumstances. In all cases, any reports provided by the CPA should clearly state the standards that apply.

Title 11 provides for six types of bankruptcy proceedings:

- *Chapter 7.* This bankruptcy proceeding applies to both individuals and businesses. Subject to certain exceptions, it provides for complete liquidation of all the debtor's assets and the complete elimination of debtor's obligations.
- *Chapter 9.* This bankruptcy proceeding applies to municipalities.
- *Chapter 11.* This bankruptcy proceeding generally applies to businesses but also sometimes to individual debtors. Rather than completely discharging all debt, the court focuses on developing a payment plan to satisfy creditors.
- *Chapter 12.* This bankruptcy proceeding applies to farming and fishing businesses.
- *Chapter 13.* This bankruptcy proceeding applies to individuals with means-tested income large enough to disqualify them from filing under Chapter 7. The court may discharge some of the debt and create a payment plan for the rest.
- *Chapter 15.* This bankruptcy proceeding applies to certain cases in which a party to bankruptcy proceedings outside the United States may obtain access to U.S. courts.

Bankruptcy is normally associated with *cash-flow insolvency*, which is the inability to pay obligations as they become due. In many cases, however, the debtor may, at the same time, be "balance-sheet solvent" and possess significant illiquid net assets that can be used to liquidate the debts, given that the debtor has a sufficient amount of time to do so. In such cases, the debtor may opt to file for a payment plan under **Chapter 11**. Otherwise, the debtor may file under **Chapter 7**, which involves total liquidation of the business or assets. However, individual debtors who cannot pass a **means test** must file under **Chapter 13** instead of Chapter 7. Chapter 13 involves the debtor assuming a payment plan. Requiring a means test of certain individuals is a central part of the most recent reforms in bankruptcy laws and has made having debts totally dismissed more difficult for individuals.

In some cases, insolvencies are handled through out-of-court restructuring. Such restructuring can take many forms, including debt restructuring or new capital infusions. The practitioner's role in out-of-court restructurings can be very similar to his or her role in court-administered bankruptcies.

For consumers seeking to file under Chapter 7, a determination is first made about whether their filing is subject to the means test. This determination involves averaging the debtor's **current monthly income** (CMI) over the six months prior to the bankruptcy filing. The average income is then adjusted for certain classes of income (for example, Social Security) and then compared to the state median income. If the debtor's adjusted average income is above the state median income, then the debtor becomes subject to the means test.

The means test involves comparing the debtor's CMI (adjusted for certain IRS-allowed deductions) to two specific maximum income thresholds. If the debtor's adjusted CMI exceeds either of the thresholds, the Chapter 7 bankruptcy filing is presumed to be abusive. If the filing is presumed to be abusive, any party of interest, including the trustee, the court, or a creditor, may request that the case be dismissed. Courts, at their discretion, can transfer the Chapter 7 case to a Chapter 13 proceeding. Even in cases in which there is means testing but no presumption of abuse, or no means testing at all, trustees can still consider a petition as abusive and seek dismissal or transfer to a Chapter 13 proceeding, if appropriate.

In addition to petitions being presumptively abusive, petitions may also be abusive if they involve misclassification of non-consumer debt as consumer debt, if the debtor has the ability to pay, if debtor dishonesty is involved, if the debtor runs up debt for extravagancies right before filing, or if the petition is for involuntary bankruptcy and is frivolous.

Bankruptcy law requires attorneys to investigate their clients' filings. In addition, bankruptcy filings are subject to certain IRS-type audits. By placing responsibility on attorneys and subjecting bankruptcy filings to IRS-type audits, the government seeks to control abusive filings.

If there is any suspicion of fraud, **Rule 2004** of the Federal Bankruptcy Code grants the trustee broad powers to require the production of documents or compel testimony from almost anyone. The trustee has an affirmative obligation to make criminal referrals to the United States Office of Trustee, which, in turn, refers cases to the U.S. Department of Justice or the FBI.

Trustees are generally appointed by the U.S. Department of Justice to administer the bankruptcy estate. In addition to seeking dismissals for abusive cases and making referrals for fraudulent cases, trustees' responsibilities include maintaining fair and orderly proceedings, collecting and reviewing required documentation, and recommending dismissal of the bankruptcy case if the debtor doesn't cooperate.

Case in Point

The United States Trustee accepts bankruptcy fraud complaints that are in the form of a signed letter bearing a return address and phone number. Complaints are reviewed promptly upon receipt. Complaints may be e-mailed to USTP.Bankruptcy.Fraud@usdoj.gov.

As defined by the U.S. Department of Justice Bankruptcy Trustee Manual, bankruptcy fraud involves anyone who "knowingly and fraudulently" commits any of the following:

- Conceals property from the bankruptcy proceedings
- Makes a false oath or account in relation to a bankruptcy case
- Makes a false declaration, certification, verification, or statement in relation to a bankruptcy case
- Makes a false proof of claim
- Receives a material amount of property from a debtor with intent to defeat the bankruptcy code
- Gives, offers, receives, or attempts to obtain money, property, reward, or advantage by acting or forbearing to act in a bankruptcy case
- Transfers or conceals property with intent to defeat the bankruptcy code
- Conceals, destroys, mutilates, or falsifies documents relating to the debtor's property or affairs
- Withholds documents related to the debtor's property or financial affairs from the standing trustee or other officer of the court

The typical penalty for a single criminal act of bankruptcy fraud is five years in prison or a maximum fine of $250,000, or both. However, in many cases, acts of fraud in bankruptcy cases involve related crimes, such as money laundering, false declarations under the Sarbanes Oxley Act of 2002 (SOX), conspiracy, mail fraud, bank fraud, wire fraud, or tax fraud.

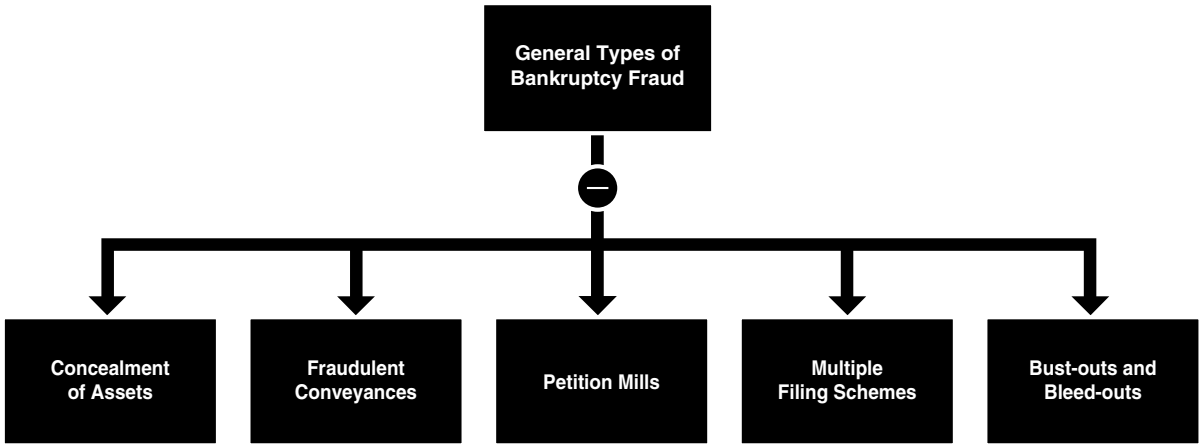
Section 802 of SOX is very specific:

> Whoever knowingly alters, destroys, mutilates, conceals, covers up, falsifies, or makes a false entry in any record, document, or tangible object with the intent to impede, obstruct, or influence the investigation or proper administration of any matter within the jurisdiction of any department or agency of the United States or any case filed under title 11, or in relation to or contemplation of any such matter or case, shall be fined under this title, imprisoned not more than 20 years, or both.

Specific fraud schemes (as depicted in figure 10.1) include the following:

- The concealment of assets.
- **Fraudulent conveyances** (secretly transferring assets and selling assets below market value).
- **Petition mills**, in which unqualified individuals offer low-quality filing services, instruct debtors to file without an attorney, and steal debtors' assets by having the debtor transfer assets to the fraudster.
- **Multiple filing schemes**, in which fraudsters use many false identities in different states to incur debt and then file separate bankruptcies under the different identities.
- **Bust-out and bleed-out schemes**, in which fraudsters establish businesses to operate with no intention of paying vendors. Various types of bust-out schemes are discussed below.

Figure 10.1
General Types of Bankruptcy Fraud



Bankruptcy filings are normally accompanied by tax returns, financial statements, and various schedules that include the following:

Schedule A—Real Property
Schedule B—Personal Property
Schedule C—Property Claimed as Exempt
Schedule D—Creditors Holding Secured Claims
Schedule E—Creditors Holding Unsecured Priority Claims
Schedule F—Creditors Holding Unsecured Nonpriority Claims
Schedule G—Executory Contracts and Unexpired Leases Schedule
Schedule H—Co-Debtor
Schedule I—Current Income of Individual Debtor(s)
Schedule J—Current Expenditures of Individual Debtor(s)
Statement of Financial Affairs

Generally speaking, the discovery rules in bankruptcy courts follow those of the Federal Rules of Civil Procedure, except for bankruptcy-specific issues such as the rules for filing the petition and proofs of claims. However, as mentioned previously, Rule 2004 permits any party in interest to obtain a court order to examine any entity involved with the case. Creditors sometimes use this rule to depose debtors in order to find concealed assets.

In addition to the discovery opportunities afforded to creditors by Rule 2004, the bankruptcy rules permit creditors to examine the debtor under oath at the first meeting of the creditors. The debtor is required to appear in person at this meeting and generally must answer all questions from both the creditors and trustee.

In some cases, bankruptcy proceedings can become complex. Special proceedings sometimes occur for recovering property or money; determining the validity, extent, or priority of liens; revoking a previous discharge of bankruptcy; or determining the dischargability of a debt.

Certain debts cannot be discharged in bankruptcy. Examples include the following:

- Federal student loans
- Tax debt less than three years old
- Tax debt older than three years, unless the related tax return was accurate and filed in a timely manner
- Domestic support obligations (including alimony and child support)
- Debts incurred during the course of a divorce or separation agreement
- Intentional torts
- Luxury credit card charges or cash advances
- Debts relating to driving while intoxicated
- Fines and citations

Federal Rules of Bankruptcy Procedure

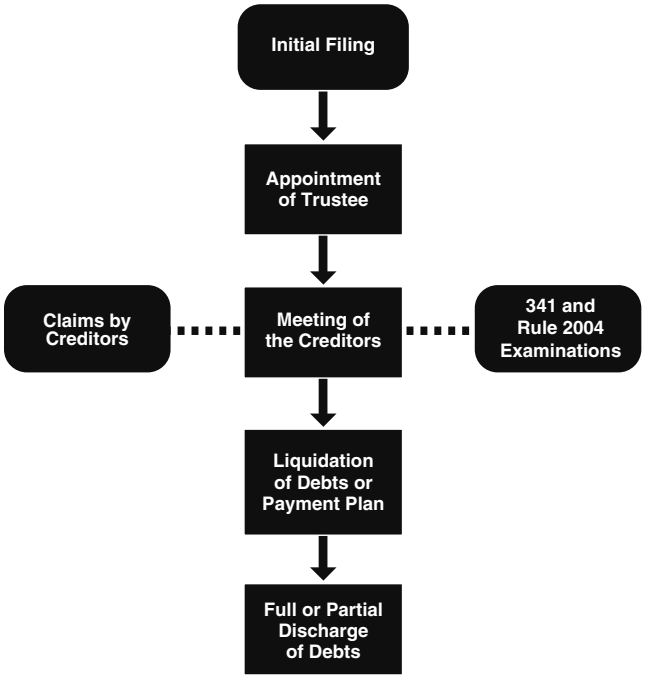
As mentioned previously, the Federal Rules of Bankruptcy Procedure govern procedures applicable to bankruptcy proceedings in U.S. federal courts. In all, these rules include nine active parts. Rules have their own numbering within each part. For example, the rules in Part 5 (Courts and Clerks) are numbered 5001, 5002, and so on. The nine active parts are as follows:

1. Commencement of Case; Proceedings Relating to Petition and Order for Relief
2. Officers and Administration; Notices; Meetings; Examinations; Elections; Attorneys and Accountants
3. Claims and Distribution to Creditors and Equity Interest Holders; Plans
4. The Debtor: Duties and Benefits
5. Courts and Clerks
6. Collection and Liquidation of the Estate
7. Adversary Proceedings
8. Appeals to District Court or Bankruptcy Appellate Panel
9. General Provisions

Part 1 sets forth the rules for commencing a case. Petitions may initiate voluntary or involuntary bankruptcies under one of the six chapters and must include a list of debts to be discharged or included in the bankruptcy proceeding. The most common types of bankruptcy include those related to Chapters 7, 9, 11, and 13.

Part 2 sets forth rules for the administration of the bankruptcy proceedings. Proceedings are administered by **trustees** appointed by the United States Department of Justice or creditors. The appointed trustee sends a notice to the creditors scheduling their first meeting. The debtor must appear in person at the first meeting of the creditors and answer creditors' questions under oath. The exact process depends on the type of bankruptcy and the issues involved, but the general flow of events proceeds from the initial filing to the appointment of the trustee to the meeting of the creditors, who, along with the court, may examine the debtor. Creditors typically file proof of claim forms per Part 3, which, if approved by the trustee, result in their receiving distributions subject to funds availability. Finally, the court may discharge the debtor's debts (Chapter 7) or approve a payment plan (Chapter 11).

Figure 10.2
Generic Bankruptcy Process



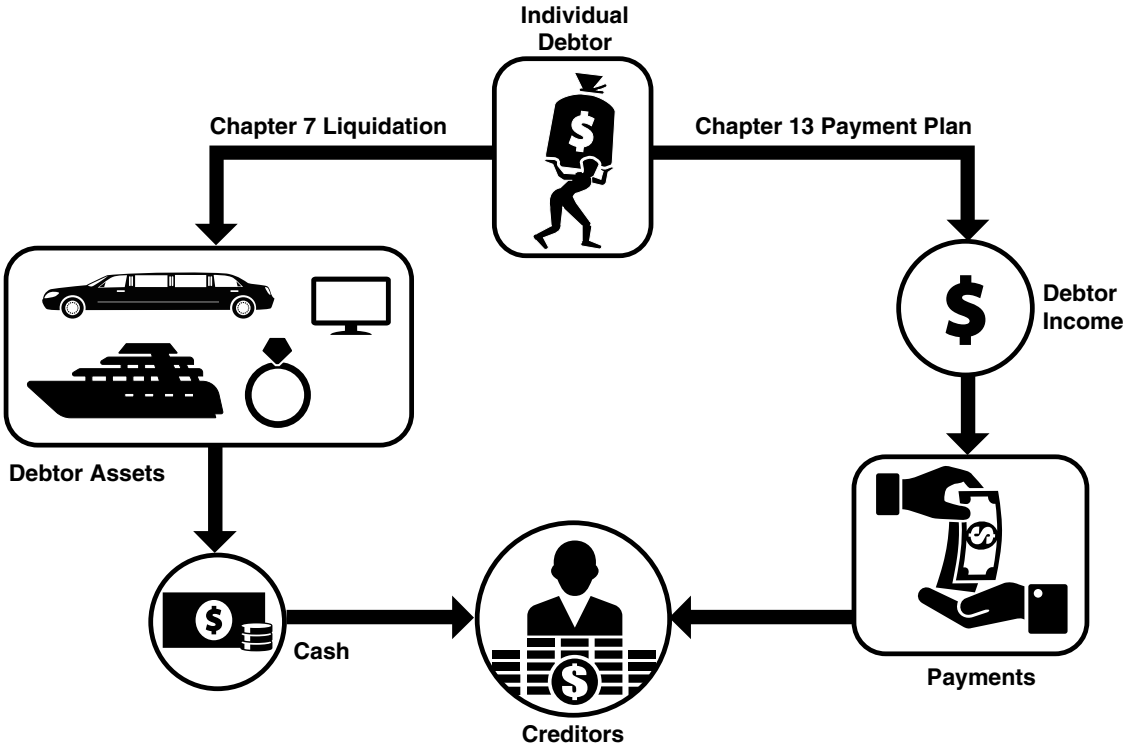
A generic bankruptcy process is outlined in figure 10.2, but bankruptcy proceedings can become complex and adversarial. Involuntary debtors can contest the bankruptcy petition, and disputes over assets and debts can arise. Disputes may be resolved through evidentiary hearings and even jury trials. Procedures similar to Federal Rules of Civil Procedure apply, with special local district rules being possible.

Some specific adversarial proceedings that can occur during bankruptcy proceedings include the following:

- Proceedings to compel a debtor to deliver property to the trustee
- Proceedings to deny or set aside a discharge of debts or deny a petition (a likely outcome in the event of debtor fraud)
- Proceedings to determine the value of an asset
- Proceedings to determine the validity of a creditor's claims

Differences between the Chapter 7 and Chapter 13 processes are shown in figure 10.3.

Figure 10.3
Chapter 7 Versus Chapter 13 for Individuals



INVESTIGATING FRAUD AND ABUSE

Documentary Sources for Concealed Assets

The number one fraud issue in bankruptcy proceedings involves the debtor concealing assets from the trustee and the creditors. The debtor seeks to conceal assets to keep those assets from being distributed to creditors as part of the proceedings.

Bankruptcy proceedings are not the only situations in which individuals seek to gain by concealing assets. Other situations include the following:

1. *Divorces.* In divorces, couples divide up a marital estate. Either party may seek to hide assets from the division process.

2. *Partnership dissolutions.* When partnerships are dissolved, assets are divided according to partnership shares. One partner may seek to hide assets from the division process.
3. *Estates.* The passing of the estate of a deceased person involves dividing assets according to a will. An heir may seek to hide assets from the division process.
4. *Acquisitions.* A buyer of a business normally assumes control and ownership of all assets of the business, unless the seller conceals assets.

Regardless of the situation, the forensic accountant will use similar means to uncover concealed assets. The general approach to the investigation involves carefully reviewing financial records. Examples of such records include brokerage statements, bank statements, tax returns, financial statements, loan applications and agreements, cash flow statements, and accounting records.

- *Tax returns.* State and federal tax returns can provide a wealth of information that can point to concealed assets. The following represent examples of what can be gleaned from examining federal tax return data:
  - W-2 forms. Verify the disposition of any retirement accounts that may be associated with listed contributions and deductions.
  - Form 1040, Schedule B, Interest and dividend income. Verify the disposition of assets that produce interest and dividend income.
  - Form 6251 (tax preferences). Verify the disposition of assets associated with tax preferences such as depreciation.
  - Income distributions from deferred compensation plans. Verify the disposition of any distributed funds.
  - Form 1040, Schedule B, Lines 11 and 12. Look for the existence of offshore accounts or trusts.
  - Schedule E (Income from rental properties, royalties, estates and trusts, partnerships, and S corporations). Verify the dispositions of the associated assets and loss carryforwards. Loss carryforwards are easily overlooked assets.
  - Investment interest expense deductions. Verify the disposition of any related brokerage margin accounts.
  - Real estate tax deductions. Verify the disposition of the associated real estate assets.
  - Form 1040 (Overpaid taxes and accumulated tax refunds). Taxes can be overpaid as a way of banking and concealing refunds or credits.
  - Form 1040, Schedule D (Disposition of asset sales). Verify the disposition of the proceeds from asset sales.
  - Interest expense deductions. Verify the disposition of loans associated with interest expenses.
  - Casualty loss deductions. Verify the disposition of the proceeds from any insurance claims.
  - Miscellaneous deductions. Look for deductions for one or more safe deposit boxes, which may contain concealed assets.
- *Loan applications.* Loan applications are an excellent place to look for evidence of concealed assets because debtors tend to disclose as many sources of income and assets as possible in order to increase their chances of obtaining loans. So, for all loans and lines of credit, the forensic accountant should seek the underlying loan application. In many cases, it may be necessary to obtain the loan application from the lender.
- *Bank and brokerage statements.* These statements can be compared with federal tax returns to identify sources of income and related assets. Careful attention should be paid to transfers in and out of the bank and brokerage accounts to other accounts that may be concealed.
- *Credit reports.* Credit reports can indicate hidden loans or credit accounts, which, in turn, may be related to borrowed funds or financed assets.
- *Public records.* Public records can point to such things as real estate, liens, vehicles, and lawsuits. Pending lawsuits in which the debtor is a plaintiff can represent significant assets.

Investigating Businesses for Concealed Assets

Investigations of businesses for hidden assets require special considerations. The normal financial statements are of limited help. Historical cost values generally do not correspond to economic values, and fully depreciated assets don't appear on the statement of financial position.

Case in Point

The U.S. Department of Justice provides the following sample indictment form (for a false claim) on its website:[2]

On or about _____, in the _____ District of _____, JOHN DOE, defendant herein, knowingly and fraudulently presented a false claim in the amount of $4,800 for proof against the estate of XYZ Company, No. _____, which sum purportedly was due for furniture sold to the debtor by the defendant JOHN DOE, when in truth and in fact, as JOHN DOE well knew, no furniture had been sold to the debtor.

All in violation of 18 U.S.C. § 152(4).

A second issue is that accounting records may be incomplete or incorrect. For example, in anticipation of bankruptcy, the ownership or management may underreport sales. Assets can be "sold" to related parties at values below market. Fraudulent conveyances can be made to friendly third parties in the form of "loans." Almost any type of "normal" fraud (for example, embezzlement) may be used to secret assets away from the business.

The following are some steps that should be followed when investigating the possibility of concealed assets in a business:

- *Verify deposits.* Verify that all collections are deposited. This applies not only to sales transactions but also to events like proceeds from loans, sales of securities, and so on.
- *Review vendors and accounts payable.* Verify that all accounts exist, relate to real vendors, and all payments to vendors exist for legitimate business purposes and are for the proper amounts.
- *Review communication records.* A careful review of e-mail, phone, and fax records can point to hidden transactions. For example, phone calls to a particular bank may indicate the presence of a hidden account.
- *Review payments to managers, owners, officers, and consultants.* Any type of out-of-the ordinary payment to any individuals or organization deserves special attention. Even quasi-legitimate payments, such as bonuses, might be recoverable by the bankruptcy trustee.
- *Review loan payments.* A careful review of all loans made to the debtor may review fraudulent conveyances through unreasonably favorable terms to related parties. In some cases, "loan payments" may be made to related parties without an underlying loan agreement.
- *Inventory all assets.* Verify the existence and presence of all assets, including fully-depreciated assets that do not appear on the balance sheet. Careful attention should be paid to detail. For example, valuable inventory parts might be replaced by obsolete parts.
- *Search for intangible assets.* Intangible assets may not appear on the balance sheet. Consequently, search expense records, internal memoranda and documents, business plans, news reports, and tax returns for expenditures evidencing research and development for patents or other intangible assets.
- *Search for overpaid accounts.* A debtor may overpay an account and carry a credit balance, thus, "banking" a refund.
- *Search for unbilled accounts.* A debtor might withhold billing a customer or client for products or services.
- *Review conveyances.* Fraudulent conveyances represent one of the most common types of bankruptcy fraud. The bankruptcy court has the power to set aside any type of conveyance that it considers to have been made in order to defeat creditors or others. The court also has the power to dismiss or deny the bankruptcy petition, and the trustee has an obligation to report cases of fraudulent conveyances to the Department of Justice for possible prosecution.

The trustee has a general obligation to oppose Chapter 7 discharges of debt when there is any kind of bankruptcy fraud committed by the debtor. If there is only a reasonable suspicion of fraud, the trustee is supposed to keep the case open as long as needed to investigate and resolve the suspicion.

[2] www.justice.gov/usao/eousa/foia_reading_room/usam/title9/crm00000.htm

Reviewing conveyances for possible fraud can be a difficult task. First, some conveyances may be completely off the books. Second, even when there are identifiable asset leaks, proving their conversion to the debtor may be impossible. This is especially true in cases involving sales skimming, poor internal controls, and poor recordkeeping. Due to poor internal controls and recordkeeping, the forensic accountant might be able to identify the sales-skimming scheme but not be able to identify the responsible person.

Despite the possible difficulties in identifying fraudulent conveyances, the forensic accountant should first identify all conveyances, especially ones close to the bankruptcy filing date, and then audit each conveyance to ensure that it involved an arms-length transaction. In the event that a fraudulent conveyance is suspected, the trustee can subpoena the personal financial records, e-mail, and phone records of suspected beneficiaries of the conveyance.

Bust-Out Schemes

Bust-out schemes generally involve fraudsters setting up a company, collecting money from customers, not paying vendors, and then filing bankruptcy. In some cases, fraudsters take deposits or prepayments from customers with no intention of providing the goods or services that customers expect to receive.

Some bust-out schemes are easy to identify, but others may be difficult to distinguish from simple cases of poor management. The most obvious cases of fraud involve virtually no payments made to vendors or no deliveries of goods or services to customers, or both. In such cases, the fraudster may file bankruptcy as a way of buying time in order to disappear, especially if the fraudster operated the bust-out business under a fake or assumed name.

Red Flags for Bust-Out Schemes

The following are some red flags that may signal a bust-out scheme. Some of these indicators may also suggest concealment of assets.

- *Short-lived companies.* Many bust-out schemes are carried out in a "hit and run" manner.
- *Suspicious buyouts.* Sometimes, fraudsters will secretly buy out an existing company with good credit. It will then use the purchased company's good credit to make purchases for which it has no intention of paying.
- *Financial statement fraud.* Any type of financial statement fraud for a business in bankruptcy suggests the possibility of a bust-out fraud.
- *Fictitious or fabricated credit references.* Many bust-out schemes rely on getting as much credit as possible.
- *No, or very weak, accounts receivable.* In some cases, fraudsters may give the false appearance of successful sales when, in reality, there are few or no sales.
- *Low inventories.* Fraudsters who want to extract as much cash as possible from the business prefer to liquidate inventories for cash.
- *Heavy reliance on part-time employees.* Bust-outs are temporary by design, so they often don't take the long-run view when hiring employees.
- *Leased facilities and equipment.* This is a sign of an underfunded or temporary operation.
- *Credit mostly from trade creditors.* Credit is much easier to obtain from trade creditors than from local banks, especially for equipment in which the creditor retains a secured interest.
- *Poor banking experience and references.* This may include low bank balances, a history of bounced checks, and so on.
- *The principals having a history with business failures.* In some cases, fraudsters may open up one business after another immediately after the previous one fails. The same attorneys may appear over and over again.
- *Taxes not paid or filed.*
- *Evidence of lulling letters to creditors.* Such letters are designed to pacify creditors in order to delay any collection actions.
- *Uninformed representative.* The company sends someone unfamiliar with company operations to testify at the meeting of the creditors.

Case in Point

A 39-count federal indictment against Teresa Giudice of the reality television show, *The Real Housewives of New Jersey*, charged that she failed to disclose her *Real Housewives* income in her bankruptcy filing. She pled guilty to counts that included bankruptcy fraud.

Examples of Bust-Out Schemes

Examples of bust-out schemes are as follows:

- *Distributor bust-outs.* A relatively new company establishes trade credit with manufacturers of consumer products. The company then rapidly purchases as much as it can on credit. It then dumps the products in volume for low cash prices and stops paying creditors, sending lulling letters to keep the credit lines open as long as possible. When the company files bankruptcy, the required schedules will show virtually no goods in inventory.
- *Retailer bust-outs.* The fraudster rents a retail store, obtains trade credit, and then doesn't pay any rent or creditors. The fraudster will file for bankruptcy as a way to forestall eviction, thus, gaining more time to carry on the scheme.
- *Tax bust-outs.* The fraudster operates a money-making business but doesn't pay taxes. The fraudster then files for bankruptcy right before the IRS begins to file liens. The fraudster then proceeds to open a new business in the same industry and repeat the scheme over again.
- *Credit card bust-outs.* The fraudster may use stolen or fictitious identities to obtain large amounts of credit card debt. When the credit runs out, the fraudster will file for bankruptcy using the stolen or fictitious identity.

Bleed-Out Schemes

Bleed-out schemes are similar to bust-out schemes, but bleed-outs tend to happen over prolonged periods of time, whereas bust-outs tend to happen with newly formed and short-lived businesses.

Red Flags for Bleed-Out Schemes

Some red flags for bleed-out schemes are as follows:

- *Leveraged buyout.* Leveraged buyouts permit individuals to buy a company with minimal cash; so, the fraudster may default on the debt used to buy the company but siphons off the company's assets.
- *New parallel company.* Fraudsters may immediately open a new company to replace the old one. This suggests assets from the old company may have been fraudulently converted to the new company.
- *Recent change in the company's ownership.* Fraudsters seeking opportunities to bleed out firms are generally more interested in bleeding out firms that they do not develop on their own.
- *Depleted pension funds.* Pension funds are a favorite target because they tend to be loaded with liquid assets that are readily transferrable. Fraudsters may also target money deducted from employees to pay health insurance or other benefits.
- *Repayments of loans to corporate officers or principal investors.* In some cases, the "repayments" might be for loans that never actually existed. In other cases, capital investments in the company might be relabeled as loan repayments and records altered after the fact to substantiate loans that were never made.
- *Changes in the historical patterns of cash flows.* Fraudsters may use complicated sets of transactions to obscure their bleeding cash from the company, but the net effect may stand out in patterns of net cash flows.
- *Changes in patterns of payments.* Any type of substantial increase in payments to a particular creditor or vendor could suggest bleeding.

Examples of Bleed-Out Schemes

- *Corporate raider bleed-outs.* The fraudster acquires a cash-rich company via leveraged buyout. The fraudster then raids all the company's assets in a series of fraudulent conveyances that are structured using complicated money-laundering-style layering techniques designed to mask their true nature. The company may file a Chapter 11 bankruptcy petition to buy the fraudster more time to continue the fraud.
- *White knight bleed-outs.* The fraudster offers to provide consulting assistance to a failing company, but instead of helping the failing company, the fraudster gains control and raids the company's assets.
- *Parallel entities.* The fraudster creates a nearly identical second company and then sells many of its assets to the second company for small sums of money. The fraudster then files bankruptcy for the first company and continues to operate the second company. The debts of the first company are discharged in bankruptcy, and the second company continues to operate with no debt and plenty of assets.

Investor Fraud Schemes

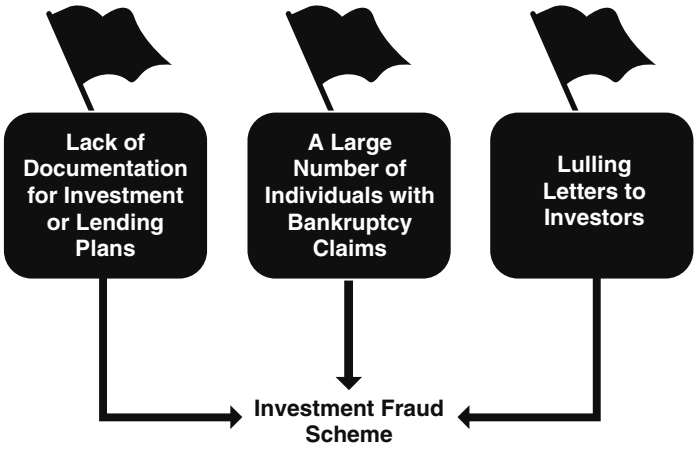
Almost any type of fraud scheme can be associated with bankruptcy. Investor fraud is no exception. The typical case involves a pyramid (or Ponzi) scheme. In such a scheme, investors are promised very large returns for their investments, but fraudsters convert the investments for personal use. Fraudsters also use the new investments to pay high returns for the earlier ones. However, the combination of fraudsters stealing funds plus the amounts paid to investors to keep up the promise of high returns eventually leads to a complete collapse of the scheme, and investors can't be paid. The fraudster then files Chapter 11 bankruptcy in order to buy more time and attempt to get rid of the unhappy investors.

Red Flags for Investor Fraud Schemes

As shown in figure 10.4, the following are some red flags that may signal investment fraud:

- *Lack of documentation for investment, charitable, or lending plans.* Sometimes fraudsters create fake letters from fake financial backers, politicians, or others.
- *Large numbers of inquires or claims from many individuals regarding the case in bankruptcy.*
- *Lulling letters to investors.* These are designed to keep investors happy so they don't withdraw their funds or look too deeply into the fraudster's activities.

Figure 10.4
Red Flags Associated With Investment Fraud



Examples of Investor Fraud Schemes

Some examples of investment fraud schemes are as follows:

- *Religious and charitable organization schemes.* The fraudster collects donations and converts them to personal use. The fraudster then files bankruptcy and hopes that the donors will not pursue the case in bankruptcy.
- *Loan-fee schemes.* In this scheme, the fraudster offers loans to troubled businesses, but the businesses must pay an upfront fee to obtain the loans. The fraudster then files bankruptcy in an attempt to discharge debt for the fees owed.

Health Care Fraud Schemes

Health care fraud has been a rapidly growing area of fraud in recent years. Many health care frauds end up in bankruptcy court.

Red Flags for Health Care Fraud Schemes

The following are some red flags that may signal a health care fraud scheme:

- Investigations by regulators
- Numerous complaints or bad press
- Failure to remit payments to insurance carriers

Examples of Health Care Fraud Schemes

The following are some examples of health care fraud:

- *Collect premiums and default on coverage.* This fraud can occur even with large, regulated insurance companies. Management can extract high salaries for a number of years while there aren't sufficient funds in reserves to pay for covered health care expenses. Management can file Chapter 11 and continue to draw large salaries even after the company has stopped honoring claims for insured expenses.
- *Sham programs.* The fraudster may create sham programs designed to collect insurance money (or government benefits or grants) for nonexistent patients or bill for services not provided.

Debtor-Creditor Collusive Schemes

Debtor-creditor collusive schemes involve both the debtor and creditor in collusion. In some cases, a debtor may be barred from filing for bankruptcy because he or she has already filed for it in the recent past. So, the debtor gets a friendly creditor to file for an involuntary bankruptcy against the debtor. This scheme is sometimes used by bust-out or bleed-out fraudsters as a way of hiding their identity from the bankruptcy court. Once the involuntary bankruptcy is filed against the fraudster, the fraudster receives an immediate stay of debt payment without any obligation to disclose any detailed identity information. This is quite different from a case in which the bleed-out or bust-out fraudster files for bankruptcy. If the fraudster files a voluntary petition, the fraudster is required to submit substantial amounts of information at the time of filing.

Red Flags for Debtor-Creditor Collusive Schemes

The following are some red flags that may signal a debtor-creditor collusive scheme:

- Both the debtor and creditor have the same attorney.
- The debtor and creditor are former business associates.
- An insider within the debtor's or creditor's organization has a history of previous filings.
- Creditors have acquired a claim after the bankruptcy is filed.

Examples of Debtor-Creditor Collusive Schemes

The following are some examples of debtor-creditor collusive schemes:

- *Real estate foreclosure scheme.* A "foreclosure protection service" (or its surrogate) files an involuntary bankruptcy petition against a property owner. The fraudster has no intention of completing the bankruptcy. The only goal is to stay foreclosure of the owner's property.
- *Fractional real estate interest scheme.* A fraudster transfers a partial interest in a real estate property to a friendly party in bankruptcy after the bankruptcy has been filed. The interest in the property may be very small, perhaps only a percent or two, but because the partial interest is transferred to someone (or an organization) in bankruptcy, any foreclosure proceedings against the property in question are automatically stayed. The result is that the property owner can delay foreclosure without even filing bankruptcy.

Case in Point

The Bankruptcy Code, under 11 USC § 548, generally allows a two-year window for the court or trustee to attempt to recover fraudulently conveyed assets. Some debtors wait two years and a day before filing bankruptcy after a fraudulent transfer. However, many states have adopted the Uniform Fraudulent Conveyances Act, and Section 544 of the Bankruptcy Code permits bankruptcy courts to rely on governing state laws relating to fraudulent conveyances. In some states, the statute of limitation for fraudulent transfers is four years or longer.

Straw Buyer and Fictitious Bidder Schemes

As part of the bankruptcy liquidation scheme, the debtor sells assets to a court-approved buyer at a low price.

Red Flags for Straw Buyer and Fictitious Bidder Schemes

The following are some red flags that may signal a straw buyer or fictitious bidder scheme:

- Evidence that a sale of assets is rigged to favor a single buyer or bidder.
- Evidence of an undisclosed relationship between the debtor and the buyer.
- A "need" to rapidly sell an asset because of an "emergency."

Example of Straw Buyer and Fictitious Bidder Schemes

Kickback and straw sales. The buyer resells the assets for a profit and gives a kickback from the sale to the debtor. It's also possible that the buyer resells the asset to a company controlled by the debtor.

Civil Actions in Bankruptcy to Fight Fraud

Some civil remedies may be available only to the trustee. However, the trustee has a general obligation to investigate suspected fraud or refer it to prosecution, or both. Some general civil remedies are as follows:

- Appointment of a "gap" trustee at the immediate onset of filing of an involuntary bankruptcy.
- Sanctions against any party to the case, including attorneys
- An order removing attorney/client privilege for the debtor
- Civil or criminal contempt for failure to comply with court orders
- Dismissal of the case with prejudice
- Denial of discharge
- Notification to law enforcement agencies of related crimes
- Request that any plea agreement with the debtor include a waiver of discharge of debts
- Require that the debtor pay the full amount of the bankruptcy debt as restitution
- Extensive 2004 exams, possibly prior to the meeting of creditors

- Set aside fraudulent conveyances
- Convert case from Chapter 11 to Chapter 7

IRS Case Files: Examples of Bankruptcy Fraud Investigations

The following cases are abstracted from IRS reports, which, in turn, are derived from public record documents in various judicial districts. Various edits have been made to remove names, dates, and some details.

- *New Jersey woman sentenced for bankruptcy fraud.* A woman from Manahawkin, New Jersey, was sentenced to 24 months in prison, 3 years of supervised release, and ordered to pay $353,404 in restitution. She previously pleaded guilty to one count of bankruptcy fraud for concealing from a bankruptcy trustee profits she had made on a Ponzi scheme investment. According to court documents, the accused and her husband invested approximately $115,750 with a company known as Global Trading Investments LLC and received profits totaling $429,154 in return. However, the owners of Global Trading were operating a Ponzi scheme, and the profits that the accused received were actually the investments of other individuals. Global Trading subsequently filed for Chapter 7 bankruptcy protection. A judgment was entered against the accused, requiring her to return the profits she had made from her investments in the scheme. Instead, she took numerous steps to fraudulently conceal a significant amount of funds and assets from the trustee, including making false statements and omissions during a deposition in the bankruptcy proceeding. She filed for individual Chapter 7 bankruptcy protection. On her bankruptcy petition, she fraudulently failed to report millions of dollars in real estate holdings plus hundreds of thousands of dollars in personal assets.
- *Texas man sentenced for bankruptcy fraud and tax crimes.* A Fort Worth, Texas man was sentenced to 168 months in prison and ordered to pay $550,000 in fines and approximately $25 million in taxes, interest, and penalties. He was convicted at trial of concealment of assets (bankruptcy fraud) and tax evasion. According to evidence presented at his trial, the day before he filed for bankruptcy, he knowingly and fraudulently transferred and concealed more than $3 million held in an online trading account and a bank account. He transferred the funds through a series of bank deposits, wire transfers, and cashier's checks, and he also used a shell company to help hide assets. He and his spouse agreed to structure more than 1,100 currency deposits into at least 13 different bank accounts. These accounts were spread among several financial institutions, and the total amount structured during this period was in excess of $9.3 million. He and his spouse created at least two shell companies, which he used to open some of the 13 bank accounts used in the structuring scheme. In addition, he underreported income on his and his spouse's joint tax returns.
- *Maryland man sentenced for bankruptcy fraud and filing false tax returns.* A Maryland man was sentenced to 87 months in prison and 3 years of supervised release for assisting in the filing of false tax returns, bankruptcy fraud, falsifying bankruptcy records, and false testimony under oath at a bankruptcy proceeding. He was also ordered to pay restitution of $1,114,988 to creditors in his bankruptcy case and $118,182 to the IRS. He was convicted by a federal jury. According to court documents, he worked for a North Carolina real estate corporation that oversaw the sale of property in North Carolina, including a development that contained more than 2000 lots. He recruited investors to purchase lots in the development, and he received referral fees based on these sales. Over a several-year period, he earned referral fees totaling $415,201. He failed to report these referral fees on his tax returns. He filed for Chapter 13 bankruptcy in the United States Bankruptcy Court for the District of Maryland. He failed to disclose the referral fees and an ownership interest in a home worth approximately $325,000 on either the Statement of Financial Affairs he filed with the bankruptcy court, an amended statement, or in testimony before creditors. Ultimately, he never provided documents to the trustee overseeing his bankruptcy case regarding either the referral fee income or the home, and as a result, his attempt to discharge his debts through bankruptcy was denied.
- *New Jersey dentist sentenced for tax evasion and bankruptcy fraud.* A New Jersey dentist was sentenced to 21 months in prison, 2 years of supervised release, fined $50,000, and ordered to pay $69,883 in restitution to the bankruptcy trustee. He pleaded guilty to income tax evasion and bankruptcy fraud. According to court documents and statements made in court, over a 4-year period he was a practicing dentist and the sole owner

of several dental practices located in New Jersey. For related years, he failed to provide the IRS with accurate information on the $2.6 million income he received as owner of the three practices. He later filed a tax return in which he falsely stated that his total income for calendar year 20xx was $632,945, and the tax owed was $187,905. When he filed for Chapter 11 bankruptcy, he failed to disclose almost $1.3 million in income he received as the sole owner of one of the dental practices.

- *Minister sentenced in scheme to obstruct bankruptcy proceedings.* A Maryland man was sentenced to 27 months in prison, 3 years of supervised release, and ordered to pay $631,050 in restitution for obstructing bankruptcy court proceedings. According to his plea agreement, he used funds from church members to accumulate substantial assets, including luxury cars and a residence, which he concealed from the bankruptcy court when he sought a discharge of his debts. More specifically, he purchased several luxury vehicles and a $1.75 million residence on the Potomac River in the names of church members. He also caused a luxury vehicle to be leased in a church member's name. He and his then-spouse owed over $1.3 million in debts, including $846,000 in back rent; more than $87,000 in lease payments on a jet airplane; over $160,000 for payments on musical instruments; and $220,000 in loan payments on a bus. He filed a bankruptcy petition seeking to adjust or discharge his debts. He lied to the bankruptcy court and obstructed its proceedings by not fully reporting his real or personal property or property owned by another that he controlled, including the home and luxury vehicles purchased with church funds. He also falsely reported his occupation as a consultant at a maintenance company and failed to report any income from his ministry. Additionally, at a court proceeding, he falsely stated that his ministry company went out of business and that he was renting a residence in Waldorf from friends, and he provided false pay stubs from a maintenance company that, in fact, did not employ him. Relying on the false information, the bankruptcy court discharged hundreds of thousands of dollars in debts owed by him. In the weeks following the discharge of his debts, he purchased or leased two Mercedes Benz vehicles and a Lincoln Navigator for more than $430,000 in a church member's name.
- *Maine man sentenced for bankruptcy fraud.* A Maine man was sentenced to one year and one day in prison and one year of supervised release for bankruptcy fraud. According to evidence introduced at trial, he and his wife filed for bankruptcy reorganization. In his bankruptcy filings and testimony, he concealed from the Office of the United States Trustee and his creditors a savings account; a deferred compensation retirement account worth $150,000; and the fact that he was entitled to reimbursement for accrued, but unused, sick leave and vacation time benefits. He also failed to report a $97,000 lump-sum distribution from his retirement account and the payment of about $12,000 for his unused benefits. He was required to report these amounts to the Office of the United States Trustee in monthly operating reports.
- *Optometrist sentenced for tax evasion and bankruptcy fraud.* A Missouri woman was sentenced to 39 months in prison and ordered to pay $334,003 in restitution for evading income taxes and filing a false tax return. According to court documents, she claimed a $40 million refund. The accused, an optometrist, attempted to evade obligations of approximately $161,773 in various ways, including concealing income and hiding assets. Hidden assets included a 3-story house on more than 6 acres, which she titled in her mother's name, and three vehicles, which she purchased and titled under the name of a fictitious company. Further, she filed a fraudulent bankruptcy petition resulting in the discharge of back tax liabilities. She also attempted to evade income taxes by failing to file returns, avoiding the use of banks (dealing mostly in cash) and listing 8 dependents and claiming exemption from withholding on an IRS Form W-4 that she provided to a former employer. In addition to the tax evasion counts, she was found guilty of two counts of bankruptcy fraud, one count of submitting a false claim to the United States, and one count of obstructing the administration of internal revenue laws.

The fact that many bankruptcy cases can be found in IRS files is no surprise. Concealed assets are frequently associated with concealed income, which, in turn, is associated with tax fraud. In some cases, the accused manages to fraudulently obtain a discharge of debts owed to the IRS, but then the IRS extracts its "revenge" by obtaining a conviction for tax evasion.

Bankruptcy Fraud Versus Divorce Fraud

As mentioned previously, other situations besides bankruptcy can lead to fraud, especially through the concealment of assets. Divorce is one situation in which fraud is especially prevalent. Some aspects of divorce that increase the risk of fraud are as follows:

- *Charged emotions.* Divorce is often charged with strong emotions, and sometimes, each side seeks to get the best of the other. This can produce an atmosphere conducive to the concealment (or undervaluing) of assets and underreporting of income.
- *Lack of financial sophistication.* Divorce attorneys are often not very financially sophisticated and lack the knowledge and skills to find concealed assets. In divorces involving large marital estates, the attorney for one party may hire a forensic accountant, but in many cases, attorneys will not advise their clients of the need to do so.
- *Lack of oversight.* There are generally no trustees or interested third-party creditors in divorce cases. Further, the IRS audits bankruptcy cases. The result is that many of the crosschecks that exist in bankruptcy cases don't exist in divorce cases.
- *Assets to conceal.* Bankruptcy is unique in that in many cases, the debtor will have no assets to conceal, but, in divorce, there generally are assets, especially for those who are divorcing after long marriages.
- *Long-term concealment.* Fraudulent conveyances in bankruptcies tend to occur relatively close to the filing date, but in many marriage cases, one spouse may conceal income and assets from the other over a period of many years.

A detailed discussion of issues related to divorce fraud are discussed in chapter 12, "Matrimonial Forensics."

Bankruptcy Fraud Versus Fraud in the Administration of Estates and Trusts

As with bankruptcy and divorce, an estate is placed in the hands of the court for division according to the applicable law and a written will (if one exists). In many cases, the will names a beneficiary as the executor (also known as the *personal representative*). The executor is appointed by the probate court to act as a fiduciary for the estate to carry out the following duties:

- Administering the estate during the probate process. This includes obtaining a federal tax number for the estate and hiring accountants and other needed professionals.
- Exercising due care, diligence, and prudence with respect to the business of the estate.
- Filing tax returns for the estate.
- Managing, maintaining, protecting, and preserving all assets of the estate.
- Paying all bills and collecting all income due to the deceased and the estate.
- Distributing the assets of the estate according to the provisions of the will, subject to court review and approval.
- Resolving all debts of the deceased and the estate.
- Maintaining accurate records and providing accountings to the probate court and beneficiaries.

The executor may be an attorney but can normally be anyone, including a beneficiary. Regardless, an attorney is normally required to file the case in the probate court, present the will, publish notices to creditors, and file any motions with the court, including the motion to close the estate and end the probate process.

In some cases, a revocable living trust is used in place of a will. In that instance, a trustee may assume duties similar to the executor of an estate and distribute assets and income according to the trust agreement. Advantages of revocable living trusts include avoiding the need for costly probate processes and complete privacy. Unlike revocable living trusts, probated estates generally become part of the public record.

Revocable living trusts are normally created by a "settlor" who names herself as trustee during her lifetime and also names a successor trustee upon her death. She will also name beneficiaries of the trust to receive shares of the trust's assets and income upon her death.

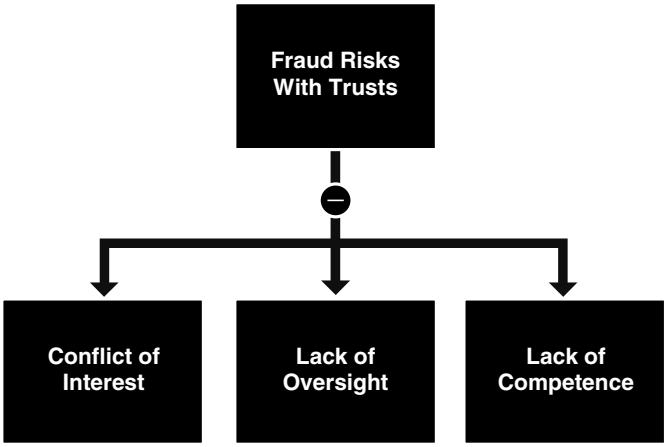
The provisions of the trust can indicate conditions that trigger the liquidation of the trust and the distribution of all its assets, but such provisions don't necessarily call for the trust to be liquidated upon the death of the settlor. For example, in the case of the sole beneficiary being a minor child, the trust provisions may instruct the successor trustee to use the income of the trust to support the child until the child becomes of legal age.

In other cases, the will may contain provisions to create a testamentary trust. Such a trust is funded by the assets of the estate and continues thereafter according to its provisions. In cases in which there is a testamentary trust, there will be both an executor and a trustee. The executor will resolve the estate in probate according to the provisions of the will and also distribute assets to the trust according to the provisions of the will. The executor and the trustee can be the same person.

Regardless of whether the estate is administered by an executor or a trustee, the following potential fraud risks exist (also see figure 10.5):

- *Conflict of interest.* The executor or the trustee may be a beneficiary, thus, creating a conflict of interest. This is not an issue if the executor or trustee is the sole beneficiary.
- *Lack of oversight.* In the case of an estate being administered through a trust, there is likely to be no oversight of the trustee. Of course, beneficiaries of the trust have the right to obtain accountings from the trustee, but the trustee may be in a strong position to conceal from them assets, income, and transactions.
- *Lack of competence.* The trustee might not be competent to keep proper records and ensure proper controls. This may open the door to fraud by third parties.

Figure 10.5
Fraud Risks Associated With Trusts



Generally speaking, executors and trustees are permitted to charge a reasonable fee for their services. Beyond a reasonable fee, the executor or trustee should not profit in any way from administering the estate.

A *reasonable fee* is generally defined as what a "prudent person would charge." Similarly, actions of an executor or trustee must also be prudent. However, there is no requirement that a trustee make the same decisions that the deceased would likely have made under similar circumstances.

Executors and trustees who act in an improper or imprudent way may be removed by the court. In some cases, executors and trustees may be held personally liable (surcharged) for damage they cause to the estate.

Some trusts are non-revocable trusts that are created during the settlor's lifetime and designed for a particular purpose, such as for the administration of a life insurance policy or to provide for a charity. In the case of a life insurance trust, the trust typically will both own a life insurance policy and be the beneficiary of the policy. Upon the death of the insured, the trust will administer and distribute the proceeds to beneficiaries named in the trust. Given that the

settlor has no ownership interest in the trust, the proceeds of the trust may escape estate taxes, if the trust is properly structured.

In cases of non-revocable trusts, it is normally very important that the settlor of the trust not serve as the trustee or exert control over the trust. If such control exists, the IRS may refuse to recognize the trust as an entity separate from the settlor. Therefore, this type of trust requires an independent trustee.

One common means of minimizing the possibility of fraud with estates and trusts is to appoint (via the will or trust document) a co-executor or co-trustee. Some banks have large trust departments that can serve in this role for a fee. An advantage to using an established trust department is the employees' expertise in managing assets and filing tax returns.

Only some of the different types of trusts are discussed here. Dozens of different types exist, such as Medicare trusts, blind trusts, qualified terminable interest property (QTIP) trusts, charitable remainder trusts, and so on. Fraud can be a risk in any type of trust.

Legal Processes for Investigations

The primary tools for investigations within bankruptcy are **Section 341 hearings** (the meeting of the creditors as provided by 11 U.S. Code Section 341.) and Rule 2004 examinations as provided for by Rule 2004 of the Federal Rules of Bankruptcy Procedure. In part, Section 341 states the following:

> (a) Within a reasonable time after the order for relief in a case under this title, the United States trustee shall convene and preside at a meeting of creditors.
>
> (b) The United States trustee may convene a meeting of any equity security holders.
>
> (c) The court may not preside at, and may not attend, any meeting under this section including any final meeting of creditors. Notwithstanding any local court rule, provision of a State constitution, any otherwise applicable nonbankruptcy law, or any other requirement that representation at the meeting of creditors under subsection (a) be by an attorney, a creditor holding a consumer debt or any representative of the creditor (which may include an entity or an employee of an entity and may be a representative for more than 1 creditor) shall be permitted to appear at and participate in the meeting of creditors in a case under chapter 7 or 13, either alone or in conjunction with an attorney for the creditor. Nothing in this subsection shall be construed to require any creditor to be represented by an attorney at any meeting of creditors.
>
> (d) Prior to the conclusion of the meeting of creditors or equity security holders, the trustee shall orally examine the debtor to ensure that the debtor in a case under chapter 7 of this title is aware of—
>
> (1) the potential consequences of seeking a discharge in bankruptcy, including the effects on credit history;
>
> (2) the debtor's ability to file a petition under a different chapter of this title;
>
> (3) the effect of receiving a discharge of debts under this title; and
>
> (4) the effect of reaffirming a debt, including the debtor's knowledge of the provisions of section 524 (d) of this title.

As noted in subsection (c), a judge does not attend the meeting; rather, the trustee will administer the meeting. Given that the meeting is part of a court process, the debtor must answer all questions under oath. Subsection (d) requires the trustee ask certain questions of the debtor regarding the debtor's general understanding of the bankruptcy process as it applies to the debtor. But the trustee may ask any kind of question relevant to the proceedings. Creditors will normally appear at the meetings and ask questions in relation to their interests.

In part, Rule 2004 states the following:

> (a) EXAMINATION ON MOTION. On motion of any party in interest, the court may order the examination of any entity.
>
> (b) SCOPE OF EXAMINATION. The examination of an entity under this rule or of the debtor under §343 of the Code may relate only to the acts, conduct, or property or to the liabilities and financial condition of the debtor, or to any matter which may affect the administration of the debtor's estate, or to the debtor's right to a discharge. In a family farmer's debt adjustment case under chapter 12, an individual's debt adjustment case under chapter 13, or a reorganization case under chapter 11 of the Code, other than for the reorganization of a railroad, the examination may also relate to the operation of any business and the desirability of its continuance, the source of any money

> or property acquired or to be acquired by the debtor for purposes of consummating a plan and the consideration given or offered therefor, and any other matter relevant to the case or to the formulation of a plan.
>
> (c) COMPELLING ATTENDANCE AND PRODUCTION OF DOCUMENTS. The attendance of an entity for examination and for the production of documents, whether the examination is to be conducted within or without the district in which the case is pending, may be compelled as provided in Rule 9016 for the attendance of a witness at a hearing or trial. As an officer of the court, an attorney may issue and sign a subpoena on behalf of the court for the district in which the examination is to be held if the attorney is admitted to practice in that court or in the court in which the case is pending.

Rule 2004 is an extremely powerful tool for investigation in bankruptcy. Subsection (a) states (emphasis added), "On motion of any party in interest, the court may order the examination of any entity." This means the following:

- The court may order an examination of someone who is neither a debtor nor creditor in the proceeding.
- Any "party of interest" can make a motion to order an examination or production of documents. In other words, there is no requirement that such a motion come from the trustee or attorney in the case. For example, a creditor could make such a motion.
- An attorney with an interest in the case can issue subpoenas in the case.

Rule 2004 provides exceptionally broad powers for an investigator working for an attorney on behalf of a creditor in a bankruptcy proceeding. Of course, targets of subpoenas can resist them on grounds such as relevance; they are over-burdensome; they are seeking trade secrets; and so forth.

Rule 2004 does not impose any limits on the number of examinations or subpoenas allowed because they provide the investigator the opportunity to follow the evidence to wherever it leads.

Investigations and Involvement From the United States Trustee Program

The **United States Trustee Program** (USTP) operates with the U.S. Department of Justice and is charged with the administration of most bankruptcy cases in the United States. The mission of the USTP also includes oversight of the bankruptcy system in order to insure the integrity of bankruptcies in the system.

The USTP is headed by the Executive Office for U.S. Trustees in Washington, D.C. The head of the Executive Office operates under the authority of the U.S. Attorney General. In addition to managing the administrative functions of the USTP, the Executive Office provides policy and legal guidance to regional trustees.

The Attorney General appoints United States trustees and assistant United States trustees for 21 regions that span all federal judicial districts, except Alabama and North Carolina, which operate with their own independent trustees. The United States trustees, in turn, appoint and supervise private trustees, who administer consumer bankruptcy cases filed under Chapters 7, 12, and 13. They also appoint and convene the creditors' committees in Chapter 11 business reorganizations cases.

Although appointed by United States trustees, **private trustees** are not governmental employees. Chapter 7 trustees are called *panel trustees* because they work as part of a panel of trustees appointed by the district's U.S. trustee. Individual trustees from the panel are assigned to individual cases on a blind rotation basis. Their primary functions include liquidating the debtor's nonexempt assets and distributing them to creditors.

Chapters 12 and 13 trustees are called **standing trustees**. They have standing appointments from the district's trustee to administer cases in their respective geographical areas. Their primary responsibilities involve evaluating cases, making recommendations to the court, and administering court-approved repayment plans.

Private trustees are guided by handbooks and guidance material provided by the USTP. These include a large number of publically available documents that govern the entire process. For example, in Chapter 7 cases, the list of guidance documents includes the Handbook for Chapter 7 Panel Trustees, Section 341(a) Meeting of Creditors—Required Questions and Sample General Question, Asset Administration Questionnaire, Chapter 8 Trustee Bank Account Review and Reconciliation Procedures, and other documents.

All trustees have an obligation to take any needed legal action to enforce the bankruptcy code and prevent and act against fraud and abuse. They have an affirmative obligation to investigate any suspicion of fraud or abuse and to seek either the petition's dismissal or denial as appropriate. In cases when there is reasonable evidence for fraud, they refer the case to the U.S. trustee, who, in turn, may refer the case to Department of Justice for prosecution and the FBI and other law enforcement agencies.

The USTP maintains a **debtor audit program**. The Bankruptcy Abuse Prevention and Consumer Protection Act (the same act that enacted the means test discussed previously) authorized the USTP to create procedures for independent firms to audit debtor petitions for Chapter 7 and 13 petitions. Although the program has been subject to funding limitations, it has been used to audit numerous consumer cases.

The audit guidelines published on the Department of Justice's website include, in part, the following language:

> The audit involves the verification of the income, expenses, and assets reported by a debtor in the bankruptcy schedules and statements. A debtor is required to provide some additional information and records and to cooperate with the audit firm and provide this information promptly. There is no cost to a debtor for the audit, except for the cost of making copies of documents needed for the audit. The information that a debtor provides in connection with a case is subject to examination by the Attorney General or his designee. Additional disclosures of the information may be to contractors engaged to perform debtor audit, to a bankruptcy trustee when the information is needed to perform the trustee's duties, to the appropriate federal, state, local, regulatory, tribal, or foreign law enforcement agency when the information indicates a violation or potential violation of law, or to a credit counseling or debtor education provider when the information is necessary to enable the provider to perform its duties.
>
> The audit firm will file a report containing the results of the audit. If the audit firm finds material misstatements of income, expenses, or assets, the clerk of the bankruptcy court will notify the debtor's creditors. The report is not a legal determination, and the legal effect of the auditor's finding of a material misstatement is a question for the court.
>
> By statute, debtors are required to cooperate with the audit firm. Failure to cooperate with the audit firm, or failure to reasonably explain to the bankruptcy court any material misstatements contained in the audit firm's report, may result in the dismissal of the case or the denial or revocation of discharge, and, possibly, in referral of the matter to the United States Attorney for criminal investigation.[3]

The debtor audit program originally authorized the audit of 1 in 250 filings at random in each district. However, historically, the program has audited far fewer petitions due to funding limitations. The result is that the probability of an individual petition being audited has been minimal. Audits may also be triggered by debtor income or expenses outside the norm for the judicial district.

Summary

In the United States, bankruptcy is a legal process that is governed by Title 11 of the U.S. Code and the Federal Rules of Bankruptcy Procedure and is designed to resolve debts that a debtor is unable to pay. Bankruptcy cases are filed in United States Bankruptcy Courts, which are special branches of United States District Courts. Bankruptcy courts have the authority to discharge or restructure debts. Appeals of decisions made by bankruptcy courts are made to the district court or, in some jurisdictions, to a BAP.

In bankruptcy proceedings, the forensic accountant may serve in one of various roles, such as a consultant, trustee in charge of administering the bankruptcy estate, examiner, or fraud investigator. All these roles share a common requirement to apply the law to the bankruptcy estate while preventing fraud or material errors. Fraud is a serious concern in bankruptcy proceedings. According to U.S. Department of Justice statistics, fraud exists in over 10 percent of bankruptcy cases.

For CPAs, CS section 100, generally applies to all bankruptcy engagements. Attestation (and auditing) standards and VS section 100 may also apply, depending on the circumstances. In all cases, any reports provided by the CPA should clearly state the standards that apply.

Title 11 provides for six types of bankruptcy proceedings. The most commonly used proceedings are Chapters, 7, 11, and 13. Generally speaking, the discovery rules in bankruptcy courts follow those of the Federal Rules of Civil

[3] www.justice.gov/ust/eo/public_affairs/debtor_audit/docs/Information_Debtor_Audits.pdf

Procedure, except for bankruptcy-specific issues, such as the rules for filing the petition and proofs of claims. The Federal Rules of Bankruptcy Procedure govern procedures applicable to bankruptcy proceedings in U.S. federal courts. In all, these rules include nine active parts.

Bankruptcy proceedings can become complex and adversarial. Involuntary debtors can contest the bankruptcy petition, and disputes over assets and debts can arise. Disputes may be resolved through evidentiary hearings and even jury trials. Procedures similar to the Federal Rules of Civil Procedure apply, with special local district rules being possible.

Regardless of the situation, the forensic accountant will use similar means to uncover concealed assets. The general approach to investigating involves carefully reviewing financial records. Examples of such records include brokerage statements, bank statements, tax returns, financial statements, loan applications and agreements, cash flow statements, and accounting records.

Reviewing conveyances for possible fraud can be a difficult task. First, some conveyances may be completely off the books. Second, even when there are identifiable asset leaks, proving their conversion to the debtor may be impossible.

Bust-out schemes generally involve fraudsters setting up a company, collecting money from customers, not paying vendors, and then filing bankruptcy. In some cases, fraudsters take deposits or prepayments from customers with no intention of providing the goods or services that customers expect to receive. Bleed-out schemes are similar to bust-out schemes, but bleed-outs tend to happen over prolonged periods of time, whereas bust-outs tend to happen with newly formed and short-lived businesses.

Almost any type of fraud scheme can be associated with bankruptcy. Investor fraud is no exception. The typical case involves a pyramid (Ponzi) scheme. When the scheme collapses, the fraudster files Chapter 11 bankruptcy in order to buy more time and attempt to get rid of the unhappy investors.

Health care fraud has been a rapidly growing area of fraud in recent years. Many health care frauds end up in bankruptcy court. Some red flags for health care fraud schemes include investigations by regulators, numerous complaints or bad press, and a failure to remit payments to insurance carriers.

Another scheme involves debtor-creditor collusion. In some cases, a debtor may be barred from filing for bankruptcy because of having filed for it in the recent past. So, the debtor gets a friendly creditor to file for an involuntary bankruptcy against the debtor. Some red flags for this type of scheme include both the debtor and creditor having the same attorney; the debtor and creditor are former business associates; an insider within the debtor's or creditor's organization has a history of previous filings; and the creditors have acquired a claim after the bankruptcy is filed.

In kickback and straw sales schemes, the debtor sells assets to a court-approved buyer at a low price. Some red flags for such schemes include evidence that a sale of assets is rigged to favor a single buyer or bidder, evidence of an undisclosed relationship between the debtor and the buyer, and a "need" to rapidly sell an asset because of an "emergency."

Other situations besides bankruptcy can lead to asset-concealment fraud. Divorce is one situation in which such fraud is especially prevalent. Some aspects of divorce that increase the risk of fraud are as follows: charged emotions, lack of financial sophistication, lack of oversight, the likelihood of there being assets to conceal, and a higher likelihood of long-term concealment.

As with bankruptcy and divorce, the potential for fraud exists when an estate is placed in the hands of the court for division according to the applicable law and a written will. Risks for fraud stem from a conflict of interest (with the fiduciary also being a beneficiary), a lack of oversight, and a lack of competence to administer the estate.

Finally, the USTP operates with the U.S. Department of Justice and is charged with the administration of most bankruptcy cases in the United States. The Attorney General appoints United States trustees and Assistant United States Trustees for 21 regions that span all federal judicial districts, except Alabama and North Carolina, which operate with their own independent trustees. The United States trustees, in turn, appoint and supervise private trustees, who administer consumer bankruptcy cases filed under Chapters 7, 12, and 13. They also appoint and convene the creditors' committees in Chapter 11 business reorganizations cases.

Review Questions

1. In which of the following roles is the practitioner not permitted to serve in bankruptcy proceedings?
   a. Consultant.
   b. Trustee.
   c. Examiner.
   d. The practitioner is permitted to serve in all the above roles.

2. Generally speaking, if the practitioner provides bankruptcy services in some other role besides that of a consultant, _____.
   a. CS section 100 applies.
   b. CS section 100 applies to roles other than trustee.
   c. CS section 100 never applies.
   d. CS section 100 applies in some districts.

3. Individual debtors who cannot pass a means test must file under _____.
   a. Chapter 13 instead of Chapter 7.
   b. Chapter 7 instead of Chapter 11.
   c. Chapter 13 instead of Chapter 11.
   d. None of the above.

4. Means testing individuals is a central part of the most recent reforms in bankruptcy laws and has made it more difficult for individuals to have their debts _____.
   a. Totally dismissed.
   b. Subjected to a payment plan.
   c. Exempt from an IRS review.
   d. None of the above.

5. If a consumer debtor's current median income (adjusted for certain IRS-allowed deductions) exceeds specific maximum-income thresholds, _____ may request that the case be dismissed.
   a. Only the trustee.
   b. Only the creditors.
   c. Only the court.
   d. Any party of interest.

6. The bankruptcy law requires _____ to investigate the client's filing.
   a. Practitioners.
   b. Attorneys.
   c. The bankruptcy magistrate.
   d. None of the above.

7. Withholding documents related to the debtor's property or financial affairs from the standing trustee or other officer of the court is an example of _____.
   a. A discovery violation.
   b. A violation of the Sarbanes-Oxley Act of 2002.
   c. Fraud.
   d. None of the above.

8. Secretly transferring assets and selling assets below market value refers to _____.
   a. A fraudulent conveyance.
   b. A filing scheme.
   c. Undocumented transfers.
   d. None of the above.

9. Which of the following schedules and statements is not typically included with a bankruptcy filing?
   a. Statement of financial affairs.
   b. Creditors holding standard unsecured claims.
   c. Co-debtor.
   d. All of the above are normally included.

10. Rule 2004 of the Federal Bankruptcy Code permits _____ to obtain a court order to examine any entity involved with the case.
   a. The trustee only.
   b. Creditors only.
   c. The court only.
   d. Any party in interest.

11. Which of the following debts may be discharged in bankruptcy?
   a. Federal student loans.
   b. Tax debt older than five years.
   c. Domestic support obligations.
   d. None of the above may be discharged.

12. In business bankruptcies, audited financial reports _____.
   a. Are reliable sources of information in identifying assets subject to bankruptcy proceedings.
   b. Are not reliable sources of information in identifying assets subject to bankruptcy proceedings.
   c. Are reliable sources of information in identifying assets subject to bankruptcy proceedings, if such reports are available for the three-year period leading up to bankruptcy.
   d. Are a reliable source of information in identifying assets subject to bankruptcy proceedings, except in involuntary filings.

13. Depleted pension funds would most likely be associated with _____.
   a. A bust-out scheme.
   b. A bleed-out scheme.
   c. A debtor-creditor collusive scheme.
   d. None of the above.

14. Which of the following situations does not involve concealed-assets frauds?
   a. Divorces.
   b. Partnership dissolutions.
   c. Estates.
   d. All of the above involve concealed-asset frauds.

15. Debtor-creditor schemes are most likely to occur in cases of _____.
   a. The debtor having been barred from filing for bankruptcy
   b. The creditor having recently acquired a new company.
   c. The debtor having recently acquired a new company.
   d. None of the above.

Short Answer Questions

1. Why are there no Chapters 1, 2, 3, 4, 5, or 6 bankruptcy proceedings?

2. When might VS section 100 apply to a CPA's work in a bankruptcy proceeding?

3. The means test is applicable to consumers in which bankruptcy chapter?

4. What is the significance of Rule 2004?

5. What is a fraudulent conveyance?
6. Name three bankruptcy crimes?
7. Why might a fraudster use a stolen identity to file bankruptcy?
8. Who appoints bankruptcy trustees?
9. In what way is divorce similar to bankruptcy?
10. Why might a loan application be a good place to look for evidence of hidden assets?
11. What is a bust-out scheme?
12. What is a bleed-out scheme?
13. How might an involuntary bankruptcy be used as part of a bankruptcy fraud scheme?
14. What is a Section 341 hearing?
15. What is the debtor audit program?

Brief Cases

1. You have been engaged as a consultant by a bankruptcy creditor. Your client believes that the debtor has secretly transferred assets to a sister company. How might you investigate?
2. You are a CPA, CFE, and forensic account, and you have been asked to serve as a private trustee in a bankruptcy proceeding. Would such an engagement be consistent with your serving as an expert witness in fraud cases in the future?
3. You have been engaged to assist a creditor with performing a Rule 2004 examination of a debtor. Your client suspects that the debtor has hidden bank accounts. How would you proceed to investigate?
4. You have been engaged to assist a creditor in a Section 341 hearing. How might your interviewing skills help?
5. You have been asked to investigate a possible bust-out scheme in a bankruptcy case for a department store. In many cases, apparent bust-out schemes are really just poor management. What can you incorporate into your investigation to help you know which of the two is the case?
6. You are investigating a debtor in a bankruptcy hearing. Your thorough search of public records shows no trace of any reference to the debtor. What might this mean?
7. You are investigating a debtor in a bankruptcy proceeding. The debtor has a very slick lawyer who has handled many bankruptcies for failed businesses in the past. In the four cases that you have observed with the same attorney, the debtors claimed that all of their financial records had been lost or destroyed. Without any records, it was nearly impossible for the creditors to challenge the bankruptcy. What might you do to challenge the bankruptcy this time?
8. You are investigating a failed business for hidden assets. Your reconciliation of physical assets to the balance sheet shows that all assets are accounted for. What else must you do to make sure there are no hidden assets?
9. You are acting as the trustee in a bankruptcy proceeding. The case has progressed to the end, and the court is ready to issue a final order discharging all debt. However, one creditor comes to you claiming that it has evidence of a fraudulent conveyance. What should you do?
10. You have consulted for debtors in many bankruptcy proceedings, but for the first time, you are engaged with a client to see if her husband is concealing assets in the couple's divorce. How should you compare the differences between divorce and bankruptcy with respect to concealed assets?

Cases

1. The GXY Clothier Company failed and filed for Chapter 7 bankruptcy. Only one day after GXY closed its doors, the same owners opened up GKY, a new store directly across the street from GXY with nearly identical items for sale. The bankruptcy filing came after GXY had "Going Out of Business Sale" signs plastered across all the front windows.

   GKY had the same management and employees as GXY. In fact, GKY was so similar to GXY that its customers thought that GXY had merely moved to a new location.

   You have been hired by Nonpery, one of GXY's large trade creditors, to investigate the possibility of bankruptcy fraud. You've been told the owners of GXY have run one going-out-of-business clothing store after another for the last 17 years. Trade creditors have filed suit many times in the past, but not one of them has ever managed to collect a penny.

   This most recent time, GXY had not paid its rent or electric bill in the last few months of operations. The power had been shut off, and employees were selling store items as if it were a Saturday flea market, using tin boxes as makeshift cash registers. But the sales clerks were still accepting debit and credit card payments using little devices connected to their cell phones.

   GXY has one of the best law firms in the state. The owners of GXY have used the same law firm many times, and the firm is known to be very aggressive in protecting its clients.

   Required

   What type of fraud might be involved in this case? Develop an investigation plan.

2. Debra Car is a credit manager for GlobalRed Wireless Services. She works with franchise stores that sell her company's wireless services and phones. She recently had to deal with one of her large Ohio franchises suddenly closing its doors. At the time, the store was supposed to be holding on consignment an inventory of phones worth about $150,000. But the store was completely empty when she arrived.

   Despite repeated attempts, she was unable to contact Pedro Ladrone, the store owner, and recover any of the missing phones. She was so upset that she hired a private detective to find the whereabouts of Ladrone.

   She reported the incident to the police, but they merely asked her for a copy of the contract between GlobalRed and Ladrone. The detective from the economic crimes unit said that he had a lot of cases and would take a look it "if he got time." Debra was not at all encouraged.

   A few days later, things got much worse when she discovered that many of the annual service contracts "sold" by Ladrone were bogus. For each new contract, GlobalRed had immediately paid Ladrone $250 It appeared that GlobalRed had paid Ladrone for hundreds of bogus contracts. None of the customers associated with those contracts were paying their monthly bill. Many had paid for one or two months, but all of a sudden they all just stopped paying.

   Debra tried to sell the contracts to a collection agency, but the agency would not buy them. After doing some due diligence, the agency said that all the contracts in question were worthless.

   About a week later, Debra received some good news from the private detective. Pedro Ladrone was living in the other end of the state on a large yacht owned by a well-known celebrity and running a small cellular services store associated with a competitor of GlobalRed.

   Debra instructed her attorneys to file a fraud suit against Ladrone and then seek an emergency order freezing all of Ladrone's assets. But before GlobalRed's attorney can file the suit, Debra received a notice that Ladrone had filed for Chapter 7 bankruptcy in federal court.

   Required

   You are engaged as an independent investigator to assist Debra in bankruptcy. What are some of the issues you face, and how should you proceed?

3. Jay Larkin is a county judge who has served on the bench for over 20 years. He is very popular and well-liked for his professional treatment of lawyers, his knowledge of the law, and his fair treatment of all those who appear before him.

   Judge Larkin's oldest daughter just went off to college, and he and his wife are tired of the upkeep associated with their large waterfront home. So, they made plans to purchase an ocean-front condominium under reconstruction as part of a new development project.

   After studying the building's plans and speaking with Debra Olvidilo, the condo's sales manager, he and his wife sign a contract and give a $1,000 deposit. However, as soon as they return home, only an hour later, Judge Larkin receives a phone call from Debra. She tells the judge that his credit was denied because he had recently filed bankruptcy.

   The judge assures Debra that there must be some kind of mistake, but she assures the judge that the bankruptcy appears in his credit file.

   Being a legal professional, the judge knew to immediately to accesses the PACER system (www.pacer.gov) to verify the bankruptcy filing. To his shock, the filing was for an involuntary bankruptcy, and it was really done under his name.

   The judge was in a panic because he really knew little about bankruptcy procedure. But he did know that his credit was a mess and that under the circumstances he would not be able to sell his house or buy the condo.

   Required

   Describe a fraud scheme that Judge Larkin may be the victim of.

4. Mary Bell is the loss manager for Abrick Jewelry Store. Abrick focuses on diamond jewelry for special occasions like engagements and anniversaries. Abrick's markup is as much as 10 times cost. For example, the store's cost for a ring might be $500, but Abrick may be able to sell it for as much as $5,000.

   Abrick is able to maintain such high profit margins for three reasons:

   1. It uses diamonds that are very clear and the best color but are not the best cuts.
   2. It has a very expensive storefront in one of the best malls in the area, with the inside of the store decorated like the inside of the Manhattan Waldorf Astoria Hotel.
   3. It is extremely liberal in granting credit. So, given the high markup, it can afford to take losses.

   Abrick provides prestigious white glove service, treating its customers like royalty, even serving them refreshments and hors d'oeuvres while they are in the store. This type of service is backed by sophisticated advertising designed to boost its image as the place to buy "when you want the very finest for your loved one."

   Mary Bell's job includes chasing customers who don't make the monthly payments on their financed purchases. In many cases, she is able to recover the jewelry and settle the accounts for a small percentage of the balance due. She's pretty generous in settling, especially in broken engagements. But she is very good at collecting payments for anniversary rings and engagement rings bought by those who successfully married. She knows that not many couples want their engagement ring repossessed.

   Mary is currently trying to collect from Peter Jones, who purchased a diamond necklace, a pair of diamond earrings, and a very large diamond ring. Peter Jones had purchased some of the best jewelry in the store, which had cost Abrick over $6,000. Mary had doubts about extending such a large amount of credit to Mr. Jones, so before completing the sale, she called his private club to verify that there was, in fact, a wedding scheduled to take place. Further, the wedding gift registry had been registered in all the best places in town and with very expensive gifts on the lists.

   Mary was very good at "looking over" her customers. She could easily see that Peter Jones was wearing a $20,000 watch and the shoes he was wearing alone put him in the super wealthy group.

   She later found that Peter did come from a truly wealthy family, but he had no money of his own. His credit report had come up clean but with very little credit experience. So, she was really disappointed when the wedding was cancelled and Peter said that he couldn't pay. Moreover, he could not return the jewelry because his girlfriend had sold it.

It turned out that Peter owed a lot of people a lot of money. Many had granted him credit based on his family name and appearance as a wealthy person.

Peter filed bankruptcy before anyone could even file a lawsuit for one of his debts.

Required

How might Mary pursue a recovery in this case?

5. You have been engaged to assist in a bankruptcy proceeding. Your client, Barae Pharmaceuticals, won a $2 million judgment against Bara Pharmaceuticals for misuse of Barae's name in the generic-label over-the-counter market.

   Bara ceased operations and filed for Chapter 7 bankruptcy after the judgment was entered. Your initial investigation tells you that virtually all of Bara's 125 employees have quit. The attorney for Bara says that the only employee left is a low-level lab technician. The CEO and CFO have left the country and returned to South America. So, you have been left very little to go on.

   The bankruptcy filing shows virtually no assets at all. The bank accounts and pension funds are empty. Only some lab equipment is left, which is of probably of little value.

   Bara's lone remaining employee shows up for the initial meeting of the creditors. The room is full of creditors with many questions, but the lone remaining employee says that she doesn't know anything. She merely worked in the lab, and she had only been with Bara for two months prior to the bankruptcy filing. She remained on because Bara's attorney had promised that she would be compensated from the bankruptcy proceedings.

   Required

   How would you investigate this bankruptcy case to help Barae recover on the judgment it was awarded?

Internet Research Assignments

1. Visit www.justice.gov and find the minimum qualifications for appointment as a bankruptcy panel trustee. Write a brief report on your findings.
2. Research "bankruptcy accounting" and "bankruptcy examiner" and 11 U.S. Code § 1104 on the Internet. What is a bankruptcy examiner? What are the qualifications of a bank examiner? How does bankruptcy accounting relate to the work of a bankruptcy examiner?
3. Research Rule 2004 and answer the following questions:
   a. Who may examine and be examined under Rule 2004?
   b. How does a party obtain approval to conduct a 2004 examination?
   c. How can a Rule 2004 examination be challenged?
4. What is a gap trustee? To what type(s) of bankruptcy does a gap trustee apply? How does a gap trustee differ from a "regular" trustee?
5. Visit the IRS's website (www.irs.gov/uac/Bankruptcy-Fraud-Criminal-Investigation-(CI)) and write a brief summary of the IRS Bankruptcy Fraud Investigation Program.

Chapter 11
Digital Forensics

Learning Objectives

- Explain the major areas of digital forensics
- Understand the Fourth Amendment issues associated with digital forensics
- Explain the knowledge and skills associated with digital forensics
- Explain the services provided by the Regional Computer Forensic Laboratories
- Describe the difference between basic and advanced digital forensics skills
- Discuss the features associated with computer forensic software
- Describe network tools and techniques
- Elaborate on the steps associated with a computer forensics investigation
- Become knowledgeable in the major crime-related databases used by law enforcement

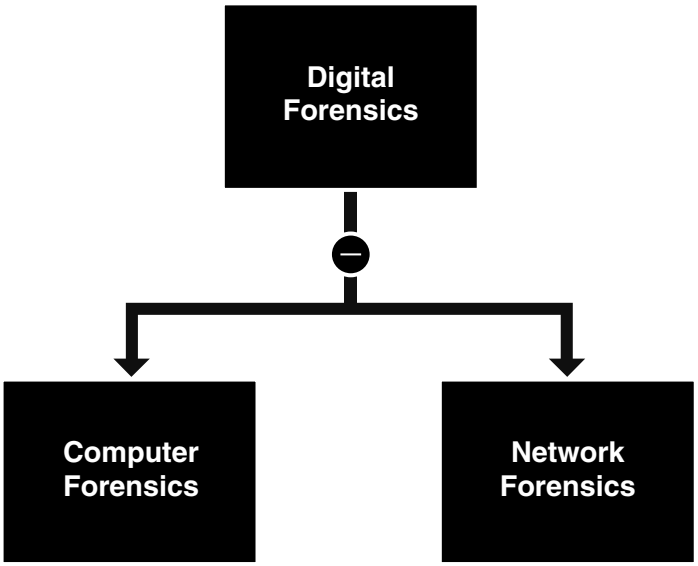
Introduction

Digital forensics uses computer science investigation and analysis techniques to discover and preserve evidence in computers and networks. Digital forensics assists with achieving the following objectives: identifying perpetrators or other individuals of interest; locating and recovering data, files, and e-mail; reconstructing damaged databases and files; and identifying causes of disasters.

Digital forensics can be divided into various areas that include computer and network forensics as shown in figure 11.1. **Computer forensics** focuses on obtaining evidence from computers. **Network forensics** focuses on obtaining evidence from computer and storage networks. Of course, in practice, cases may involve both computer and network forensics. Moreover, experts can also carve out specialties within computer and network forensics. Examples include working with mobile devices, particular operating systems, images, and so on. However, some individuals simply use the term *computer forensics* to represent any kind of digital forensics. For purposes of this chapter, the terms *computer forensics, digital forensics,* and *network forensics* are used, more or less, interchangeably.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Figure 11.1
Digital Forensics



Given the complexities of digital technologies, digital forensics is a constantly evolving field. With the proliferation of mobile devices, new types of computers and networks are popping up everywhere. Automobiles are run by computers, factories are run by computer automation systems, and now we even have smart refrigerators and smart toilets. For example, one article in a U.K. newspaper bears the title, "Computer hackers can now hijack TOILETS: 'Smart toilet' users in Japan could become victim to Bluetooth bidet attacks and stealthy seat closing."

Networks are also becoming increasingly complex. For example, published articles indicate that one major manufacturer of laundry detergent has placed GPS tracking devices in soap boxes. According to reports, the GPS trackers permitted the manufacturer to track customers all the way to their personal residences. Such digital tracking information is easily transmitted via a secure network, stored in a computer system, and then linked to customer profiles.

Simple and complex digital technologies are all potentially relevant to forensic investigations. Law enforcement is forced to try to stay one step ahead of fraudsters. Reports indicate that the FBI has had the capability to remotely activate microphones on cell phones in order to surreptitiously eavesdrop on conversations. The microphone-activating procedure doesn't even require that the cell phone be turned on.

The common denominator in all types of digital forensics is digital evidence. Digital evidence is unlike classic physical evidence. A smoking gun can't simply be erased by pressing a key, touching an icon, or even submitting to a voice command; It cannot be copied and edited. So, digital evidence is somewhat unique in that, in a sense, it is physical evidence but doesn't exhibit all the characteristics of what has traditionally been considered physical evidence.

Digital data always exists physically on some storage device or communication medium. Words, numbers, letters, images, instructions, are stored in the form of binary data—zeroes and ones. So, at the most basic levels, all digital data is physical, but what complicates things from an evidentiary point is that a jury can't use a magnifying glass to inspect the contents of a digital storage device. Rather, the data has to be decoded, organized, and presented in a way the jury can understand. The digital forensic specialist plays a vital role in this process.

The forensic accountant is in a unique position to conduct investigations involving financial fraud. In order to acquire evidence, the investigator first needs to know what evidence to look for. In cases of fraud, the search for evidence will be guided by some theory of the fraud. However, positing a fraud theory requires an understanding of fraud schemes and their related accounting concepts. A pure computer forensic specialist might know how to acquire evidence from computers but won't know what evidence to collect.

For the forensic accountant, digital forensic skills and knowledge are inescapable. The bulk of any forensic accounting investigation involves collecting evidence. More specifically, the forensic accountant should systematically collect evidence in a clear, organized way that can be presented to a court. It's not good enough just to browse a

computer and find a "gotcha" document. The evidence gathering should be conducted in a systematic, organized, and complete manner. Further, all evidence will be cataloged so that it can easily be referenced and cross-referenced. The same type of cataloging will also be done with things like fingerprints and DNA samples.

Consider the organizational structure for a typical forensic accounting investigation. Take, for example, a case of suspected embezzlement in a company. The company contacts a forensic accounting firm and asks for an investigation. In virtually all cases, the forensic accountant will advise the company to have its attorney arrange for the engagement. This way, all the work of the forensic accountant falls under attorney-client privilege (or work-product doctrine), which means it is not subject to discovery in a subsequent legal proceeding.

So, technically speaking, an attorney will hire the forensic accountant. From that point on, the forensic accountant will gather evidence, including computer evidence. If the forensic accountant knows how to collect computerized evidence, he or she will do so, but he or she might also call on a computer forensics specialist for assistance. Still, the forensic accountant will be running the investigation, and after the evidence is collected, he or she will need to integrate it into his or her investigation and report, and he or she will remain fully responsible for it. As a general principle, experts are responsible for the evidence that they choose to use in their investigations.

Legal Issues

Cases Involving Law Enforcement

As with all forensic accounting investigations, the professional should always assume that evidence gathered as part of an investigation must stand up to the rigor of court proceedings. Therefore, it is necessary that the forensic accountant at least have a basic understanding of some of the legal issues that apply to digital evidence.

In cases involving law enforcement, concern will be given to the Fourth Amendment rights of those under investigation. As a general rule, and subject to the usual exceptions, the Fourth Amendment means that law enforcement officials must obtain a search warrant to seize evidence. Further, search warrants must clearly and specifically set forth what items are to be seized. The issue of specificity is a potential problem. For example, if a search warrant says "all computer devices," would it be specific enough to seize a digital watch with PDA (personal digital assistant) capabilities? Warrants that are too broad run the risk of being challenged given the probable cause included in the affidavit used to obtain the warrant. For example, a warrant that specifies "all digital devices" could be taken literally, and law enforcement might remove a digital thermostat that controls a building's heating system in the middle of a bitter winter. Such a broad search warrant could possibly be construed as being too broad and not fully supported by probable cause and, therefore, unconstitutional.

Generally speaking, the Fourth Amendment prohibits the government from engaging in unreasonable searches and seizures. The Supreme Court has defined a *Fourth Amendment search* to mean the government scrutinizing areas in which an individual has a reasonable expectation of privacy. If there is no reasonable and legitimate expectation of privacy, then no search warrant is required.

Given that new technologies are constantly evolving, the issue of reasonable expectation of privacy can become muddled. For example, if an individual computer is used as a server to publish web pages and contains files containing pirated movies, is that server subject to a reasonable expectation of privacy? Law enforcement might be tempted to seize the server without a warrant under the theory that there is no reasonable expectation of privacy.

In this case, however, assume that the warrantless seizure is constitutional. What happens if evidence of drug trafficking is discovered while searching the server for pirated videos? Is the evidence of drug trafficking admissible based on an "in plain sight" exception? The problem is that the Fourth Amendment was written during the colonial days of English rule, and at that time in England, a general search warrant permitted nonspecific searches of individuals' homes. The framers of the Bill of Rights wrote the Fourth Amendment to prevent such abusive practices.

However, searches and seizures of personal residences don't exactly fit with searches and seizures of digital evidence. For example, law enforcement might search a home for a stolen gold watch. To execute the search warrant, officials would go from room to room looking for the stolen watch. They would then seize the watch upon finding it. So, the process would be to search first, then seize.

Notice how the case of the pirated videos involves first seizing the server, then searching it. The process is one of "seizure and search" rather than "search and seizure"—not exactly what the framers of the Constitution had in mind when writing the Fourth Amendment. Further, another aspect the framers had not envisioned is that the process of searching the server might take place weeks or even months after it is seized.

Note also that the room-to-room searching of a home is quite different from searching a computer storage device. A room-to-room search for an elephant rifle would not permit law enforcement to open a small jewelry box because there would be no reason to expect a large rifle to be found in a small jewelry box. On the other hand, no such physical constraints exist when searching computer storage devices. A storage device the size of a cell phone can contain an entire virtual world of data. Take, for example, a bank statement. An investigator searching for the elephant rifle couldn't open a briefcase and discover a bank statement that incriminates the target of the search warrant in an unrelated crime. Should the same investigator be permitted to search a computer disk and find the exact same bank statement in digital format, and could he or she get it admitted as evidence in court? Compare this to one actual case in which law enforcement moved a stereo system to observe the serial number located on its rear. The evidence of the serial numbers was declared inadmissible because moving the stereo was unrelated to the specifications in the warrant.

In computer and network environments, the entire concept of what is considered a search or seizure can become muddled. Consider a case in which a police officer is executing a search warrant and observes a document on a screen that appears to indicate evidence of a crime unrelated to the search warrant. If the officer scrolls down to see the rest of the document, is the officer performing a search?

In the digital world, it might not even be clear when a seizure takes place. The Supreme Court has defined *seizure* as meaningful interference with one's possessory interests in the property. Does making a copy of a computer storage device, file, or document result in such interference? If the answer is no, then a law enforcement officer would be permitted to take copies of anyone's digital data and keep it in storage until a later time a warrant might be obtained. This is exactly what the National Security Agency has done with metadata relating to phone calls.

The discussion here does not provide specific rules regarding what types of digital evidence may be seized and searched because the entire area of Fourth Amendment law, as it applies to digital evidence, is constantly evolving with new technological developments. However, as a general rule, courts tend to take a relatively permissive view when permitting searches and seizures in cases in which case law is not clear. However, it is possible that digital evidence might be admissible in one jurisdiction but not the next. Case law evolves differently in different states and countries.

Cases Involving Private Investigations

In cases that do not involve government agencies, the Fourth Amendment does not apply. However, various legal issues arise. If evidence is not obtained properly, it might not be admissible in court. Even worse, it might lead to a lawsuit against the entity that conducts the investigation. As a general rule, employees working for an organization have no expectation of privacy in connection with their work, but there are some exceptions and gray areas that can lead to problems.

If an organization informally permits employees to send and receive personal e-mail or surf the Internet during work hours, the employee might have an expectation of privacy. There is also the case in which an employee uses a company cell phone both during and after work hours. In some cases, the company may have a right to all data stored in the phone.

To avoid legal problems, organizations should have clearly written policy manuals that explain fair use policies for company resources and the company's rights to, and ownership of, data for which an employee might otherwise assume a right to privacy exists. Computer workstations and computer devices could contain warning banners to indicate no expectation of user privacy.

The policy manual should also clearly notify employees of how, when, and where covert surveillance may be used. Some types of surveillance, such as covert video recording, might be reserved only for cases in which there is a reasonable suspicion of employee misconduct or illegal activity. Other types of surveillance might be routine and ongoing, such as audits of employees' e-mail on company servers.

General Knowledge and Skills for Computer and Digital Forensics

In many respects, computer forensics parallels the work of forensic scientists and crime scene investigators (CSIs), who deal with things like fingerprints, DNA, and trace evidence. Cases involving forensic science begin with crime scene processing. At the beginning of an investigation, a CSI arrives and processes the crime scene.

When processing a crime scene, the CSI arrives at the scene and collects evidence. Many types of evidence are possible, depending on the particular crime scene. Possibilities may include tire skid marks at an accident scene, fingerprints at a burglary scene, and so on. However, regardless of the particular scene, the CSI seeks to gather and preserve as much relevant evidence as possible and preserve it for investigators and attorneys.

In order to gather and preserve evidence, the CSI must be concerned with various issues, including the following:

- *Protecting the crime scene and the evidence from alteration or contamination.* Evidence must be preserved without alteration for a court. To the extent that evidence is altered or contaminated, it may become inadmissible in any court proceeding or challenged as being unreliable.
- *Deciding what evidence to collect.* The evidence that is collected depends on the possible crime under investigation. Criminal investigation departments frequently have different units for different types of crimes, with each unit possibly having its own CSIs who specialize in crimes investigated by their unit. Examples of such units include burglary units, homicide units, economic crime units, and special victims units. It is also common for agencies to also have general forensic units that support other units. For example, fingerprint units may provide support to any other units that may need their services. CSIs will generally gather evidence under the direction of a forensic investigator, but, at the same time, CSIs become very knowledgeable in what evidence to collect.
- *Storing and cataloging evidence collected.* CSIs collect evidence in a systematic manner. Physical evidence is placed in secure evidence bags and carefully labeled and cataloged. Photographs may be taken.
- *Maintaining a secure and documented chain of custody for evidence collected.* Documented custody of evidence must be maintained at all times, beginning with the CSI. Failure to maintain the chain of custody can render evidence unreliable or inadmissible.
- *Interacting with other investigators on the scene.* The CSI will take direction from the forensic investigator or detective with respect to the evidence gathered. The CSI can also make recommendations to the investigator based on the CSI's experience and findings.

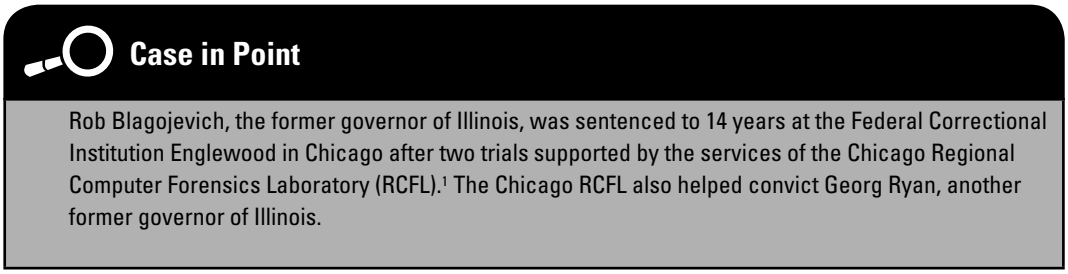
The evidence collected by the CSI is then sent to a forensic lab where it is studied, further organized, and interpreted by a forensic scientist (also known as a *criminalist*). The forensic scientist is typically someone with an advanced degree. In many crime labs, forensic scientists will have graduate degrees in chemistry, biology, information technology, and so on. After working with the evidence, the forensic scientist writes a forensic report. The report summarizes the substantive evidence in the case.

Computer and digital forensics are very similar to traditional crime scene forensics. As with physical evidence found at crime scenes, digital evidence must also be collected, processed, and sent to a lab for interpretation. In the case of a forensic accounting investigation, a computer forensic specialist serves as the CSI and the forensic accountant as the investigator.

In some cases, the computer forensics specialist will simply "bag" a computer to bring to a lab for further processing. This is similar to a CSI bagging a pistol left at a murder scene. In other cases, the computer forensics specialist may need to copy files from networked computer systems in the same way that a blood-spatter CSI collects blood samples at a crime scene.

Depending on the investigation, the forensic accountant may play the role of the on-scene CSI, especially in cases in which the only task is seizing computers. However, given sufficient skills, the forensic accountant may also perform tasks such as extracting copies of files from computer networks. In many instances, seizing computers can cause an entire business to shut down; Therefore, seizing computers isn't always feasible, but there are in cases in which critical computer data must be secured immediately before it is erased.

Generally speaking, there is absolutely nothing wrong with the forensic accountant using the client's employees when conducting an investigation. In some cases, the forensic accountant may rely on the client's IT staff to assist in retrieving evidence. Of course, the forensic accountant should be confident that none of the IT staff are possible suspects in the matter under investigation.



Computer Forensics Responsibilities

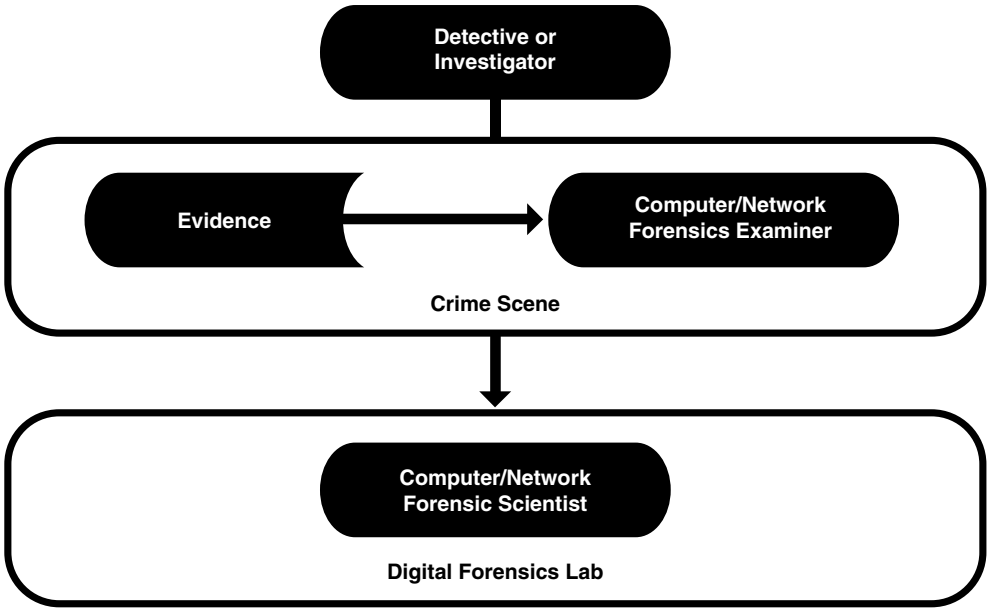
In a large law enforcement agency, sufficient division of labor may exist to provide separate functions as depicted in figure 11.2 and as follows:

- *Computer forensic technician or examiner.* This person works with computer devices and networks to collect digital evidence. Such work may be done at the scene of the investigation or in the lab.
- *Detective or investigator.* This person supervises the entire investigation, including supervising computer forensics technicians at investigation scenes, communicating with the lab, preparing expert or other reports for the attorney, and testifying in court. This person is the lead detective or investigator on the case. This person must have experience investigating the particular type of crime at hand.
- *Computer forensic scientist.* This person organizes and interprets digital evidence, provides reports for attorneys, and testifies in court. Generally speaking, if an economic crime or issue is involved, this person must be a forensic accountant, fraud examiner, or someone trained in investigating economic crimes.
- *Computer lab assistants and managers.* A large lab that handles a sufficiently large volume of cases needs a lab manager and lab assistants.

An investigator who handles only one case at a time and has sufficient skills may handle all the preceding functions. For example, a forensic accountant who is engaged to investigate a suspected case of embezzlement by a bookkeeper might simply bag the bookkeeper's computer and take it to his or her accounting office for further analysis.

[1] www.chicagorcfl.org

Figure 11.2
Digital Forensics Investigation Team



Education, Training, and Qualifications

Computer forensic technicians and scientists need to have the knowledge and skills to collect evidence from many different types of computers, storage devices, networks, and operating systems. Forensic accountants and computer scientists also need the additional skills to analyze and interpret the collected digital evidence. Of course, forensic accountants will also possess skills in areas such as analyzing and interpreting paper records, accounting data, and interviewing.

Various organizations train and certify computer forensics specialists. Some examples of certifications are as follows:

- International Association of Computer Investigative Specialists[2]
  - ○ Certified Forensic Computer Examiner
  - ○ Certified Advanced Windows Forensic Examiner

  Available to certain members of law enforcement, government employees, and government contractors.
- High-Tech Crime Network[3]
  - ○ Certified Computer Crime Investigator, Basic Level
  - ○ Certified Computer Crime Investigator, Advanced Level
  - ○ Certified Computer Forensic Technician, Basic Level
  - ○ Certified Computer Forensic Technician, Advance Level

  Available to all who meet training and experience requirements.
- AccessData[4]
  - ○ AccessData Certified Examiner® (ACE®)
  - ○ AccessData Mobile Examiner

[2] www.iacis.com
[3] www.htcn.com
[4] www.accessdata.com

ACE is available to AccessData software registered users who complete certain training courses and satisfy knowledge-based and practical-based testing requirements.

- Guidance Software[5]
  - EnCase Certified Examiner[6]

Available to registered users of EnCase software who complete certain training courses and satisfy knowledge-based and practical-based testing requirements.

Academic programs represent an additional credentialing alternative. For example, Florida Atlantic University includes digital forensics as part of its Master of Accounting in Forensic Accounting program.[7] As part of the program, students receive training to pass the AccessData exam for the AccessData Certified Examiner credential.

Education, training, certifications, experience, and degrees are only the beginning of what is required to become an expert in digital forensics. Other ongoing activities are also desirable, including obtaining memberships in professional organizations, attending seminars, taking continuing education courses, and publishing in professional journals. Being an expert is a lifelong process.

Digital Forensics Labs

Computers, storage devices, and data removed from crime (or other) scenes are delivered to a **digital forensics lab** for analysis. The specifications of the lab will depend very much on the number of cases it handles. However, in all cases, the lab should meet certain requirements:

- *Secure evidence lockers.* Computers and other digital devices should be kept in locked storage containers. In a small lab that handles only one case at a time, a safe, locked file cabinet, or even a locked closet may suffice. Keys to evidence lockers should be very tightly controlled, and each evidence locker should have its own key. Programmable combination locks are very desirable because the combinations can be changed periodically, and physical key management is not required. A large lab will have a separate limited access evidence storage room managed by a custodian.
- *Secure access.* Larger labs may have double-door entry and exit systems, possibly with a metal detector. Central security may monitor and log everyone entering and exiting the lab.
- *Secure trash processing.* All discarded digital devices must be securely wiped of data before being discarded. In addition, all trash should be processed by a trash collection service that specializes in securely destroying and recycling discarded items.
- *Equipment.* Larger labs keep on hand many different types of computers and digital devices, including devices that are outdated and no longer in active use. Having many types of computers on hand permits the lab to read and process data from many different types of storage devices.
- *Supplies.* Labs keep plenty of storage media on hand to make copies from storage devices that arrive for processing.
- *Software.* Special computer forensics software is used for the many tasks performed in various cases.
- *Workspace.* In some cases, the forensic examination of a particular computer may take days or weeks. Dedicated workstations are common in labs.
- *Business continuity and disaster recovery management.* Consideration must be given to the possibility of fire, floods, earthquakes, and so on. Evidence lockers should be disaster resistant.
- *Logs.* Visitor logs should be maintained. All evidence should be logged as it enters and leaves the lab or evidence lockers.

[5] www.guidancesoftware.com
[6] www.encase.com
[7] ForensicAccounting.FAU.edu

Large labs have directors, managers, and supervisors. These individuals may become members of the American Society of Crime Laboratory Directors (ASCLD).[8] The ASCLD/Laboratory Accreditation Board (ASCLD/LAB)[9] provides accreditation for forensic science testing laboratories that perform testing activities involving digital and multimedia evidence.

An important element of ASCLD/LAB is the requirement for periodic auditing of the lab to insure it meets ASCLD/LAB standards in a consistent way. The accreditation program is based on the following:

- ISO/IEC 17025: 2005 internationally developed and approved
- ASCLD/LAB-developed supplemental requirements specific to forensic science testing laboratories
- ASCLD/LAB policies for laboratories
- ASCLD/LAB board interpretations for specific program applications

Regional Computer Forensic Laboratories

Services include the following:

- *Seizing and collecting digital evidence at a crime scene.* This includes pre-seizure support and assistance for including the best language in affidavits to obtain warrants. It also includes supplying examiners to participate in on-site seizure and collection of evidence.
- *Conducting an impartial examination of submitted computer evidence.* This includes duplication, storage, and preservation of evidence. It also includes organizing evidence to make it understandable by an investigator.
- *Testifying as required.* This includes testifying during a deposition and in court as needed to support active cases.

A number of regional computer forensic labs (RCFLs) are ASCLD/LAB accredited.

Special skills of RCFL examiners include using "…digital investigation and analysis techniques to determine potential legal evidence by applying their skills on a variety of software programs, different operating systems, varying hard drive sizes, and specific technologies. Examiners are capable of locating deleted, encrypted or damaged file information that may serve as evidence in a criminal or terrorism investigation."[10]

The labs assist with many types of crime, especially the following:

- Terrorism
- Child pornography
- Crimes of violence
- Trade secret theft
- Theft or destruction of intellectual property
- Financial crime
- Property crime
- Internet crime

Each RCFL has participating agencies that contribute resources. The participating agencies tend to be local and regional law enforcement affiliates and also include the FBI. Links to the FBI exist because the entire RCFL program has been strongly supported by FBI start-up and operational funding, training, and equipment.

The examiners in the RCFL's CART (Computer Analysis Response Team) are very much modeled after the FBI's own CARTs. Within the FBI, digital forensics and CARTs operate under the Operational Technology Division. Individual FBI field offices have their own CARTs. The FBI refers to CART members as *CART forensic examiners*.

[8] www.ascld.org
[9] www.ascld-lab.org
[10] http://www.rcfl.gov/dsp_p_about.cfm

Private Investigations Versus Law Enforcement Investigations

Given the proliferation of digital technologies, public accounting firms, consulting firms, and detective firms maintain their own digital forensics experts. The work in the private sector is very much the same as in the public sector. Work in both sectors requires acquiring, interpreting, and reporting on digital evidence. The two sectors differ mostly in their respective legal environments.

Private sector investigations rely heavily on consent and subpoenas for access to evidence, whereas law enforcement investigations have the additional capability of obtaining search warrants. Search warrants have the distinct advantage of permitting evidence to be seized immediately and by surprise. On the other hand, subpoenas in civil cases provide notice to opposing parties and can take a considerable amount of time (sometimes weeks or months) to produce the desired response.

Kessler International[11] is a good example of a private firm that conducts forensic accounting investigations that include computer forensics. It provides many computer forensics services, such as the following:

- *Data recovery.* This includes recovering data from corrupted files or data that has been moved, copied, or deleted.
- *On-site acquisition.* In some cases, removing digital devices from working systems is not feasible due to the continued presence of the devices being needed for continuing operations.
- *Electronic risk control.* This includes risk mitigation for digital information.
- *Document discovery.* This involves searching digital media for documents or information relevant to a particular case.
- *Password recovery.* This includes removing password protection as a result of the password being lost or intentionally withheld.
- *Cell phone forensics.* This includes everything from analyzing call logs to recovering deleted text messages.
- *Tracing hostile contact.* This includes identifying the source of e-mail harassment.
- *Cyber evidence.* This includes extracting digital evidence, even deleted evidence, from computer systems.
- *Internet monitoring.* This includes monitoring Internet use for policy compliance, criminal activity, and so on.
- *Litigation support.* Litigation support can include expert advice and expert testimony. Expert advice can be provided discretely.
- *Expert testimony.* This includes testifying in depositions and in court for cases involving digital evidence.

Large accounting firms also have their own in-house computer forensics experts. For example, PriceWaterhouse Coopers'[12] forensic investigation services include CPAs, forensic accountants and certified fraud examiners, former law enforcement and regulatory officials, as well as computer forensic and business intelligence specialists. Areas of specialty include the following:

- Securities litigation and investigations
- Financial fraud
- Cybercrime and data breach investigations
- Emerging markets
- Government contracting
- Health care fraud and abuse

Types of Investigations

Specialists in digital forensics encounter many different types of investigations. Examples of these investigations are discussed in the following sections.

[11] www.investigation.com

[12] www.pwc.com

E-MAIL INVESTIGATION CASES

One type of e-mail investigation deals with e-mail as part of a crime, abuse, or in relation to a lawsuit. This type of investigation typically requires searching for, retrieving, and analyzing e-mail messages using criteria that relate to the investigation at hand. For example, the investigator may search for all messages that are sent to or from a given sender within a particular date range.

Many different types of e-mail analysis are possible. For example, content analysis software can be applied to "mine" large numbers of messages for evidence of fraud. Social network analysis can be applied to identify social networks of individuals that communicate with each other. In some cases, mapping e-mail intercommunications involving a suspect can lead to the suspect's network of accomplices.

A second type of e-mail investigation involves identifying the source of particular e-mail messages. Such messages may be associated with a crime, abuse, or other matter of interest. In many cases, the source of a particular e-mail message can be identified from the message's internal headers, which are normally not seen by the receiver. In some cases, characteristics of documents sent by e-mail can be used to identify the sender.

Case in Point

Marion Young, a co-owner of Private Chiropractic Care, pled guilty to engaging in a conspiracy to commit insurance fraud. The alleged scheme suggested that Young participated in recruiting alleged auto accident victims and also billing for services not performed. It was alleged that the fraudulent bills were used as a basis to demand insurance settlements from insurance companies. The case was investigated by the Greater Houston Regional Computer Forensics Lab.

THE BTK SERIAL KILLER CASE

This case is a good example of how computer forensics can be used to identify the sender of an e-mail message. Dennis Rader killed at least 10 people over a span of 17 years. The case was well-publicized in the national media. Over the years, he sent taunting letters, postcards, and packages with proof of his murders to the police and newspapers. He gave himself the BTK moniker, short for Bind, Torture, and Kill.

At one point, Rader sent a letter to the police asking them if it was safe for him to send them information on a disk. The police responded by placing a classified ad in the Wichita Eagle newspaper advising Rader in the affirmative. Rader then sent the police a computer disk that contained a Microsoft Office document for them to view. The disk was sent to the computer forensics lab for examination.

The computer forensic examiner discovered that the disk contained a second file, one that had been deleted. The examiner then recovered the deleted file and further discovered that the metadata associated with the file indicated that it had last been modified by "Dennis" from Christ Lutheran Church. Upon that discovery, investigators went to the church's website and found that Dennis Rader was the president of the church's congregation council. He pled not guilty at first but eventually confessed and was sentenced to 10 consecutive life terms in prison and a minimum of 175 years.

ALEX RODRIGUEZ SPORTS DOPING CASE

According to media reports, professional baseball star Alex Rodriguez was suspended for using banned substances and obstructing a drug investigation. Evidence in the doping scheme included digital evidence. The arbitrator cited more than 500 text messages exchanged between Rodriguez and the alleged supplier of the banned substances.

COLOMBIAN CRIMINAL ENTERPRISE CASE

For several years, Colombian security forces were unable to identify members of the Black Eagles, an organized crime group and gang that existed from the remains of a largely disbanded right-wing paramilitary group. Police placed one

suspect under surveillance hoping he would make a mistake and lead them to other associates and members of the group.

The suspect was very careful with his activities and even avoided the use of cell phones. To avoid having the police trace his communications to where he lived, he communicated with group members only through public Internet cafes. But the police followed him as he went from one Internet cafe to another and studied the digital traces that he left behind. This led to the successful arrest of several gang members.

Scott Peterson Murder Case

This murder case was widely reported in the news media. Peterson was accused of murdering his wife Laci after her body washed up on a beach in Richmond, California. Peterson claimed to be fishing alone the same morning he reported his wife missing. Experts opined that water currents in the area could have carried the body from his fishing spot to where it washed up on the beach. A computer forensics examiner testified that Peterson had downloaded information from the Internet about water bodies and currents in the area.

Casey Anthony Murder Case

Casey Anthony was accused of murdering her two-year-old daughter, Caylee Anthony. An FBI lab report indicated there were traces of chloroform in the trunk of Casey's car. Computer forensics experts found various searches on the Anthony home computer that included "neck breaking," "shovel," "how to make chloroform," and "death." She was acquitted on the murder charges but found guilty for providing false information to a law enforcement officer.

Financial Fraud: Bernie Madoff Ponzi Scheme Case

This was one of the largest Ponzi (pyramid) investment schemes the world has ever seen. A critical part of the investigation to unwind Madoff's scheme and recover assets involved extensive computer forensics and forensic accounting work.

Rod Blagojevich Public Corruption Case

Rod Blagojevich, the ex-governor of the state of Illinois, was sentenced to 14 years in a federal correction institution after being convicted of public corruption charges. The Chicago RCFL provided expert support to the prosecutors in both of Blagojevich's trials.

Khalid Quazzani Counterterrorism Case

Quazzani was sentenced to 14 years in prison after pleading guilty to conspiring to help finance al-Qaida terrorist activities. FBI agents reported that Quazzani used a form of steganography to hide messages associated with his illegal dealings. *Steganography* is a form of encryption in which messages are hidden in images. The FBI computer forensics specialists cracked his encryption scheme, which led to his arrest.

Alberto Gonzalez Hacking Case

Gonzalez was sentenced to 2 concurrent 20-year sentences for his role in running a gang of cyber thieves who stole more than 90 million debit and credit card numbers from TJX Companies, Inc. and others. He was first arrested when an NYPD plain-clothes detective spotted him suspiciously using one bank card after another to withdraw money from an ATM.

After Gonzalez's arrest, he was recruited to assist the Secret Service Electronic Crimes Task Force, and after a time, he became an informant. However, during the same time, while he was drawing a $75,000 a year salary as a paid informant, he continued his illegal activities. He and his fellow online criminals hacked into many large companies and gained access to about 180 million credit card accounts. Victims included OfficeMax, Dave & Busters restaurants, and T.J. Maxx retailers. They also hacked into Target, Barnes & Noble, and Sports Authority, among others.

As part of his work assisting the Secret Service, Gonzalez participated in the Secret Service Operation Firewall, which was run from the Secret Service's headquarters. From there, he engaged in an online chat session with many of his fellow cyber thieves. Computer forensics experts traced those in the chat, and within a matter of hours, arrests were made in eight different states and six different countries.

Mortgage Fraud Case

Several defendants pled guilty in relation to a fraudulent loan modification company. The fraudulent company promised several thousand homeowners help in renegotiating their mortgage loans. The victims received little or no help and lost millions of dollars. The investigation was supported by the San Diego RCFL.[13]

Child Pornography Cases

The RCFLs have been especially active in supporting child pornography cases, and they have supported investigations and convictions in many such cases. Some RCFLs have handled one child pornography case after another.

Courtney Haynes Sexual Assault Case

A computer forensics examiner with the Miami Valley RCFL[14] testified in the trial of Courtney Haynes. Haynes was accused of sexually assaulting a single mom who lived nearby in his apartment complex. The victim had complained about Haynes's loud music. He subsequently broke into the victim's apartment and sexually assaulted her in retaliation for her having complained.

The computer forensics examiner searched Haynes's computer and found evidence that he had searched for information about the victim on Facebook and Google. He was sentenced to nine years in prison for rape.

Basic Versus Advanced Digital Forensics Skills

In ***Special Publication 800-86***, the U.S. National Institute of Standards and Technology (NIST) defines four phases of the forensic process:

1. *Collection*: Identifying, labeling, recording, and acquiring data from the possible sources of relevant data, while following procedures that preserve the integrity of the data.
2. *Examination*: Forensically processing collected data using a combination of automated and manual methods and assessing and extracting data of particular interest while preserving the integrity of the data.
3. *Analysis*: Analyzing the results of the examination, using legally justifiable methods and techniques, to derive useful information that addresses the questions that were the impetus for performing the collection and examination.
4. *Reporting*: Reporting the results of the analysis, which may include describing the actions used, explaining how tools and procedures were selected, determining what other actions need to be performed (for example, forensic examination of additional data sources, securing identified vulnerabilities, improving existing security controls), and providing recommendations for improvement to policies, procedures, tools, and other aspects of the forensic process.

Basic digital forensics involves collecting (also known as *acquiring*) data from computers and electronic devices, especially documents, messages, and files. Superficially speaking, acquiring such items from computers appears to be something that any person with modest computer skills can do. However, computer examiners use special tools to recover deleted files, crack passwords, acquire log files, discover files and messages, and examine metadata associated with documents.

Advanced digital forensics involves additional skills that include acquiring data from complex accounting systems, examination, analysis, and reporting. Some advanced digital forensic examiners, also called **fraud auditors**

[13] www.sdrcfl.org

[14] www.miamivalleyrcfl.org

(and also *forensic auditors*), must also be able to connect to and acquire, examine, analyze, and report on relevant data from databases and accounting systems. Database systems have special logical and physical structures that must be understood in order to effectively acquire data from them and then perform an examination.

Almost any type of digital file requires some type of software in order to display it on a computer. For example, a document created in Microsoft Office might require Microsoft Word to open and view it. Similarly, image files might require an image viewer. The result is that the forensic examiner must have some level proficiency in the software products that the examiner is likely to encounter.

The need for software proficiency extends to database and accounting systems. However, a much higher level of skill is required to work with database and accounting systems than with many other types of software. Both databases and accounting systems have unique logical and physical structures and security features. In addition, accounting systems contain data that generally require accounting skills to examine.

Larger companies use enterprise resource planning (ERP) systems, which is a type of system that involves a single integrated software platform to handle all functions of the company's business. Examples of functions handled by ERP systems include logistics management, production scheduling, financial statements, internal controls, marketing, and customer service. Obviously, any type of digital forensics work with such systems, even simple data acquisition, requires accounting skills.

The difference between a "simple" accounting system and an ERP system is just a matter of functionality: The ERP system supports more functions. However, there has been a general trend towards software vendors adding more and more functions to accounting systems over time. The result is that in many fraud and forensic accounting investigations, it is likely that the investigator will be required to deal with some type of complex accounting or ERP system. Basic computer forensics is great for finding "gotcha" documents in single computers, but it is of limited usefulness in many fraud or forensic accounting investigations.

When it comes to fraud and many types of financial investigations, the investigator often will be skilled in not only accounting but also other areas such as information systems auditing and forensic auditing. *Information systems auditing* involves the auditing, control, and monitoring in businesses systems in the context of information technology. ISACA[15] provides the Certified Information Systems Auditor (CISA) credential, which is widely recognized in the information systems auditing area.

Fraud auditors apply special skills to advanced digital forensics. Fraud auditing requires skills very similar to those in traditional financial statement auditing but is somewhat more intensive. The following are examples of how fraud auditing (or investigative) procedures differ from traditional procedures:

- *Documentation versus public document searches.* Traditional financial statement auditors review existing documents. Forensic auditors may conduct public document searches as part of investigating a suspect's personal assets.
- *Inquiry versus interviewing.* Traditional financial statement audits involve many routine inquiries. Forensic auditors use advanced interviewing methods to detect deception and obtain confessions.
- *Confirmation versus alternative sources.* Financial statement auditors send letters to confirm the existence and correctness of accounts receivable and payables. Forensic auditors may do the same but also do things like send letters to all local banks looking for secret bank accounts in the organization's name.
- *Physical examination versus laboratory analysis of physical evidence.* Traditional auditors inventory assets. Forensic auditors study computers and other evidence in a laboratory setting in order to build a case for court.
- *Reperformance versus analyzing electronic evidence.* Traditional auditors frequently reperform calculations and other functions to verify they are correct. Forensic auditors analyze electronic evidence with a focus on unraveling intentional deception.
- *Observation versus surveillance.* Traditional auditors observe business processes with an eye on internal control compliance. Forensic auditors use covert observation techniques for purposes of identifying fraud.
- *Generally accepted auditing standards (GAAS) analytical procedures versus nontraditional analyses.* Traditional auditors use various techniques to identify anomalous transactions and account balances. Forensic auditors used more sophisticated techniques, such as handwriting analysis of questioned documents.

In general, differences in techniques used by forensic auditors versus traditional auditors are due to the differing objectives of the two. The primary objective of the traditional auditor is to attest to the financial statements. On

[15] www.isaca.org

the other hand, the primary object of the forensic auditor is to investigate a particular fraud or other issue. Both the traditional auditor and the forensic auditor have an interest in fraud, but the traditional auditor is relatively more interested in the impact of fraud on the financial statements.

Software Used by Digital Forensics Examiners

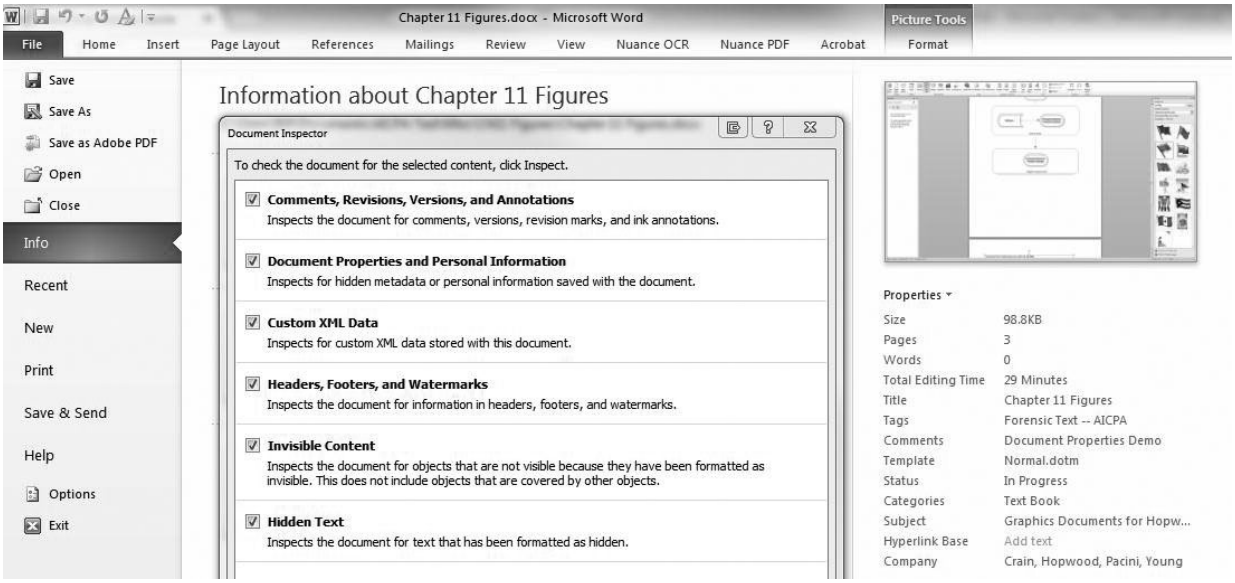
Digital forensics examiners routinely use special computer forensics software to conduct their work. Such software facilitates acquiring evidence from computers, storage devices, and networks. General features of such software include the following:

- *The ability to crack passwords.* Computer forensics software may have the capability of applying brute force password attacks and general and special dictionary attacks. Generally speaking, *dictionary attacks* involve automatically guessing passwords using words, or combinations of words, from a standard dictionary. Special dictionary attacks are based on dictionaries defined by the forensic examiner. For example, one type of special dictionary attack involves using a dictionary based on every single word found on the target computer's storage devices and in its Random Access Memory (RAM).
- *The ability to recover files that have been permanently deleted.* Most operating systems don't actually delete files, even when they are deleted from a "recycle bin" or "trash bin." Instead of actually deleting files, the operating system simply removes the files from the internal directory of files. The space on which the files are stored then becomes free space, which can be used by the operating system to store additional files.
- *The ability to recover data from "slack space."* Computers store files in disk clusters but generally don't put two files in the same cluster. That makes possible the following scenario: A file is stored that fills an entire cluster. The file is then deleted and replaced by a file that fills up only the first half of the same cluster. The result is that the second half of the first file remains in the cluster after the first file is deleted.
- *The ability to analyze the contents of computer files that are normally hidden and not accessible by normal computer users.* Operating systems maintain many different files needed to perform various system management tasks in the background. Examples of such files include cache files, page files, and registry-related files. Cache files are used to speed up software. For example, Internet browsers download pages from the Internet and store the pages in temporary cache files. So, if the user views a web page twice, the computer will simply display the cached version and not need to retrieve it a second time from a remote website. Page files exist on an overflow area for RAM. Registry files define settings and store some data for the user, operating system, and software applications.
- *The ability to analyze unallocated storage space on storage devices.* Operating systems store files in free space, also called *unallocated storage space*. Space that is occupied with files is called *allocated storage space*. When files are deleted, the space that they occupy is returned to free space.
- *The ability to create exact duplicates of entire computers and files.* Forensic examiners prefer to work with exact copies of original computer storage devices. Care is taken to make sure that the copying process does not, in any way, change the original.
- *The ability to index and search the contents of files, folders, or entire storage devices.* Some storage devices may contain very large numbers of files, too many for a person to view one at a time. Forensic indexing software can rapidly index large numbers of different types of files. The index permits the examiner to perform sophisticated context-based searches. For example, a search might be for the word mail within three words of the word account but only in documents that don't include the word cash.
- *The ability to analyze metadata, logs, and e-mail headers.* A lot of data is hidden from plain sight in metadata, logs, and headers. As discussed previously, Microsoft Word metadata was responsible for catching the BTK killer. See figure 11.3 for an example of Word metadata. Log files can indicate when a particular user accessed or edited a given file or record. Headers (for example, e-mail headers) can contain data that can sometimes be used to trace e-mail to its source.
- *The ability to systematically organize and categorize images, files, data, and other digital objects.* Building a forensic case requires organization. Good digital forensics software keeps track of all data (for example, documents, spreadsheets, e-mail messages, and images) in a database and separately for each case.
- *The ability to connect to databases and accounting systems.* Forensic accountants may use generalized audit software to connect directly to a company's accounting system. Other software may require that the accounting

system's data first be "dumped" to a file or files, which can then be accessed by the software. Functions of these kinds of "high-level" software include data analysis; continuous monitoring; and management and measurement of controls and risks in accordance with management policies and procedures, regulations, and business decisions.

- *The ability to log examiner activities and generate reports.* Computer examiners should keep logs of the activities that they perform and generate reports regarding acquired evidence. Such logs and reports may be used by experts in court proceedings.
- *The ability to extract data from volatile memory (RAM).* The computer's RAM stores information about the current state of the operating system and application software. RAM is called volatile memory because data in RAM is normally lost when a computer is turned off.
- *The ability to acquire data from many different types of devices.* The computer examiner may need to acquire data from many devices that include cell phones, PDAs, tablet computers, notebook computers, desktop computers, and network storage devices. Almost any kind of digital device can contain evidence.

Figure 11.3
Microsoft Word Menu to View Document Metadata



Specific Functions and Capabilities of Popular Computer Forensics Software Products

Although there are perhaps a half dozen or so major computer examination software programs on the market, two of the most popular tools are Guidance Software's EnCase[16] and AccessData's FTK.[17] Both of these software platforms have the capability of making an image copy of a target computer. Then from the image copy, the examiner acquires case-relevant data as needed.

FTK provides a good example of the functionality of computer forensics software. Major components of FTK software include the FTK Forensic Toolkit (FTK), FTK Imager (FTK-I), Registry Viewer (RV), Password Recovery Toolkit (PRTK), and Distributed Network Attack (DNA). Some details of these components are described in box 11.1. These functions should be studied as models of the functions generally available to computer forensic examiners. Further, collectively, these models provide a pretty good picture of the work that computer examiners perform, especially in the area of evidence acquisition.

[16] www.guidancesoftware.com
[17] www.accessdata.com

Box 11.1 Sample FTK Feature Components

FTK Software Component	Feature	Description
FTK Toolkit	File Filter	This feature eliminates large numbers of files from consideration. It does so by cross-referencing file names and their hash values with a known database of files. This saves the examiner time by avoiding the need to examine various operating system and application files. Hash values ensure that filtered files are exact matches with files in the database of known files.
	Indexing and Searching	FTK has a built-in version of dTSearch,[18] one of the most powerful indexing and search engines on the market.
	File Viewer	FTK is capable of previewing files and e-mail messages in a wide variety of formats.
	Report Generator	Reports can include spreadsheets, documents, and reports from other tools.
	E-mail Extraction and Analysis	FTK can open and search Microsoft Outlook files and various other types of e-mail.
	File System Explorer	The file explorer permits browsing the target file system. It has options for showing slack and free space.
	User Administration	FTK's user administrator system permits the creation of different user accounts, one for each examiner. Each examiner, in turn, can create multiple cases. Cases can be archived permanently when they are closed. User accounts can also be limited to a reviewer role, thus, permitting the user to view acquired evidence but without being able to add to or alter it.
	Tabbed System for Organizing Different Types of Data Objects	Different types of evidence (for example, e-mail, documents, images, RAM data, and so on) are stored under their own tabs.
	Data Carving	FTK assists with data carving, which means putting together pieces of deleted files. FTK identifies deleted files in the free space area by the internal file headers. Data carving can be done automatically or manually. Automatic carving is possible when the file being carved still exists in the operating system's file directory or master file table. Manual carving is applicable when the file does not exist in the file directory or master file table, and no internal file header can be found. Manual carving is very much like putting together pieces of a shredded document. The task isn't too difficult if all the pieces of the file are stored contiguously. But operating systems tend to store files in pieces and spread the pieces all over the storage device. So, manual carving is very laborious.

(continued)

Box 11.1 Sample FTK Feature Components

FTK Software Component	Feature	Description
FTK Imager	Make Image Copies of Computers and Devices	A standard practice of examiners is to make an exact copy of a computer of device to be examined. This is done using imaging software that makes a bit-by-bit copy of the original device. *Bit-by-bit copies*, also called *image* or *bit-stream copies*, are the only type of copies that exactly reproduce the original. Simply copying files or folders leaves behind things like hidden files or data residing in free space. When acquiring devices using image copies, examiners normally insert a write blocker (a hardware device) between the examiner's computer and the device being acquired. The write blocker ensures that no data on the original device is altered. Finally, the examiner computes hash totals of both the original and the image copies. Matching hash totals provide legal proof that the image is a perfect copy.
	Mount Images	FKI Imager "mounts" images, which makes them appear like an extra hard drive or storage device on the examiner's computer. Almost any kind of digital storage device can be imaged and mounted. Examples include computers, digital cameras, cell phones, CDs, DVDs, and USB drives. Images are typically mounted in read-only mode to prevent any type of alteration. Images of working computer systems can be booted in the same way that the systems they are copied from can be booted.
	Manage Multiple Image Formats	FTK Imager works with a wide variety of image formats. Common formats include ISO (used for CDs and DVDs) and Microsoft-supported VHD (virtual hard drive). Images may be created and stored in the supported format of the examiner's choice, and existing images can be converted from one format to another.
	Export Files and Folders	FTK imager can export files and folders and use hash totals to verify they are unchanged.
	Capture RAM	FTK Imager can be booted from a USB drive attached to the target computer and then capture a copy of the target computer's RAM. Capturing RAM can include capturing passwords for encrypted files, folders, and devices that are open at the time of the capture.
Registry Viewer	The Registry Viewer assists the examiner in acquiring information from the Windows Registry that is relevant to an investigation. The Windows Registry is a hierarchical database of configuration settings that govern the functioning of Windows and user applications. Configuration entries in the registry are referred to as *keys*, and keys are said to have values. Some keys and their values are of particular interest to forensic examiners. Some of the important keys are as follows:	
	OpenSaveMRU	MRU is the abbreviation for "most recently used." The OpenMRU key contains a list of many of the most recently opened and saved files via common Windows Open/Save dialog boxes.

Box 11.1 Sample FTK Feature Components

FTK Software Component	Feature	Description
	LastVisitedMRU	The values of this key provide information about the location of files listed in the OpenSaveMRU key.
	RecentDocs	This key provides a list of files recently opened or executed via the Windows file explorer.
	RunMRU	This key contains a list of programs recently run using the Run command in the Windows Start menu.
	Memory Management	This key contains a value that when set to one tells Windows to delete the Windows Paging file when Windows is shut down. This value is normally set to zero, but the examiner should check it before shutting down the computer.
	ACMru	This key contains the contents search terms used in searching Windows files and folders.
	Uninstall	This key points to all user programs installed on the computer. Some details are also provided, such as the date installed and version of the software. Many system security updates and device drivers are not listed. *Device drivers* are files that tell Windows how to interact with specific hardware devices, such as video displays, printers, and so on.
	Volume	This key provides information about mounted devices, such as external storage units. Some information may persist in this key after devices are dismounted (for example, unplugged from the computer).
	USBSTOR	This key provides information about mounted USB devices. Some information may persist in this key after devices are dismounted (for example, unplugged from the computer).
	Command Processor and Winlogon	These keys contain pointers to software to run at Windows startup. Malware may use this key to run.
	Services	This key contains a list of Windows services and the conditions for them to run. Many software applications rely on Windows services. The examiner may have an interest in identifying any unknown services. In many cases, the key values will include the name of the software vendor associated with the service.
	Image File Execution Options	This key has an effect on how programs are launched. It's possible for someone to set this key value in such a way that an illegitimate program runs covertly in the place of a legitimate program.
	Command	This key contains information that is passed to some applications when they run. Malware programs sometimes change the value of this key as a way of loading themselves.

(continued)

Box 11.1 Sample FTK Feature Components

FTK Software Component	Feature	Description
	GUID	This key contains information regarding network adapters, network connections, and some network storage devices and folders.
	UserAssist	This key contains list of programs and shortcuts recently accessed by the user.
	Protected Storage System Provider	This key contains encrypted passwords stored for some Internet browsers and Microsoft Outlook. This registry key is normally hidden from administrators. AccessData's Registry Viewer can access and decrypt values of this key.
	Typed URLs	This key contains the locations of files or web pages recently typed into Windows Explorer or Windows Internet Explorer.
Password Recovery Toolkit	This product decrypts encrypted (password-protected) files and recovers Windows log-on passwords.	
	Create and Use Dictionaries to Attack Passwords	FTK's Password Recovery Tool Kit (PRTK) can import dictionaries created by other FTK tools. For example, FTK's Registry viewer can decrypt the contents of the Protected Storage System Provider Key. The decrypted data can then be passed to PRTK, which, in turn, can use the decrypted data to crack passwords.
	Password Reset Attacks	FTKPRK exploits vulnerabilities in software products that possess a feature that permits users to reset lost passwords.
	Decryption Attacks	FTKPRK exploits vulnerabilities in the encryption schemes. Some encryption schemes have known vulnerabilities.
	Key Space Attacks	FTKRPK uses a brute-force attack, trying every possible combination of keystrokes. Brute-force attacks are never effective against sufficiently long passwords.
	Windows Login Password Recovery	Windows keeps user log-on passwords in a SAM (security account manager) file. This file is not normally available to Windows administrators, but FTK can access it and perform attacks to decrypt user logons and passwords.
Distributed Network Attack	This product works like FTK's Password Recovery Toolkit, but instead of working on just a single computer, it harnesses the computing power of multiple computers to crack passwords. The result is that passwords that would normally take weeks to crack may instead be cracked in a single day.	

Solid State and Mechanical Storage Devices

Much of the preceding discussion regarding the recovery of deleted files also applies to mechanical storage devices, especially computer hard drives. Solid state storage devices (SSDs) are an entirely different matter. SSDs store data in permanent (flash) electronic memory. The problem is that one characteristic of flash memory is that data can only be written to a large, but limited, number of times before it wears out and no longer functions.

Given that SSDs can be written to only a limited number of times, built-in SSD controllers (hardware that lets the SSD communicate with the computer) use what are called *wear-leveling techniques* that store files in little pieces in such a way to cause the SSD to wear evenly. On hard drives, these little pieces can get stored in contiguous blocks of storage that are made available when files are deleted, but on SSDs, wear-leveling, instead, results in the pieces spread all over the device. Thus, wear-leveling is like the electronic shredding of files. Of course, this is only an issue if the file has been deleted from the recycle bin.

Another aspect of SSDs is that some contain large amounts of extra hidden storage space generally unavailable to normal hardware or software. However, this hidden data may be accessed by a special hardware device that reads flash chips. To counteract this issue, some SSD manufacturers have implemented a secure erase function that erases all regions of the SSD without leaving any trace for a forensic examiner to discover. With hard drives, secure wipe software is available that repeatedly writes zeroes and ones over every sector of the drive, completely obliterating any data that might otherwise be recoverable by the examiner.

Another issue with SSDs involves self-corrosion. After a given location on the SSD has been written to a number of times, the associated parts of the SSD may be marked for destruction so they will no longer be used. This process goes on automatically and, over time, an SSD can self-corrode to the point that significant amounts of data are automatically destroyed.

Whole device encryption poses a special program for forensic examiners. If the entire storage device is encrypted by using Windows Bitlocker, it may be impossible to decrypt any data on the storage device. The only hope may be guessing the user logon and password, but if these are sufficiently complex, accessing the storage device will prove impossible. Trying to directly break the encryption scheme would be practically impossible because the encryption keys are normally too long and complicated. Encrypted computers are frequently set up to automatically make the encryption key available upon machine log in. So, a weak machine password can create a vulnerability that can permit an examiner to unlock an encrypted drive.

If whole device encryption is suspected and the login and password are unknown, then the forensic examiner should use a product like FTK to dump the RAM contents to an external device (for example, to a thumb drive) before shutting down the machine. Running a portable version of the dumping software that is installed on a USB device can minimize any loss of data due to running the dump. The examiner may then extract the key from the dump and use it to unlock the drive. Normally, Windows is satisfied with a simple log-in password, but if an attempt is made to disturb any of the base boot record, Windows will prompt for and require the full encryption key be entered.

Another issue is deleted records in an accounting or database system. Many such systems don't actually delete records; instead, they simply mark them for deletion. A special clean-up utility should then be run to actually remove the marked records. The ability to mark records for deletion or run a clean-up utility may require special permissions, but even then the activities performed by the person making the deletions, and the person's identity, will likely be entered into a log file that the person is not able to alter or delete.

A final issue relates to **network storage devices**. These are storage devices that share data with multiple computers and users as part of an organization's network. They are typically critical to operations and contain very large amounts of data. This poses two problems for examiners encountering such a device. First, the device is likely to be critical to operations, so removing it will cause a disruption. Second, the device may contain too much data for the examiner to simply make a normal image copy of the entire device. Of course, the examiner can obtain a similar storage device to store a copy of the original, but the cost of doing so may be too high. A second option is for the examiner to make copies of relevant portions of the device.

Case in Point

According to a news release by the San Diego RCFL,[18] "The San Diego RCFL provided digital forensics expertise to investigators looking into a fraudulent loan modification company that promised nearly 4,000 desperate homeowners help with renegotiating the terms of their mortgages. Instead, they bilked them out of millions of dollars."

[18] www.sdrcfl.org

Advanced Digital Forensics and Computer-Assisted Audit Tools and Techniques

As discussed previously, advanced digital forensics involves collecting, examining, analyzing, and reporting on evidence in database and accounting systems. Basic digital forensics is useful in cases in which the examiner finds "gotcha" documents that support a particular fraud (or other) theory posited by the investigator. Examples of gotcha documents include image files containing child pornography, e-mail messages showing culpability in a crime, text messages sent to terrorists, bank statements from secret accounts, and so on.

Basic digital forensics is important for solving very sophisticated cases, like complex financial statement fraud, embezzlement, and so on. However, for such sophisticated cases, additional evidence may also lay buried within a large accounting or ERP system. For example, the evidence of a sales-skimming scheme might begin with incriminating e-mail messages from an employee's office computer, but additional evidence might exist in the accounting system in the form of missing invoices.

As discussed previously, advanced digital forensic cases that involve accounting or ERP systems require forensic auditing skills. They also require software tools whose functions go beyond those available in common computer forensics software platforms previously discussed.

Forensic auditors frequently rely on specialized software platforms, sometimes referred to as **CAATs (computer-assisted audit techniques)**, designed to assist in audits. Four general types of CAATs exist:

- Data analysis software
- Network security evaluation software
- Operating system and database system evaluation software
- Software-testing tools

Among these types of software, data analysis software is the most frequently used by forensic auditors. This type of software is also sometimes referred to as *general purposes software* or **generalized audit software** (GAS). CAATs are also frequently referred to, perhaps more generally, as **CAATTs (computer-assisted audit tools and techniques)**.

In any case, the primary functions of GAS and CAATs include extracting data from accounting or ERP systems. CAATs also contain many tools for analyzing extracted data. In some cases, sophisticated CAATs may be able to simply "plug in" to the target accounting system, thus, permitting the forensic auditor to perform data queries directly from the target system. In other cases, the forensic auditor will "dump" the system's data to one or more files, which the CAAT can process.

Some functions of CAATS are as follows:

- *Sample extractions.* Transactions or accounting balances are extracted based on criteria relevant to the forensic audit. For example, when investigating a sales fraud scheme, the forensic auditor might desire to select all sales transactions originating from new clients.
- *Sophisticated data queries.* Transactions are extracted based on complex selection criteria. For example, the forensic auditor might select all sales orders associated with a particular sales person in months for which that sales person's orders are, on average, larger than they were in the previous month.
- *Completion checks.* Transactions are analyzed to find records with missing data.
- *Duplicate checks.* Invoices and other electronic documents are checked for duplicates.
- *Missing sequence identification.* Sequence numbers on invoices and other electronic documents are checked for missing numbers.
- *Reasonableness checks.* Numbers within (or among) individual electronic documents can be compared to each other for reasonableness.
- *Statistical analysis and calculations.* Sophisticated analyses, such as Benford's analysis, is performed. Analyses can also involve various types of data reduction and reporting, with aging of accounts receivables being a good example.

CAATs may also be used to test application logic and controls using one of several approaches:

- *Test data.* Using this approach, the forensic auditor submits test transactions to the target system. For example, the forensic auditor might create a fictitious customer account and then submit to the system a series of purchases and payments for that account.
- *Integrated test facility (ITF).* The ITF approach involves embedding an audit module in the target system's software code. Dummy records, files, and transactions are processed in normal operations alongside those relating to normal operations.
- *Parallel simulation.* The forensic auditor uses a system outside of the target system to reprocess transactions processed by the target system.

ISACA's IS Auditing Guideline[19] provides guidance on the use of CAATs. It specifically covers the planning and use of CAATs, CAAT-related data security, performance of CAAT-related audit work, and documentation and reporting. ISACA publishes various standards relating to information systems auditing. Standard 060.020 deals with the collection of evidence, as discussed in the following paragraph:

> During the course of the audit, the Information Systems Auditor is to obtain sufficient, reliable, relevant and useful evidence to achieve the audit objectives effectively. The audit findings and conclusions are to be supported by appropriate analysis and interpretation of this evidence.

CAAT Software

Many popular CAAT software platforms are commercially available. Two popular CAATs include ACL Services Ltd.'s ACL®[20] and CaseWare Analytics IDEA®.[21]

ACL software is used by nearly 90 percent of Fortune 500 companies. It includes support for the following:

- *Data analysis.* Ad-hoc analysis of data populations to detect transactions that fall outside of business norms, internal control standards, or regulatory requirements.
- *Enterprise continuous monitoring.* Recurring analysis of transactional data designed as an early detection system to help prevent and mitigate business impacts through identification of operational deficiencies or control gaps.
- *GRC (Governance, risk, and compliance).* Management and measurement of risks and controls against business objectives in accordance with regulations, standards, policies, and business decisions.

CaseWare Analytics software suite includes IDEA Data Analysis, Collaborative Analytics, and Continuous Monitoring. CaseWare Analytics lists the following as features of IDEA:

- *Import data from practically any source.* IDEA allows you to quickly import an infinite amount of records from practically any source, including spreadsheet and database software, mid-range accounting programs, ERP systems, legacy mainframes, telecom switches, travel and expenses applications, flat and printed files such as PDFs, plain text (.txt), and print-report (.prn) files.
- *Simplified analysis.* Instead of programming macros, you can use over 100 audit-specific tasks that effortlessly look for duplicates, detect gaps in numeric sequences, group data by categories, and filter numerous rows and columns of information in seconds. IDEA allows you to record every analytic step and repeat for future use via a graphic drag-and-drop interface.

Network Forensics

Network forensics is a special area within digital forensics that focuses on evidence that passes through networks. As with all areas of digital forensics, network forensics involves collection, examination, analysis, and reporting. However, network forensics requires special tools, techniques, and skills for collection, examination, and analysis.

[19] http://www.isaca.org/Knowledge-Center/Pages/default.aspx

[20] www.acl.com

[21] www.caseware-idea.com

Given the prevalence of computer networks, almost any type of investigation can involve network forensics. One unique aspect of network forensics is that unlike traditional computer forensics, it often deals with data that may have a very short life as it is transmitted across a network. However, network forensics also deals with data after it has been transmitted across a network and kept on an electronic storage device.

A second characteristic of network forensics is that in many cases suspects may have technical skills and tools that are at least as good as those of the investigator. In many cases, fraudsters are some of the most technologically sophisticated people in the world. Those that don't attend hacker schools often join underground discussion boards and clandestine social networks that serve as developmental labs for all the latest nefarious network attack methods and scams.

Some examples of investigations that involve network forensics are as follows:

- *Intrusion detection.* **Network intrusion detection** can involve anything from a minor annoyance to a major disaster. Network intruders can steal company secrets, customer profiles (including credit card numbers), and cash from bank accounts; enter phony orders into a system; and so on. In some cases, intruders seek to inflict serious damage on the company through things like erasing or altering critical data files, defacing web pages, or even inserting malware that may possess the capability of doing things like destroying equipment critical to production operations. The Stuxnet virus is a good example. This computer virus attacked Iran's nuclear facilities and caused about 20 percent of the nuclear centrifuges to spin out of control and thereby self-destruct. The virus was originally inserted via removable storage devices, but then it spread through private networks.

  The main objectives in cases of intrusion detection are identifying the source of the intrusion, blocking the source from future access, and assessing the damage. Over the years, we have seen major intrusions resulting in network breaches that have sometimes lead to the loss of bank card information and user profiles. Examples among large companies included Target, Neiman Marcus, and Sony. The attack on Target resulted in the loss of millions of credit card numbers.
- *Denial of service attacks.* Such attacks normally bombard an organization's Internet server with very large numbers of simultaneous requests (that is, fake visitors). The resulting loads can overwhelm an Internet server and its network channels to the point that it crashes or can't keep up with the load. **Denial of service (DOS) attacks** are also made against the **distributed name servers (DNSs)** that serve as general directories on the Internet to direct traffic to websites and e-mail to the correct destination. Therefore, attacks against DNSs prevent traffic from even getting to the destination website. A primary form of DOS is the **distributed denial of service** (DDoS) **attack**. DDoS attacks typically originate as Trojans (or viruses), infecting large numbers of computers. The Trojan contains software that, upon remote orders from a command and control server controlled by the perpetrator, begins to flood the target Internet server with traffic. The infected computers are called *zombies*, and collectively, the entire network of zombies and command and control servers is called a *botnet*.
- *E-mail tracing.* Tracing e-mail involves finding the identity and location of an unknown sender of a particular e-mail message. The e-mail message may have been sent as part of a fraud or abuse scheme or as part of a spam campaign.
- *Data interception.* In some cases, evidence of interest is not stored in any location accessible to the investigator. For example, a suspect might use randomly selected public computers to send messages to someone in a foreign country that is not subject to subpoenas from the United States. In this case, the investigator's only option for learning the contents of the messages might be by intercepting them as they pass through the Internet.
- *Geo-location of Internet users.* In some cases, it is desirable to identify the location of someone who visits a particular website. The person of interest might have been involved in a crime or other undesirable activity. For example, a company might want to identify the identities and locations of network intruders.
- *Policy violations.* In some cases, it is necessary to investigate internal policy violations that involve Internet usage. Monitoring internal Internet traffic is one way to conduct such investigations.
- *Economic espionage.* Sometimes, a company employee may use company network resources to send secrets to competitors. In such cases, network forensics might be used to identify the source of the leaks.

IP Tracing

Network forensics specialists use IP addresses to trace Internet visitors, e-mail, and other Internet-based communications. **IP (Internet protocol) addresses** are unique addresses assigned to all devices connected to local or wide-area (Internet) networks. For Internet traffic, each website, computer, host, e-mail server, and so on has its own IP address. However, because IP addresses are complicated groups of numbers, Internet users instead use **fully-qualified domain names** (FQDNs) like www.google.com to address "places" on the Internet. (For convenience sake, the terms *FQDNs* and *domain names* are used interchangeably in the remainder of this chapter.)

The best way to explain IP addresses is to use telephone numbers and directories as an analogy. A phone directory associates a phone number with the name of the person. Similarly, an **Internet directory** (called a *domain name server* or DNS) associates an IP address with a domain name. Further, the same way a phone number is used to do a reverse lookup to find a person's name, it is also possible to do a reverse lookup of an IP address to find a domain name.

E-mail messages generally contain **header information** that is buried in e-mail messages but not normally visible to e-mail users. This header information contains the IP address associated with the sender. The forensic examiner can do a reverse lookup of this IP address to identify the sender. The reverse lookup will point to the owner of the IP address. In some cases, the owner might be an Internet service provider (ISP), company, or individual. If it's an ISP or company, a subpoena may be required to find out the individual subscriber to whom the IP is (or was, at the time) assigned. Some ISPs and companies have blocks of IPs that they dynamically assign to users. With dynamically-assigned IPs, the end user of the IP can change anytime the IP is reassigned. IPs that are not dynamically assigned are called *statics IPs*.

Many home and office networks share a single IP with more than one end user. This is normally done through network devices called *routers* and *switches*. These devices route traffic back and forth between a single Internet connection (an IP) and various end users. The shared IPs are called *local* or *internal IPs*. Routers and switches use a protocol called Dynamic Host Configuration Protocol (DHCP) to assign users local IPs. The main IP that gets shared through DHCP is called a *wide-area network* (WAN) IP. It is the WAN IP that is found in e-mail headers as shown in figure 11.4.

Figure 11.4
Example of an E-Mail Header With Originating IP (216.92.127.22, from Pair.com) Highlighted

```
Received: from rs119.luxsci.com ([172.16.28.158])
        by rs143.luxsci.com (8.14.4/8.13.8) with ESMTP id s217QvNf001683
        (version=TLSv1/SSLv3 cipher=DHE-RSA-AES256-SHA bits=256 verify=NOT)
        for <user-89686@rs143.luxsci.com>; Sat, 1 Mar 2014 02:26:57 -0500
Received: from rs119.luxsci.com (localhost.localdomain [127.0.0.1])
        by rs119.luxsci.com (8.14.4/8.13.8) with ESMTP id s217QuIs001823
        for <user-89686@rs143.luxsci.com>; Sat, 1 Mar 2014 02:26:56 -0500
Received: (from mail@localhost)
        by rs119.luxsci.com (8.14.4/8.13.8/Submit) id s217QuJO001822
        for user-89686@rs143.luxsci.com; Sat, 1 Mar 2014 02:26:56 -0500
Received: from rs119.luxsci.com (localhost.localdomain [127.0.0.1])
        by rs119.luxsci.com (8.14.4/8.13.8) with ESMTP id s217Qu3e001808
        for <noreply@fau-business.com>; Sat, 1 Mar 2014 02:26:56 -0500
Received: (from mail@localhost)
        by rs119.luxsci.com (8.14.4/8.13.8/Submit) id s217QunJ001807
        for noreply@fau-business.com; Sat, 1 Mar 2014 02:26:56 -0500
Return-Path: <2612p=stats=mastersoftaxation.com@bounce.se-news.com>
Received: from qs762.pair.com (qs762.pair.com [216.92.127.22])
        by rs119.luxsci.com (8.14.4/8.13.8) with ESMTP id s217QtSf001798
        for <noreply@mastersoftaxation.com>; Sat, 1 Mar 2014 02:26:56 -0500
Received: from qs762.pair.com (localhost [127.0.0.1])
        by qs762.pair.com (Postfix) with ESMTP id 1675B92F41
        for <noreply@mastersoftaxation.com>; Sat, 1 Mar 2014 02:26:55 -0500 (EST)
```

Tracing an e-mail message involves doing a reverse lookup of the WAN IP, but if that IP is shared, it is also necessary to discover the owner of the local IP. Further, if the local IP is not included in the e-mail message header, it can be obtained from log files or other records associated with the switch or the router that assigned it to an end user. Obtaining the end user that was assigned a local IP may require a subpoena.

Internet servers keep logs of all incoming traffic. The logs contain the date, time, IP address, and other information regarding incoming requests. Reverse lookups of IP addresses found in these log files can be used to trace any incoming Internet server traffic. Figure 11.5 shows an example of the information generated by a lookup of an IP address.

Figure 11.5
Location Lookup for Originating IP Identified in Figure 11.4

Geo-Location Information

Country	United States
State/Region	PA
City	Pittsburgh
Latitude	40.4531
Longitude	-79.9294
Area Code	412

Geo-Location Map

Whois:

The IP address 216.92.127.22 appears to have been assigned by the American Registry for Internet Numbers (ARIN). ARIN is the Regional Internet Registry (RIR) for the United States, Canada, and several islands in the Caribbean Sea and North Atlantic Ocean.

For details, see the additional information about IP address 216.92.127.22 at ARIN.

LIMITATIONS OF IP TRACING

Sophisticated fraudsters use **proxy servers** and **virtual private networks** (VPNs) to hide their IP addresses. Both proxy servers and VPNs essentially work the same way: They route traffic through a third party in such a way that the third party's IP address, rather than the fraudster's IP address, appears in all Internet communications. Therefore, the proxy server or the VPN server relays traffic back and forth between the fraudster and the person or service with which the fraudster communicates.

Proxy servers are used to relay traffic for individual applications, such as Internet browsers and e-mail and chat clients. For example, to "proxify" an Internet browser, one enters the IP address of the proxy server into the browser's configuration settings and also possibly enters a user id and password. So, it's possible to proxify only the Internet browser and no other communications software (such as e-mail clients) on the same computer.

VPNs differ from proxy servers in that they are designed to relay all Internet traffic on a given computer instead of relaying traffic for only one application at a time. In other words, VPNs, in effect, proxify the user's entire Internet connection instead of only proxifying a single application at a time. VPNs typically require that a VPN client application be installed on the user's computer. The client then enters a user id and password to access the remote VPN server.

Proxy servers and VPNs also don't guarantee that the end user's IP address will remain hidden. Proxy servers and VPN servers can maintain log files that contain the end user's IP address. However, some proxy and VPN servers deliberately do not maintain logs in order to protect the identity of their users.

Fraudsters may use proxy and VPN servers in countries that are not subject to subpoenas from the United States. Further, it's a common trick for fraudster to use "proxy chains." A *proxy chain* exists when a user connects through a proxy server, which, in turn, connects through a second proxy server, which, in turn, connects through a third proxy server, and so on. In many cases, the proxy servers in the chain will be spread all over the globe and not maintain log files, making IP tracing practically impossible.

Commercial proxy servers and VPNs are very common. But there are also many public VPNs and proxy servers, especially proxy servers, and even Internet-browser plugins and other software designed to make them easy to use. For example, there are Tor clients designed to randomly route traffic through a free worldwide network over 1,000 volunteer-run proxy servers in the Tor network. Both Tor and VPN servers use encryption designed to defeat eavesdropping. Tor security is boosted by the network's use of hidden servers, which are configured to only accept inbound connections from Tor servers, thus, making them generally invisible to normal Internet traffic. Edward Snowden, the infamous National Security Agency leaker, used the Tor network to send government secrets to a newspaper.

Various groups of fraudsters and terrorists like to use the Tor network for not only e-mail but also live private chat sessions, voice over Internet Protocol (VOIP) phone calls, video conferences, and instant or text messages. Proxy servers, VPNs, and the Tor network can all be accessed via desktop computer and portable devices.

IP Spoofing

IP spoofing involves sending a fake IP address with an Internet message or request to view content from an Internet server. IP spoofing is possible with one-way communications. It's obviously not possible to respond to a sender whose address is a fake.

Traffic Monitoring

In some cases, with proper legal authority, it's possible to use hardware devices called packet sniffers to "wiretap" Internet communications. However, very often, these days the content will be encrypted. In some cases, the IP address may be visible even when the content is encrypted. One way to track encrypted traffic that flows through proxy chains is end-point monitoring. If one suspects that user A is communicating with user B through a proxy chain, then one can monitor the traffic sent by either user and compare it to the traffic received by the other. Even if the content of the traffic is unknown because it is encrypted, the comparison of data sent to data received can prove that user A and user B are communicating.

Network Forensics Software

IP Look-Up Services

The distribution of IPs is done by an Internet registry. The **American Registry for Internet Numbers** (ARIN) manages the distribution of IPs for the United States, Canada, and many Caribbean and North Atlantic islands. ARIN makes reverse IP lookups available through its **Whois services**.[22] ARIN's Whowas service provides reverse lookups based on historical registration information.

[22] whois.arin.net

Many domain registrars provide Whois look-up services for domain names (for example, www.networksolutions.com/whois). These services will give the owner information of a given domain name. Looking up related DNS records will also give the IP addresses of related websites and e-mail servers.

E-MAIL TRACING

Many e-mail clients, including Microsoft Outlook, and webmail services contain advanced menus that permit the user to display the internal e-mail headers. The headers look fairly complicated to the causal user, but they simply contain a log of the servers (and related IP addresses) that handled the message. There are also usually some extra lines in the headers with information about the mail servers themselves and possibly spam indicators.

Although, technically speaking, special software isn't needed to examine e-mail headers and identify their source, special software is available that does the job for the examiner. One example is Visualware's eMailTrackerPro®.[23] This software analyzes every server that an e-mail message passes through, in addition to pinpointing its origin.

LOG ANALYZERS

Various software products are available to analyze log files, such as those kept by Internet and e-mail servers. Although, technically speaking, special software isn't needed to analyze Internet server logs, its use makes the job much easier because of the sheer volume of data they normally contain.

Web log analyzers cannot only sometimes do reverse lookups, they can also identify every Web page viewed by a given visitor and also identify the user's Internet browser, type of device, operating system, time spent viewing each page, and so on. Of course, sophisticated users may block this information from being sent from the Internet browser to the Internet server.

Two types of web log analyzers exist: There are those that are installed on the same machine as the Internet server. These are accessed via an Internet browser. AwStats[24] is open source (and, hence, free) and is found on many Linux-based Apache servers. Apache is probably the most commonly encountered server on the Internet, although large e-commerce sites often use more advanced products.

The second option among Web analyzers is software that downloads web logs to a separate computer. Such software is typically more powerful and flexible than what's found installed on machines alongside Internet servers. Sawmill®[25] is a good example. Sawmill is capable of sending customized, event-triggered reports, which can be used for fraud detection.

CONDUCTING COMPUTER FORENSICS INVESTIGATIONS

A computer forensics examination may begin as part of a larger investigation; so, it is assumed that such an investigation is already underway and that proper legal authority exists. Given this as a starting point, the computer forensics part of the investigation follows a series of steps that include sizing up the situation; securing, examining, and analyzing the evidence and reporting the results of the examination. Each step is discussed individually.

SIZING UP THE SITUATION

The examiner should consider various factors before proceeding. These include the nature of the investigation, the fraud theory, whether the fraud is ongoing, possible sources of evidence, the sophistication of the suspect, software and hardware that may be involved, the structure of the local area network, the impact of the investigation on operations, and security policies and procedures that may affect the examination.

- *The nature of the investigation and the fraud theory.* The examiner needs to know from the onset what the investigation is about. This knowledge prepares the examiner to acquire relevant evidence. Given a theory of the

[23] www.emailtrackerpro.com
[24] awstats.sourceforge.net
[25] www.sawmill.net

fraud and an identified suspect or suspects, the investigator should develop a preliminary plan regarding the devices to be examined and any impact on operations caused by the examination. For example, implementing a plan that calls for seizing several key computers could possibly interrupt operations.

- *Size up the situation.* If the fraud is ongoing, the investigator might consider using surveillance to obtain strong evidence of the suspect's guilt, but the benefits of permitting the fraud to continue will be weighed against the cost of ongoing fraud losses.
- *Sophistication of the suspect.* Sophisticated suspects often use counter-forensic measures, such as encryption, proxy servers, VPNs, and even self-destruct measures. The examiner should consider such possibilities as part of the examination plan. For example, if it is believed that the suspect's computer is fully encrypted, the examiner would want to obtain access to the computer when it is turned on, not in an encrypted state, and with no password request on the screen.
- *Software and hardware involved.* The examiner should gain an understanding of the exact software and hardware that may be involved. For example, within a client server environment, important evidence might exist on a network storage device. Other possibilities for evidence can include e-mail servers, Internet servers, individual computers, PDAs, and even fax machines. Particular effort will be given to identify hardware that may contain evidence in the case.

  The particular software in use is also important. For example, if critical evidence is stored in a large accounting database on a network storage device, the examiner may need access to the accounting system to create a snapshot. By design, database systems do not normally store their data in individual files that can simply be copied. Instead, special database utilities must be used to extract data and create backups or snapshots.
- *The structure of the network.* The structure of the organization's network is related to what data is stored where, how it is stored, who has access to it, and how it is accessed. For example, the organization's network might include an extranet portal through which suppliers connect to submit invoices.
- *Applicable security policies and procedures.* In an electronic environment, security policies and procedures generally focus on access controls. The particular type of access controls in place can affect the scope of the evidence to be gathered. For example, a hardware firewall device may limit network access to a particular computer of interest. This may suggest eliminating computers outside the firewall from consideration.

Securing Evidence

Secure the Site

Upon initiating the forensic examination, the examiner should consider immediately securing all relevant evidence. The exact steps required depend on the particular case. Generally speaking, the examiner needs to make sure that no evidence is altered, removed, contaminated, or destroyed. This especially means denying suspects access to possible evidence.

Document the Site

The examiner should document relevant aspects of the site. The documentation may include network diagrams, hardware (including serial numbers) and software inventories, control policies and procedures, and user functions and access privileges. The documentation may include relevant photos.

Collect Evidence

Various issues pertain to collecting evidence:

- *Static acquisition.* In many cases, the investigator will seize all devices relevant to the case. This approach is sometimes referred to as *static acquisition*. It involves seizing devices and taking them to the forensic laboratory for examination. However, seizing devices isn't always possible, such as in cases in which the devices are critical to operations and in cases of large network storage devices.

  One issue with static acquisition is whether to immediately pull the plug on computers before seizing them. Pulling the plug results in the contents of RAM being lost but best preserves the contents of hard drives

and solid state drives. However, RAM may contain important encryption keys and passwords, so their possible importance should be considered. But if the contents of RAM aren't considered to be critical, the best approach is to simply pull the plug without performing any kind of activity on the target computer.

- *Live acquisition.* When seizing devices is not practical, the investigator may perform a live acquisition. This means acquiring data from a device while it is operational. The disadvantage of this approach is that live operating systems protect many files from being accessed. Further, the mere act of accessing a live computer can result in files being altered and data being lost.

  Live acquisitions can sometimes be performed over a network connection. However, they tend to work best when special software is pre-installed on the target computer to facilitate doing things like dumping the contents of RAM and making copies of files protected by the operating system.

Various commercial software applications exist that can be pre-installed on computers with sufficient legal authority. Such software can surreptitiously record all keystrokes, mouse clicks, text messages, phone calls, websites visited, Internet searches, e-mail sent and received, chat application dialogs, and so on. One example of such software is WebWatcher,[26] which is popular in the law enforcement community and installs on computers and mobile devices and runs undetected in the background. The software sends all captured data to a central server where an investigator can log in via an Internet browser and monitor all activity on the suspect's computer. WebWatcher is so undetectable that it "does not appear in the Registry, the Process List, the System Tray, the Task Manager, on the Desktop, or in Add/Remove programs. There aren't even associated with it any visible files on the computer."

Live Database Acquisition. Many ERP, accounting, and customer relations management systems keep their data in a database. As mentioned previously, database systems are such that they don't store data in normal files. However, they frequently contain features for backing up individual records, groups of records, or the entire database. Virtually all accounting and database systems permit data to be exported to ordinary files. Given that most databases are relational, they store data in tables (with rows and columns like spreadsheets have). The normal procedure is to export tables to individual files. For example, a typical table might be a sales register.

Most good accounting systems store their data in encrypted format and maintain detailed access and change logs. The change logs can serve as documentation to demonstrate that the examiner has made no changes to any of the data in the system, thus, maintaining chain of custody.

Chain of Custody

All devices seized should be carefully inventoried and placed in sealed evidence bags. They should remain under lock and key in a secure storage area until they are transported to the forensic lab for examination. Logs that include serial numbers of devices seized should be carefully maintained.

Multiple Copies of Digital Data

Consideration should be made to acquiring all copies of evidential data. For example, copies of e-mail messages might be found on individual computers, on the organization's mail server, in back-up files, and even in mobile devices and sometimes on paper.

Examining the Evidence

Various issues pertain to examining the evidence:

- *Image copies.* The standard procedure for examining statically-acquired storage devices begins with the examiner making an image (also known as a *bit-stream*) copy of the original storage device. To ensure that the copying process does not makes changes to data on the original device, the examiner inserts a write blocker in line with the cable that connects the original to the copy. Making two copies is a good practice. When making copies, the examiner computes a hash total for both the original and copy to verify that they are exact matches. The original should be stored in a secure evidence locker.

[26] www.webwatcher.com

- *Protected files.* Most operating systems tend to protect their own systems-level files from being viewed or accessed. For example, in Windows, the registry information is mainly stored in five files: SAM , SECURTY, SYSTEM, SOFTWARE, and NTUSER.DAT. The individual user registry is created from data in these files when the user logs on to windows. However, Windows protects these files from user access. This is true even when these files are mounted on an external (rather than boot) drive. However, these files can be accessed if the drive is mounted on a computer running the Linux operating system. So, as a general rule, access to protected files can be gained when the drive is mounted on a non-native operating system.
- *RAID devices.* **RAID** (short for *redundant array of independent disks*) is a storage-device protocol that typically marries together multiple drives to act as one drive. RAID arrays can be used for fault tolerance or to obtain increased speed. When they are used for fault tolerance, one or two drives in the array (depending on the particular RAID protocol or "level" being used) can fail without the array losing any data. In fact, many RAID arrays contain hot-swappable drives that permit replacing a failed drive without even shutting down the array or any attached computers.

With fault-tolerant RAID arrays, it is possible to separately create an image of each drive in the array. Then, using the same model of RAID hardware controller, it is possible to rebuild the array from copies. The exact procedure will depend on the particular RAID configuration.

Analyzing the Evidence

Given a fraud theory, the examiner can use the software tools discussed previously to obtain, analyze, and organize evidence. The exact process depends on the particular case, but all visible, hidden, and deleted data is included.

Reporting

After concluding the examination, the examiner writes a report. This report might become part of a larger report that covers an investigation that includes, in part, digital forensics.

Law Enforcement Databases

Strictly using law enforcement databases is only tangentially related to digital forensics. However, the computer forensics specialist may be skilled in accessing such databases, so some of the more prominent ones are briefly mentioned here.

- *IAFIS (Integrated Automated Fingerprint System).* IAFIS is the FBI's fingerprint system. It contains the fingerprints of over 70 million subjects in its criminal master file. The system can scan for matches of a suspect's prints.
- *FINCEN (Financial Crimes Enforcement Network).* FINCEN data is obtained from over 27,000 financial institutions. The data is especially important for identifying individuals involved in terrorist financing or money laundering.
- *NLETS (National Law Enforcement Telecommunications Systems).* According to NLETS's website, NLETS is

> … a private not for profit corporation owned by the States that was created over 45 years ago by the 50 state law enforcement agencies. The user population is made up of all of the United States and its territories, all Federal agencies with a justice component, selected international agencies, and a variety of strategic partners that serve the law enforcement community-cooperatively exchanging data.
>
> The types of data being exchanged varies from motor vehicle and drivers' data, to Canadian and Interpol database located in Lyon France, to state criminal history records and driver license and corrections images. Operations consist of nearly 1.5 billion transactions a year to over 1 million PC, mobile and handheld devices in the U.S. and Canada at 45,000 user agencies and to 1.3 million individual users.[27]

[27] www.nlets.org/about/who-we-are

- *NCIC (National Crime Information Center).* NCIC is an FBI searchable index of criminal record history information that includes fugitives, known criminals, stolen properties, missing persons, persons deemed a threat to the president, gang members, members of organized crime groups, and members of terrorist groups.

Individual states also have their own systems. For example, Illinois has the LEADS system:

> **LEADS (Illinois Law Enforcement Agencies Data System).** LEADS is maintained by the Illinois State Police. The LEADS system contains many files that include gang members, missing persons, fugitives, license plates, and so on. It also includes access to NCIC and NLETS.

Summary

Digital forensics uses computer science investigation and analysis techniques to discover and preserve evidence in computers and networks. Computer forensics assists in achieving the following objectives: identifying perpetrators or other individuals of interest; locating and recovering data, files, and e-mail; reconstructing damaged databases and files; and identifying causes of disasters.

Digital forensics can be divided into various areas that include computer and network forensics. Computer forensics focuses on obtaining evidence from computers. Network forensics focuses on obtaining evidence from computer and storage networks.

In cases involving law enforcement, concern must be given to the Fourth Amendment rights of those under investigation. As a general rule, and subject to the usual exceptions, the Fourth Amendment states that law enforcement officials must obtain a search warrant to seize evidence. Given that new technologies constantly arise, the issue of a reasonable expectation of privacy can become muddled.

Computer and digital forensics are similar to traditional crime scene forensics. As with physical evidence found at crime scenes, digital evidence should also be collected, processed, and sent to a lab for interpretation. In the case of a forensic accounting investigation, a computer forensic specialist serves as the CSI and the forensic accountant as the investigator.

Computers, storage devices, and data removed from crime (or other) scenes are delivered to a digital forensics lab for analysis. The specifications of the lab will depend on the number of cases it handles. However, in all cases, the lab should meet certain requirements that include secure evidence lockers, secure access to the lab, secure trash processing, special equipment, appropriate supplies, special software, adequate workspace, business continuity and disaster recovery management, and appropriate logs.

Computer forensic technicians and scientists need to have the knowledge and skills to collect evidence from many different types of computers, storage devices, networks, and operating systems. Forensic accountants and computer scientists also need the additional skills to analyze and interpret the collected digital evidence. Of course, forensic accountants should also possess skills in areas such as analyzing and interpreting paper records, accounting data, and interviewing. Various organizations train and certify computer forensics specialists. Some examples of certifications include the IACIS Certified Forensic Computer Examiner and the AccessData Certified Examiner.

Given the proliferation of digital technologies, public accounting firms, consulting firms, and detective firms maintain their own digital forensics experts. The work in the private sector is very much the same as in the public sector. Work in both sectors requires acquiring, interpreting, and reporting on digital evidence. The two sectors differ mostly in their respective legal environments. In private sector investigations, consent and subpoenas are necessary for access to evidence, whereas in law enforcement investigations, search warrants are an additional way to access evidence.

Forensic auditing requires skills very similar to those required for traditional financial statement auditing but are somewhat more intensive. The following are examples of how forensic auditing (or investigative) procedures differ from traditional procedures: documentation versus public document searches; inquiry versus interviewing; confirmation versus alternative sources; physical examination versus laboratory analysis of physical evidence; reperformance versus analyzing electronic evidence; observation versus surveillance; and generally accepted audit standards analytical procedures versus nontraditional analyses.

Digital forensics examiners routinely use special computer forensics software and specialized software platforms to conduct their work. Such software facilitates acquiring evidence from computers, storage devices, and networks. General features of such software include things such as the ability to crack passwords, extract data from RAM, and recover data from slack space and unallocated storage. Specialized software platforms, sometimes referred to as CAATs or *computer-assisted audit techniques*, are designed to assist in audits.

Network forensics requires special tools, techniques, and skills for collection, examination, and analysis. Some examples of investigations that involve network forensics include those relating to intrusion detection, denial of service attacks, e-mail tracing, data interception, geo-location of web users, policy violations, and economic espionage.

Sometimes, a computer forensics examination may begin as part of a larger investigation. Given this as a starting point, the computer forensics part of the investigation follows a series of steps that include sizing up the situation; securing, examining, and analyzing the evidence; and reporting the results of the examination.

Given a fraud theory, the examiner can use the software tools discussed previously to obtain, analyze, and organize evidence. The exact process depends on the particular case, but all visible, hidden, and deleted data is included.

After concluding the examination, the examiner writes a report. This report might become part of a larger report that covers an investigation that includes, in part, digital forensics.

Review Questions

1. Which of the following is not an objective of computer forensics?
   a. Identifying perpetrators or other individuals of interest.
   b. Locating and recovering data, files, and e-mail.
   c. Determining guilt in computer crimes.
   d. All of the above are objectives of computer forensics.

2. With respect to computer forensic investigations and including opinions and conclusions in the practitioner's report, the practitioner _____.
   a. Should carefully detail all opinions and conclusions.
   b. Should carefully detail only conclusions.
   c. Should not detail opinions and conclusions.
   d. Should only detail those opinions and conclusions that are clearly consistent with the evidence gathered by the practitioner.

3. In a computer forensics investigation, chain of custody is the responsibility of _____.
   a. The practitioner.
   b. The attorney.
   c. Employees of the client whose interest the practitioner serves.
   d. None of the above.

4. The first action with respect to a computer device is _____.
   a. Clone the storage device (for example, the hard drive).
   b. Power it down.
   c. Perform an online lookup of its security features.
   d. None of the above.

5. Encrypted data on a hard drive _____.
   a. Can always be decrypted by using a commercial-grade forensic tool kit.
   b. May be permanently out of reach for the practitioner.
   c. May be unlocked by contacting the vendor of the encrypting software.
   d. None of the above.

6. Once the power is off, the computer disk or storage device should be _____.
   a. Removed from the computer and then cloned.
   b. Kept in the computer and cloned.
   c. Cloned and then removed from the computer.
   d. None of the above.

7. When working with a cloned copy of a hard drive, the practitioner should _____.
   a. Not boot the cloned copy because booting it can cause changes to its data.
   b. Boot the cloned copy.
   c. Not transport the cloned copy without securing its chain of custody.
   d. None of the above.

8. Mounting a device on a computer running a foreign operating system has the advantage of permitting access to many operating system files that may contain cached or paged data that would normally be _____ when mounted under their native operating system.
   a. Garbled.
   b. Unacceptable evidence.
   c. Inaccessible.
   d. None of the above.

9. Once files are deleted from the trash bin, they are _____.
   a. Not recoverable.
   b. Likely recoverable shortly after their being deleted from the trash bin.
   c. Recoverable under most circumstances without special computer forensics tools.
   d. Recoverable under most circumstances with special computer forensics tools.

10. Deleted files may be made unrecoverable by overwriting them with data by antiforensic programs that are used to securely wipe files and storage devices. Such programs can securely wipe files by overwriting free storage space _____ with zeroes and ones.
   a. Once.
   b. Two times.
   c. Three times.
   d. Many times.

11. A common issue for the practitioner is locating the origin of an individual or device that has communicated in some way over the Internet. This is normally accomplished by identifying the location of the Internet protocol (IP) address that is hidden inside each _____ on the Internet.
   a. Web page.
   b. E-mail message sent.
   c. Web page and e-mail message.
   d. None of the above.

12. When the target is a sophisticated user, IP tracing _____.
   a. Is a sure fire way to trace the person's Internet communications.
   b. Is a possible way to trace the person's Internet communications.
   c. Is not applicable to tracing communications over the Internet.
   d. None of the above are correct statements.

13. A VPN may be used to hide a person's _____.
   a. IP address.
   b. Web address.
   c. E-mail address.
   d. None of the above.

14. Network forensics is _____.
   a. An area within digital forensics.
   b. An area within computer forensics.
   c. An area outside of both digital forensics and computer forensics.
   d. None of the above.

15. In large law enforcement agencies, the computer forensic examiner is the person who _____
   a. Works hands-on with computer devices and networks to collect digital evidence.
   b. Organizes and interprets digital evidence, provides reports for attorneys, and testifies in court.
   c. Supervises the entire investigation.
   d. None of the above.

16. The U.S. National Institute of Standards and Technology *Special Publication 800-86* defines _____ phases for the forensic process.
   a. Two.
   b. Three.
   c. Four.
   d. None of the above.

17. Fraud auditors are concerned with _____
    a. Inquiry instead of interviewing.
    b. Confirmation instead of alternative sources.
    c. Observation versus surveillance.
    d. None of the above.

18. Computers store files in disk clusters but generally don't put two files in the same cluster. This leads to _____.
    a. Unallocated space.
    b. Free space.
    c. Slack space.
    d. None of the above.

19. Putting together pieces of deleted files is called _____.
    a. Registry filtering.
    b. Registry extraction.
    c. Registry assembly.
    d. None of the above.

20. Wear leveling applies to _____.
    a. Hard drives.
    b. Solid state drives.
    c. Both hard drives and solid state drives.
    d. Neither hard drives nor solid state drives.

21. Fraud auditors are likely to use _____.
    a. CATS.
    b. CAATs.
    c. CASTS.
    d. None of the above.

22. Denial of service attacks may be against _____.
    a. Individual websites.
    b. Domain name servers.
    c. Either a or b.
    d. None of the above.

23. The computer forensics examiner may remove an entire computer from a crime scene and take it to a forensics lab. This approach involves _____.
    a. Live acquisition.
    b. Static acquisition.
    c. Network acquisition.
    d. None of the above.

24. IAFIS is an FBI system for looking up _____.
    a. DNA.
    b. Handwriting.
    c. Fingerprints.
    d. All of the above.

25. FINCEN is useful in _____ investigations.
    a. Terrorist.
    b. Money laundering.
    c. Both terrorist and money laundering.
    d. None of the above.

Short Answer Questions

1. What is the relationship between digital forensics and computer forensics?
2. What possible Fourth Amendment issue may arise in a digital search and seizure action?
3. What does a CSI and a computer forensics examiner have in common?
4. Name three important requirements for a digital forensics lab.
5. What are basic digital forensics skills?
6. What are some special skills of fraud auditors?
7. What is slack space?
8. Why are bit-stream copies used?
9. Why is IP tracing limited?
10. What special issues exist with acquiring data from RAID drives?

Brief Cases

1. You have been asked to assist a detective with writing a probable cause affidavit in support of a request for a search warrant. The target of the investigation is a bookkeeper in a small business. You suspect embezzlement. What items might you list for search and seizure?
2. A junior associate in your firm has asked you what she must do to become a digital forensics expert. How do you respond?
3. You are a forensic accountant in a small practice. You have seized a computer for further examination. Where can you take the computer if you don't have a forensics lab?
4. You are examining a computer and looking for files that might have been deleted. How do you proceed?
5. You have received an incriminating word processer document via e-mail. You are unsuccessful in using IP tracing to identify the source of the message. What else might you do?
6. You investigate an office computer for evidence of participation in a misappropriation fraud. You find several spreadsheet files that you suspect may contain incriminating information. But the files are password protected and you can't open them. What do you do?
7. You remove a hard drive from a computer and take it back to your office lab for examination, but the entire hard drive is fully encrypted. What are your options?
8. You are hired to investigate suspected financial statement fraud in a company that is in bankruptcy. What types of skills will you need to conduct your investigation?
9. Someone is sending a series of threatening e-mail messages to employees in your company. How do you investigate?
10. You visit a company to investigate a fraud involving the company's computer network. The data you want to examine are on an enormous RAID server. The storage capacity of the server far exceeds what you can "image." How do you proceed?

Cases

1. You are visiting a company office to investigate an employee suspected of selling company secrets. You enter the employee's office, along with the controller, attorney, and a company security guard. The attorney tells the employee that this is a surprise audit and orders the employee to immediately leave his office without touching anything. However, instead of immediately leaving the employee starts pressing buttons on his computer, causing a password screen to pop up.

   After the employee is out of the room, you photograph the room, the computer screen, and record the make, model, and serial number of the computer. But going forward, you aren't sure what you are going to do. You suspect that the employee has fully encrypted everything on the computer. This means that if you remove the storage unit and take it back to your lab for imaging, you won't be able to read anything on the storage unit because it will be completely encrypted.

   Required

   How should you proceed with your investigation?

2. You have been called to help investigate a problem with someone in the WeTimesNews newspaper company who is sending e-mail messages to employees. The messages have spread false stories indicating that WeTimesNews is on the verge of going out of business. Carbon copies of the messages have gone to all employees. Some of the messages have encouraged employees to look for jobs elsewhere. But the most recent message was even more damaging: It went to some of the newspaper's best clients, saying that the circulation numbers for WeTimesNews were false.

   Barbara Notis, the CEO, tells you that she is sure that the messages are coming from an insider because the messages show intimate knowledge of WeTimesNews operations. It's being sent from an e-mail address, thetruth@gxxyyzz.com.

   Barbar's IT manager checked the domain registration for gxxyyzz.com and found that it is registered through a service that holds proxy control of domains. Consequently, a court order would be required to find out the real owner of gxxyyzz.com.

   The attorney for WeTimesNews indicated that it would be possible to file a "John Doe" lawsuit and then use a subpoena to find the real owner of gxxyyzz.com. However, going that route would take time and, in the end, could easily produce nothing. Merely finding the owner of gxxyyzz.com wouldn't guarantee that it would also be possible to find out the owner of the e-mail address, thetruth@gxxyyzz.com. For example, the domain gxxyyzz.com could belong to an e-mail service in a distant country, and the service could easily refuse to turn over the name of the owner of the e-mail address in question. Further, even if the service did turn over the name of the owner of the e-mail address, the name could very easily be a fake name.

   The most recent thing to happen is that Barbara received a private e-mail message from the perpetrator. It offered to stop the malicious e-mail campaign if she would send a "mere" $10,000 in Bitcoins.

   You contacted the police, but they refused to help, indicating that the case was too small for them to take on.

   Required

   Devise a plan to catch the person sending the problem e-mail messages.

3. Matt Woods, the CFO of the New Green Car Company has contacted you for help with catching Brad Witts, the company's financial manager. Matt strongly suspects that Brad is somehow siphoning off company funds, but Matt has absolutely no theory Brad is stealing.

   Matt indicates that Brad is always working in his office alone, preparing reports, paying bills, taking care of payroll, and so on. He works six days a week and has not taken a single vacation in the previous five years. He gets very touchy when asked any questions about his work. So, being suspicious, Matt asks Mary West, the company controller, to log in to the accounting system and review all of Brad's work for the last several weeks.

However, she reports she cannot see anything unusual.

New Green's accounting system is somewhat distributed. Parts of it are on a company-wide server, and other parts of it are on individual office computers.

Required

You have been called in as a consultant to investigate Matt's suspicion that Brad Witts is engaged in some type of misappropriation scheme. Develop an initial investigation plan that includes the use of digital forensics.

4. Luis Carrillo is the CEO for Drip Not, a regional plumbing supply company. The company conducts a lot of business through its website. Local contractors visit the site and enter orders for supplies and materials to be delivered directly to job sites. In recent weeks, a hacker has broken into Drip Not's website several times and replaced the home page with nonsensical graffiti. Luis knows almost nothing about technology. He only knows that his web hosting company says that it is not responsible for security.

   Drip Not did have a web programmer working for the company, but she left a couple of months before. Further, Luis has heard rumors that a competitor is doing the hacking.

   Required

   Luis has contacted you to conduct an investigation. Develop a preliminary investigation plan.

5. Harry Blends is in charge of engineering for West Consultants, a large Midwest engineering consulting company that does laboratory testing for construction products such as windows and doors and truss systems. Harry is convinced that someone inside the company is stealing valuable product data that belongs to the clients of West Consultants. Several clients have complained that secret details about their ongoing projects have been leaked to their competitors, and they believe that the leaks originated from inside West.

   West Consultants' offices occupy an entire floor of the Carwell Office Complex (COC) in downtown Birmingham. All work is done on individual work stations, with only the company e-mail being centralized. Within West's rented space in the COC are five offices with engineers, three offices with support staff, and three offices devoted to senior management.

   Required

   You have been engaged to investigate the leaks. Develop a preliminary plan for your investigation.

Internet Research Assignments

1. Find the FBI's website and research the requirements for employment as a member of an FBI CART or an RCFL.
2. Search the Internet and find the most interesting case that involves computer forensics.
3. Visit all the individual RCFL sites and write a brief report on the types of cases on which the RCFL's focus. The RCFL directory is located at www.rcfl.gov.
4. Research the Internet and find an accounting firm that offers digital forensics services. Write a brief report on what you find.
5. Research the Internet and write a brief report on how computer forensics have helped with anti-terrorism efforts.

Chapter 12
Matrimonial Forensics

Learning Objectives

- Describe the role of the forensic accountant in matrimonial proceedings
- Discuss matters to be considered prior to engagement acceptance
- Describe the divorce process
- Describe the process of discovery in the context of a matrimonial engagement
- Understand the general issues of marital and non-marital property and its distribution
- Have a general understanding of the impact tax has on the distribution of property
- Determine the types of documents needed to identify assets, liabilities, income, and expense
- Understand the general issues of valuation as they pertain to matrimonial engagements
- Understand the determinants of alimony and child support
- Discuss ways by which fraud can occur in a matrimonial setting and how innocent spouses can be protected

Introduction

Matrimonial forensics is a specialized area of litigation services. It deserves special attention for two reasons:

- Spouses may be motivated to deprive one another of assets due to a deterioration of the relationship.
- Marriage is a relationship recognized by law and conveys certain benefits that don't exist in other types of relationships.

In this chapter, we will explore the role of the forensic accountant in matrimonial (divorce) proceedings, the process that occurs in divorce actions, general definitions of marital property, what constitutes alimony and support, the tax aspects of property divisions, and methods that spouses have used to conceal assets.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

The Role of the Forensic Accountant

Practitioners of forensic accountaning have various roles and responsibilities in matrimonial proceedings. In all of these roles, practitioners must maintain objectivity. Remaining objective is not only in the best interest of the client and the court, but it also protects the practitioner's credibility and reputation. The attorney is an advocate for the client; however, the practitioner is not. Instead, they provide their objective opinions based on conscientious discovery and examination of the evidence.

The pracitioner assists the attorney by providing services related to the identification of evidence needed and analysis of that evidence (see box 12.1). When providing these services, he or she may, for example, analyze documents, records, and statements obtained by the attorney through interrogatories and depositions and prepare trial exhibits.

Box 12.1 Illustrative Services Practitioners May Provide During Matrimonial Proceedings

- The identification of assets, liabilities, and family income
- The determination of the nature or character of assets and liabilities
- The valuation or quantification, or both, of assets, liabilities, and income
- The division or distribution, or both, of assets, liabilities, and income

The practitioner may also act as a consultant to the attorney. In this capacity, the practitioner provides advice on the facts and issues of the case, strategic options that are available, the value of assets and liabilities, and offers advice on pensions, tax, market analysis, and statistics. The advice the practitioner gives can include an evaluation of the strengths and weaknesses of the financial aspects of the case and financial theories relevant to the case. As a consultant, the forensic accountant's work product (for example, personal knowledge, reports, working papers, exhibits, and notes) may be protected by the attorney work-product privilege. If the practitioner's role changes to that of an expert witness, the same work product (including knowledge gained during the consulting engagement) may be subject to discovery. The court determines whether an item is discoverable.

The functions a forensic accountant can perform in divorce engagements are varied and include services such as valuing assets, such as businesses; tracing assets to determine whether they should be included in the marital estate; searching for hidden assets; helping determine an equitable distribution of assets and liabilities, including potential tax effects of contemplated transactions and distributions; determining income of the spouses and the lifestyle or the financial standard of living during the marriage; and assisting the court by helping it understand financial matters involved in the divorce.

Whether the practitioner plays one or more of these roles depends on the wishes of the court or the agreement between the practitioner and the attorney or client. Although practitioners rarely perform all the duties they are capable of performing in a divorce action, they often draft engagement letters that are general and nonspecific about the duties they expect to perform.

The practitioner may also be engaged to testify as an expert witness at trial or in depositions to help the court understand the issues before it. The testimony is usually confined to the practitioner's work product, opinions, and conclusions. If engaged to testify as an expert witness, many of the duties performed are similar to those performed by a consultant.

The court will determine whether a practitioner is allowed to testify as an expert witness based on his or her education, training, certifications, and relevant experience with respect to the subject matter before the court. The practitioner's qualifications are verified by direct examination by an attorney and, after direct examination, by the opposing attorney. The court's primary concern is whether the practitioner has achieved at least an acceptable level of knowledge, understanding, and skill pertaining to the subject about which the expert is testifying. Often, opposing counsel will request that the practitioner be qualified before a jury (if one is used) hears the case; this prevents jurors from hearing the expert's credentials and, thus, from being so impressed by credentials that the jury relies more on the expert's past accomplishments than on present testimony. See chapter 3, "Civil and Criminal Procedures," for more information on the role of the practitioner in court, including issues such as direct examination and cross examination.

A practitioner can also be involved in marital disputes in which the parties desire to avoid a formal litigation proceeding and wish to resolve their disputes by other means, such as arbitration, settlement facilitation, and

mediation. These approaches are often referred to as *alternative dispute resolutions* (ADR) and are a part of an area of law known as **collaborative law**. When the parties avail themselves of ADRs, the practitioner can serve in a neutral capacity or can represent one spouse.

Arbitration is less formal than litigation. As an arbitrator, the practitioner may consider testimony, exhibits, and arguments from both sides and then make a decision. Instead of serving in this neutral manner, the practitioner may act as an expert or consultant to either party. Although most arbitration is binding, it can be nonbinding. If it is binding, the decision is final, and further litigation is prohibited. On the other hand, nonbinding arbitration allows the parties to seek a more favorable judgment by appealing the arbitrator's decision. One reason to use binding arbitration is that it usually preserves the parties' privacy. For example, a divorce action may include issues such as extramarital affairs; if this information became public, it might harm one or more of the party's reputation.

Mediation is the most informal method of ADR. A qualified individual, such as a CPA, attorney, psychologist, or psychiatrist is engaged to act as a mediator and assist the parties by discussing various options for resolving their differences. A practitioner can also assist the mediator in arriving at a mutually agreeable resolution. The mediator cannot bind the parties to any decision.

The attorneys for the parties usually do not attend the mediation sessions, although, in some cases, both parties' attorneys are present. The practitioner who fills the role of mediator must be careful not to offer advice that could be construed as legal advice. If a practitioner is engaged to perform other services for one of the parties, a conflict of interest may exist.

After an initial group session during which the opposing positions are discussed, the mediator may decide that the most effective way to assist the parties is to speak to each one separately, with their attorneys, or with only one side. This separation from the group is called **caucusing**.

Settlement facilitation is usually an unstructured, nonbinding meeting with the parties, their attorneys, and a facilitator and may be court-ordered or agreed to by the parties. CPAs, attorneys, psychologists, and psychiatrists often serve as settlement facilitators to assist the spouses in resolving their dispute. The practitioner may serve as the facilitator or represent either of the parties in these proceedings.

Special master is a role in which a qualified person, such as a CPA, is charged with the responsibility of hearing the evidence from both sides and making a decision. Special masters are sometimes appointed by the courts to decide specific issues. A special master's decision is subject to review by the court if the parties and their attorneys appeal. Practitioners acting in this capacity may need to know the rules and procedures for holding hearings and issuing an opinion in the dispute.

Court-appointed expert is a role in which the practitioner has the responsibility of providing a knowledgeable, objective, and supported opinion to the judge or jury. If a practitioner is a court-appointed expert, he or she may need an understanding of matters, such as the form of his or her report, due dates (including required court appearances), the manner by which he or she communicates with the parties and attorneys, and the procedure by which he or she can obtain necessary information that could not be obtained through discovery.

Mutually agreed-upon expert is a role in which the practitioner performs the same duties as that of a court-appointed expert, but instead of reporting his or her opinion to the court, he or she reports to the parties involved so that they can use the opinion to resolve certain divorce issues. The practitioner may need to obtain an understanding of his or her duties, such as the form of communicating his or her opinion and the manner by which he or she will communicate with the parties and attorneys.

Receiver is a role to which practitioners are appointed by the courts to act in the capacity of overseer of marital assets, such as investments or family businesses. A receiver might be appointed when the court believes that one or more assets are being misappropriated. Practitioners should understand the potential consequences of accepting the role as receiver and may wish to consult with legal counsel on ways to reduce the likelihood that they will experience any ill effects due to exposure to third-party liability.

Accepting an Engagement

Before a practitioner accepts an engagement, he or she should consider whether he or she possesses sufficient expertise and objectivity, including being free from conflicts of interest. Additional factors to consider include whether the practitioner has sufficient staff and time to conduct the engagement.

Expertise

The *General Standards* section of the Code of Professional Conduct (AICPA, *Professional Standards*, ET sec. 1.300.001), states that a member is only to undertake professional services that the member or the member's firm can reasonably expect to be completed with professional competence. Competence, in the context of matrimonial forensics, may require knowledge of accounting and tax law as well as an understanding of the state statutes and case law that are applicable. CPAs should also be good communicators, particularly if they are deposed or required to testify in court, or both.

Practitioners should recognize the skills needed to competently perform the services required by the engagement. For example, certain divorce engagements require substantive experience in business valuation. The practitioner may not be allowed to testify about valuation matters unless he or she is able to demonstrate specific knowledge and expertise (for example, having specialized knowledge and relevant experience; holding a professional designation, such as Accredited in Business Valuation (ABV); or obtaining continuing professional education in the area of family law).

Integrity and Objectivity

The *Integrity and Objectivity* section of the Code of Professional Conduct (AICPA, *Professional Standards*, ET sec. 1.100.001), states that when performing any professional service, a member of the AICPA is to be objective and free of conflicts of interest. The existence of any potential or perceived conflicts should be determined by the practitioner before he or she accepts an engagement. Potential or perceived conflicts of interest can arise in a number of situations but are most likely to occur if the practitioner has performed services for one or both of the spouses and has had access to confidential information about one or both spouses that could be used to the advantage of either spouse. In addition, confidential information acquired by the practitioner when performing services not related to the divorce action could be subject to discovery by the opposing side.

The objectivity of a practitioner can also be questioned by opposing counsel if the practitioner has testified as an expert witness for the attorney of either party due to a continuing financial relationship between the practitioner and the attorney. A potential or perceived conflict will not be an issue if the opposing party is informed of the potential conflicts and that party expresses no objections.

Sufficient Staffing

The practitioner should not agree to perform an engagement for which staff is necessary if he or she does not have sufficient, knowledgeable staff that possess the level of expertise required to competently complete the engagement.

Timing

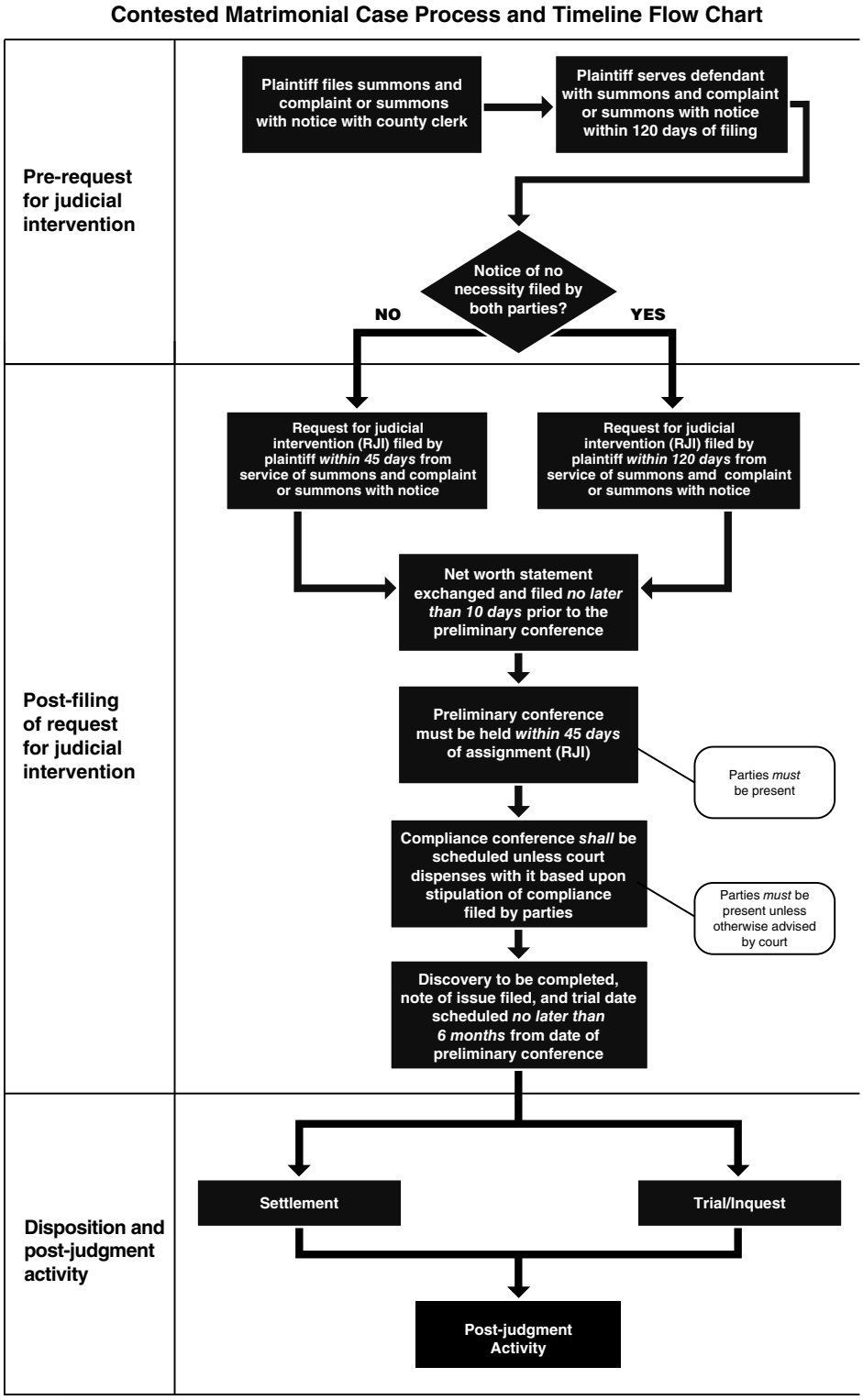
The practitioner should not accept an engagement if he or she is not likely to meet deadlines determined by the courts. Family law courts establish time schedules such as case management orders or docket control orders for each case. The practitioner can assist the attorney in meeting deadlines such as the date by which discovery requests are to be submitted so that adequate evidence is gathered and can be analyzed in preparation for trial.

In addition to the time required to prepare for trial and for the trial itself, the time period between the preparation of trial materials and the presentation of, and testimony on, these materials can be quite lengthy; therefore, additional time may be required to become familiar with the materials before trial.

The Divorce Process

The divorce process begins with the filing of a complaint by the plaintiff (petitioner). See figure 12.1 for a depiction of a general divorce process. The defendant (respondent) receives notification of this complaint by being served a summons, which apprises the defendant that a suit against him or her has begun and that if he or she does not appear in the action, a judgment of divorce may be granted by default.

Figure 12.1
Divorce Process Flow Chart



Source: Adapted from www.nycourts.gov/divorce/images/matrimonialflowchart.gif.

The *complaint* is a document that contains the specifics of the action and the grounds on which the divorce is sought (in some states, no grounds are required to be specified). In some states, an automatic restraining order may be issued at the same time. This order may affect the transfer of property and the division of income. Thus, the practitioner may want to check with the attorney to see if a restraining order has been issued.

The filing of the divorce complaint marks the beginning of discovery. *Discovery* is the process by which attorneys gather information about each other's clients related to the assets, liabilities, income, spending habits, and any other information that is believed to be relevant to the action. Although this information is usually financial in nature, it may include nonfinancial information.

If the defendant wishes to contest the complaint, he or she serves an answer to the complaint. The defendant can admit to the allegation contained in the complaint, deny it, or, state that he or she doesn't have sufficient information to either admit to or deny the allegation. The plaintiff has the burden of proof and must meet this burden to the satisfaction of the court.

The defendant may also file a counterclaim. Counterclaims can be important, particularly in states that do not have no-fault divorces because they can shift the fault for the divorce to the plaintiff and, thus, affect such issues as child custody and property division.

Divorces are brought to an end either through mediation, settlement negotiations, or trial. Most divorces do not proceed to trial. As a result, forensic accountants can be very helpful during settlement negotiations and can provide valuable advice on the distribution of the assets and their tax effects.

If the divorce is not ended by settlement, the action will go to trial. Opposing attorneys present their sides of the case on behalf of their clients. These attorneys may call fact and expert witnesses for testimony, provide exhibits, and argue their clients' case before the court. Forensic accountants may be called upon to testify at trial as expert witnesses if they prepared reports or analyzed financial information related to the case.

After all evidence has been presented to the court by each side, the trial ends, and the court (either a judge or a jury) will enter a judgment on the issues before the court. Usually, a final order ending the marriage is issued by the court. Although a final order ends a marriage, there may be requests made by each side for reconsideration of specific issues or appeals, or both.

Discovery

Discovery begins with an attorney issuing a request for the production of documents. Discovery does not necessarily require the issuance of a complaint; it can occur informally with an agreement between parties to the action. Practitioners can aid the attorney by suggesting the types of financial documents and information that might be useful.

If a party does not comply with the request, the requesting attorney can either issue a subpoena or file a motion with the court requesting an order for the production of documents. If the requested material is not produced, the court may impose sanctions against the noncompliant individual.

During discovery, interrogatories may be served to the spouses. *Interrogatories* are written questions developed by the attorney and completed by the spouse on the opposing side. These questions are usually required to obtain information on subjects such as employment history and income; assets, such as bank accounts, brokerage accounts, and cars; the existence of businesses that the responding spouse owns; and liabilities, such as credit cards and secured loans. The responses are made under oath.

Subpoenas of third parties can also be used to obtain documents and records, such as bank information, brokerage statements, and corporate minutes. Usually, spouses are also required to complete a **financial affidavit**, a document sworn to under oath regarding its veracity and on which the spouse's assets, liabilities, income, and expenses are listed. See figure 12.2 for an example of a financial affidavit.

Figure 12.2
Domestic Relations Financial Affidavit

IN THE SUPERIOR COURT OF COBB COUNTY
STATE OF GEORGIA

Plaintiff: _____	
and	**Civil Action File No.:** _____
Defendant: _____	

DOMESTIC RELATIONS FINANCIAL AFFIDAVIT

(1) Your Name:		Your Age:
Spouse's Name:		Spouse's Age:
Date of Marriage:	Date of Separation:	
Names and birth dates of child(ren) for whom support is to be determined in this action:		
Name	Date of Birth	Resides with
Names and birth dates of your other children:		
Name	Date of Birth	Resides with

(2) SUMMARY OF YOUR INCOME AND NEEDS: (fill out this part after you complete pages 2-5)	
(A) Gross Monthly Income (from Item 3A below)	$
(B) Net Monthly Income (from Item 3B below)	$
(C) Average Monthly Expenses (Item 5A below)	$
Monthly Payments to Creditors (Item 5B below)	$
Total Monthly Expenses & Payments to Creditors (Item 5C below)	$

Source: Hindson & Melton LLC.

Figure 12.2 *(continued)*
Domestic Relations Financial Affidavit

(3) (A) YOUR GROSS MONTHLY INCOME: (Complete this section or attach Child Support Schedule A). (All income must be entered based on monthly average regardless of date of receipt. Where applicable, income should be annualized)	
Salary or Wages — ATTACH COPIES OF 2 MOST RECENT WAGE STATEMENTS	$
Commissions, Fees & Tips	$
Income from self-employment, partnership, close corporations and independent contracts (gross receipts minus ordinary and necessary expenses required to produce income) ATTACH SHEET ITEMIZING YOUR CALCULATIONS	$
Rental income (gross receipts minus ordinary and necessary expenses required to produce income) ATTACH SHEET ITEMIZING YOUR CALCULATIONS	$
Bonuses	$
Overtime Payments	$
Severance Pay	$
Recurring Income from Pensions or Retirement Plans	$
Interest and Dividends	$
Trust income	$
Income from Annuities	$
Capital Gains	$
Social Security Disability or Retirement Benefits	$
Worker's Compensation Benefits	$
Unemployment Benefits	$
Judgments from Personal Injury or Other Civil Cases	$
Gifts (cash or other gifts that can be converted to cash)	$
Prizes & Lottery Winnings	$
Alimony and maintenance from persons not in this case	$
Assets which are used for support of family	$
Fringe Benefits (if significantly reduce living expenses)	$
Any Other Income (Do not include means-tested public assistance, such as TANF or food stamps.)	$
TOTAL Gross Monthly Income (also write in 2A on page one)	$

Source: Hindson & Melton LLC.

Another method used to obtain information is the deposition. Each attorney questions, or deposes, an individual who has information the attorney needs. This is done under oath and in the presence of a court reporter. An attorney can depose the other spouse or the spouse's family, friends, business associates, experts (including forensic accountants who are working on the divorce), and persons suspected of having an affair with either the defendant or plaintiff. Almost anyone can be summoned to give a deposition. The practitioner can assist the attorney who takes the deposition by developing questions and follow-up questions.

The standard of conduct in effect in the state where the divorce action is brought can have an impact on the sharing of information between parties to the divorce. If the standard is fiduciary, the sharing of information (including documents) may be required by law. If, however, the standard is good faith and fair dealing, the spouses have a lower standard than that of fiduciary with respect to sharing information during the marriage.

Ideally, the practitioner is involved as early as possible in the discovery process so that the documents required for the engagement can be identified, received, and analyzed adequately before trial.

The Character of Property and Its Division

The court divides the property in accordance with the law and adheres to the rules established by the state regarding whether property is considered *marital* (in some states, marital property is known as *community property*) or separate property. Marital (or community) property is usually divided between the parties, whereas separate (that is, non-marital) property generally is not divided.

As a practical matter, the practitioner should have some familiarity with the laws in the state where the divorce occurs. For example, nine states are community property states. In these states, all income and assets and liabilities[1] acquired during the marriage are to be equally divided regardless of who produced the income or which spouse acquired the assets. Exceptions to this rule include property received by inheritance, gift, or owned prior to the marriage. These non-marital assets, although not divisible, can produce appreciation that is divisible if the efforts of one or both spouses contributed to the appreciation. For example, if rental property one spouse bought prior to being married was worth $100,000 on the wedding date and is now worth $150,000 on the date it was valued for the divorce, the court could rule that each spouse is entitled to $25,000 of appreciation ([$150,000 – $100,000] ÷ 2 = $25,000). Issues such as these become more complex if the spouses in the example were married in a community property state and then moved to a state that is not a community property state. Each state has rules that address such nuances. In this situation, the practitioner will likely want to become familiar with the state law and request guidance from the attorney of the spouse.

In states that are not community property states, assets acquired during the marriage, although considered marital property and, thus, includible in the marital estate, are not necessarily divided equally. The court determines whether a division constitutes an equitable division of property. To determine an equitable division, the court makes a judgment based on a number of factors, such as the duration of the marriage, the relative contributions of each spouse to the marriage, the standard of living to which each spouse has become accustomed, and the existence of any prenuptial agreements. Because of the judgment involved, different courts in the same state can arrive at different divisions of marital assets.

Only marital property (community property in community property states) is included in the marital estate (although income from non-marital property may be considered when setting spousal and child support). Property acquired prior to the marriage or commingled during the marriage may become marital or community property. Some states require that funds used to acquire assets be specifically identified to support any assertion that the assets were acquired using separate property and, thus, are excludable from the marital estate. (As noted earlier, in some situations, appreciation of the asset during the marriage may be **apportioned** between the spouses.) To determine the origin of the funds used to acquire assets, the practitioner may have to **trace** the money used to acquire the asset to determine whether the asset in the spouses' possession at the time of the divorce was acquired using marital or separate property.

Allocating more in assets (net of liabilities allocated) to one party than the amount of assets allocated to the other party is not uncommon. If this imbalance cannot be resolved by splitting liquid assets, such as bank accounts,

[1] For the rest of the chapter, references to valuing assets also include valuing liabilities, unless otherwise noted.

the imbalance is sometimes corrected by the issuance of an **equalization note**. If the note represents equalization due to property that differs in character (for example, a personal residence and a business), any interest that is paid or received will be separately classified according to its character (for example, the interest on the portion of the note that represents the value of a personal residence is considered home mortgage interest). If the note bears no interest, interest will not have to be imputed (Internal Revenue Code [IRC] Regulation 1.483(c)(3)(i) states that IRC Section 483, Interest on Certain Deferred Payments, does not apply to transfers subject to IRC Section 1041,Transfers of Property Between Spouses or Incident to Divorce).

The existence of a prenuptial agreement does not mean that assets will be divided by a court in accordance with the agreement. The court may treat the agreement as it would any other contract and look closely at whether the party seeking to enforce the contract enticed the other party to sign the agreement under duress or without adequate representation.

In addition to understanding property division issues, the practitioner may also consider the liquidity, tax, and risk aspects of various assets.

When dividing assets, the cash-flow needs and consequences associated with individual assets may need to be considered. The practitioner can assist in determining the impact that the liquidity (or illiquidity) has on a party. A proposed property distribution (for example, certain real estate or a retirement plan) may be one that a party cannot afford because of the liquidity issues caused by negative cash flow, tax effects, or other costs. In some situations, a party may be offered an asset that requires high debt service.

When advising the client or attorney on the distribution of assets and liabilities, the practitioner might consider the risk attitude, needs, and levels of sophistication of the client. Some assets may be both illiquid and volatile, such as those in certain retirement plans; other assets, such as publicly-traded stocks, may be volatile but liquid; and still other assets, such as stock in closely-held family businesses, may not be volatile but can be illiquid.

Debt is also classified as marital (community) or separate. Usually, the debt is allocable to the spouse who was awarded the asset that secures the debt. If the debt is not secured by any asset, the court can allocate the debt based on the reason the debt was incurred or the use of the debt proceeds. Likewise, if debt is secured by separate property but used to acquire marital (community) property, the debt may be considered (depending on the judgment of the court) marital (community) debt, depending on whether marital (community) or separate assets were to be used to repay the debt.

Tax Consequences of Asset Distributions

The practitioner may need to consider the tax consequences of assets received. These consequences include not only those incurred annually (for example, deductibility of property taxes) but also those that are experienced upon the disposition of the property (for example, gains and losses). Practitioners may want to also determine which assets may be taxed immediately, such as current distributions from qualified retirement plans that will not be rolled over, gains on dispositions of assets and whether these gains will be taxed as ordinary income or at capital gains rates, and the tax basis of assets (if this is low, it could result in higher taxes at a later date).

Some states require that deferred tax consequences on appreciated assets be considered when assets are divided. In some states, the tax consequences are considered only if they have an immediate impact on the tax position of at least one of the spouses.

Marital property transfers are generally treated as gifts according to IRC Section 1041 and, thus, are not taxable events. As a result, the assets have a carryover basis for tax purposes (that is, the tax basis of the transferor at the time the transfer is not affected). The distribution of some assets, however, can trigger tax immediately, whereas the taxability of other assets does not occur until sometime after the distribution occurs. A few of these assets are discussed in the following paragraphs.

Stock in a Closely-Held Corporation

At times, stock in a closely-held corporation owned by a spouse can be redeemed by the corporation using cash in the corporation to buy the spouse's stock interest. Thus, the spouse who owned the stock receives cash, which is easier to distribute. This approach is especially beneficial if the non-owner spouse desires cash instead of stock (if the non-owner spouse will accept stock, the transfer of stock to the spouse is nontaxable, and the spouse receives a carryover basis per IRC Section 1041). However, unless structured properly, the redemption of stock of a closely-held company can have unintended income tax effects. Practitioners who encounter engagements that involve the redemption of stock may want to become familiar with IRC Regulation 1.1041-2, Redemptions of Stock, which provides guidance on the taxability of stock redemptions in divorce actions. The regulation allows spouses to determine which spouse will be taxed on the redemption. If the guidance is followed, gains will be taxed as capital gains; if not, the distribution of cash by the corporation could be treated as a dividend and taxed, according to IRC Section 301, as ordinary income.

Nonqualified Stock Options

If the transfer of nonqualified stock options (NQ) (discussed later in this chapter) that are vested is incident to divorce,[2] the transfer is a nontaxable event, and the receiving spouse takes a carryover basis in the options. The non-employee spouse will recognize income upon the sale of the stock.

Incentive Stock Options

Although no tax must be paid at the time incentive stock options (a type of qualified stock option discussed later in this chapter) are granted and no tax is due upon exercise by the employee spouse to whom the options were granted, the transfer to a nonemployee spouse incident to a divorce causes the options to lose their qualified status and take on the character of nonqualified stock options. As a result, although no gain is taxable to either spouse at the time of transfer, income is recognized by the nonemployee spouse upon exercise of the options. Any subsequent gain on the sale of stock arising from the options is taxable to the nonemployee spouse, at the capital gains rate, if it is sold two or more years after the employee was granted the stock. If sold within two years, a portion of the gain may be taxed as ordinary income, with the balance of the gain being taxed at the capital gains rate. If the stock is disposed of within one year of exercise, any gain is considered short term and taxed as ordinary income.

Deferred Compensation

The rules on taxability of deferred compensation follow those of the transfer of nonqualified stock options. Deferred compensation is not taxable to either spouse upon transfer of the compensation to the nonemployee spouse but is taxed to the nonemployee spouse when the compensation is received.

The practitioner should be aware that each state may have income tax laws that differ from those discussed previously and that affect the taxability of property transferred.

Personal Residence

At the time of the divorce proceedings in situations in which the residence will not be sold during the proceedings, if the gain (that is, the difference between the value of the personal residence and the tax basis) is greater than the amount of gain excluded from tax under federal and state law, this difference is considered because the expected tax on the gain effectively reduces the benefit of the residence to the spouse who receives the residence.

[2] The transfer of *property* incident to a divorce is a transfer made within one year of the date the marriage ceases or, if according to a divorce decree, within six years after the divorce is final.

Case in Point

David and Theresa have been married for 25 years but are considering a divorce. One of their marital assets is a principal residence purchased 10 years ago that has a tax basis of $400,000. Its appraised value is $1,000,000. The gain, therefore, is $600,000.

The tax law currently in effect at the time their divorce is being considered allows $250,000 of the gain on the sale of a personal residence to be excluded from tax ($500,000 in the case of a married couple who file a joint return for the year in which the sale occurred) if they have owned and used their home as their main residence for at least two years out of the five years prior to the earliest date they contemplate selling the residence. David and Theresa meet this ownership and use test. Gain above the amount excluded would be taxed, in David and Theresa's situation, at 15 percent.

If David and Theresa can agree to sell the house while still married and file a joint return for the year in which the sale occurred, the marital assets to be divided will be maximized due to the tax savings of $37,500, which is the tax if sold as a single individual of $52,500 ([$600,000 – $250,000] × .15 = $52,500) less the tax if sold as a married couple of $15,000 ([$600,000 – $500,000] × .15 = $15,000) or the difference between thresholds of $500,000 and $250,000 multiplied by the tax rate of 15 percent.

Identification of Assets, Liabilities, and Income

One of the earliest actions performed by a forensic accountant is listing all assets and liabilities that could be includable in the marital estate and then, from that listing (called an *inventory*), excluding any assets that are not to be considered because they are not subject to division. (The final authority regarding whether property is includable or excludable is determined by the trier of fact, usually a judge or jury.) For example, assets and liabilities that are excludible include those that have been placed in trust for one of the parties, assets that are the property of the children, or assets that are the separate property (that is, non-marital) of the spouses. Regardless of whether the assets may be excludable, they can be included in the initial inventory listing.

The identification of the assets, liabilities, and income that are includible in the marital estate can be difficult due to the usual uncooperativeness of the parties to the divorce action. In addition, each state has its own rules that specify required disclosures. To ensure that the identification and disclosure is as complete as possible, the practitioner may want to obtain and analyze documents and resources, such as those discussed in the following paragraphs.

Tax Returns

Tax returns, which include income, estate, and other types of returns, provide information about reported taxable income and income-producing assets. Form 1040, U.S. Individual Income Tax Return, and accompanying schedules and forms (for example, Schedule C, Profit or Loss from Business, and Form 4562, Depreciation and Amortization), provide useful information that can help identify the spouse's income, assets, and liabilities. If one or both spouses own interests in partnerships or corporations, copies of tax returns filed by these entities can also be obtained. Copies of the returns for the previous four or five years can be requested from the parties and, if either the returns cannot be located or the practitioner suspects that the returns are **dummy returns**, the practitioner can request a copy by asking the spouses to sign a Form 4506, Request for Copy of Tax Return (if separate returns were filed and cannot be located, a separate Form 4506 for each return must be filed). Returns requested in this manner may be mailed directly to third parties, such as a CPA or an attorney.

Bank and Brokerage Statements

Bank and brokerage statements can provide information about the spouse's acquisition of assets, incurrence of loans, and income and expenses. An analysis of the activity shown in these statements can highlight income and expense items, such as bonuses, interest and dividend checks, and expense reimbursements. Care should be taken to obtain all

bank statements; some accounts, unknown to one of the spouses, may have been opened to hide unexpected income received (for example, bonuses) and the secretive payment of certain expenses.

Credit Card Statements

Credit card statements can provide information about assets and liabilities as well as lifestyle, which can be particularly important when the court determines the level of support (discussed later) necessary for spouses and children.

Personal Financial Statements

Personal financial statements are often required when individuals borrow money. The statements may lead to the discovery of assets, liabilities, income, expense, or other commitments not listed on the financial affidavit. They are often prepared to borrow money, refinance debt, or cover personal guarantees. Assets, such as homes, other real estate, or automobiles may secure the loans.

Loan Agreements

Loan agreements are helpful in determining the existence and nature of debt owed by one or both spouses. These agreements can also be helpful in identifying assets that are used as security for loans.

Insurance Policies

Insurance policies can be helpful in identifying assets that have not been disclosed when the initial inventory was taken. These policies usually cover expensive items, such as jewelry, antiques, automobiles, and second homes. Life insurance policies represent a death benefit, which is an asset.

Internet Services

Internet services can be used to identify assets and obtain other information, such as photographs of property. Some governmental entities, such as counties, provide appraisals of real and personal property located in their jurisdictions. Online state records may contain information on the ownership of corporations and other entities. Although some information is free, some jurisdictions charge a fee for gaining access to records.

Online Search Firms

Online search firms can provide information on registered or licensed assets, such as boats and airplanes, as well as real property. Arrest records and court dockets are also often provided by these services. Some online search firms charge fees based on the number or types of searches performed. Use of information obtained from these firms may be subject to restrictions imposed by state and local law.

Valuation and Quantification of Assets, Liabilities, and Income

After the assets, liabilities, income, and losses of the marital or community estate have been identified, their value for purposes of division and distribution will be determined. A very important consideration is the date on which the assets and liabilities are to be valued. The assets and liabilities will be valued at the date determined under state law. In some states, the valuation date is the date of separation; in others, it is the filing date of the divorce petition; in others, the date is the actual date of divorce. The valuation date may even be the date of the marriage, gift, or inheritance if the appreciation of the asset is a marital asset.

Most likely, the values will change between the required valuation date and the date on which the actual distribution occurs. The practitioner can assist in determining how any such difference is to be handled. For example, if a brokerage account is divided between the parties, the practitioner may request guidance on how the change in values

between the date of valuation and the date of distribution is to be apportioned. Some states address this issue through statute, case law, or both; others do not. The same issue may occur with other assets or liabilities, including bank account and credit card balances.

If the practitioner is not familiar with local law, he or she should obtain guidance early in the engagement on which date is applicable. The correct valuation date may depend on numerous factors, and the client's attorney is often in the best position to provide the date or dates that are to be used.

Valuation of the Marital or Community Estate

After identifying the assets and liabilities of the marital or community estate and the date on which the assets (and liabilities) are to be valued, the valuation process will normally commence.

Standards of Value

Although the attorney may be consulted in determining the standard of value, the practitioner may need to defend the standard of value chosen. Often, the standard of value depends on the state where the parties file for divorce, and different states specify different standards of value. Furthermore, state statutes may refer to value without specifying any particular standard of value. In these situations, case law may provide guidance. Therefore, understanding the law (both statutes and case law) in the jurisdiction of the divorce is important. In addition, variations on the standards of value may arise due to court preferences, and most of the standards of value depend on assumptions that are made by the person performing the valuation. In this section, a brief overview of valuation as it pertains to divorce is presented. For more in-depth coverage, see chapter 15, "Valuation Fundamentals."

The most commonly used standards of value are:

- Fair market value (FMV)
- Intrinsic (fundamental) value
- Investment value
- Fair value

Fair Market Value

Although FMV is the most commonly used standard of value in business valuation engagements, its application varies according to local law. Usually, the standard of FMV used is the standard found in IRS Revenue Ruling 59-60:

> ...the price at which the property would change hands between a willing buyer and a willing seller when the former is not under compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts.

See Figure 12.3 for an illustration of FMV based on this definition.

FMV assumes a hypothetical arm's-length sale without regard to a specific buyer or seller. Variations due to different laws and case law affect the use of FMV. For example, in some jurisdictions, a covenant not to compete, which may or may not be divisible, is assumed to exist and affect the valuation of a business interest, whereas in other jurisdictions, no such assumption is made. Therefore, there can be many variations on the definition of FMV.

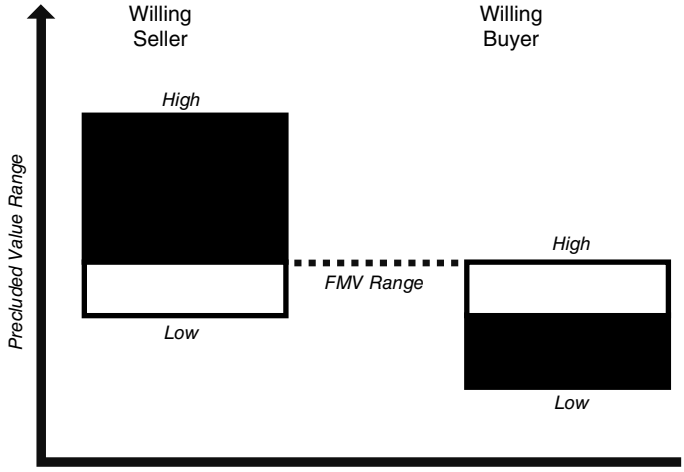
Intrinsic (Fundamental) Value

Intrinsic value is the value that an investor believes to be the true market value. Intrinsic value assumes that the business owner spouse who is divorcing will not sell the business and, therefore, there is no assumption of a hypothetical transaction as there is when FMV is used as the standard of value. As a result, the intrinsic value of a spouse-owned business may differ from the value obtained using FMV.

Investment Value

Investment value represents the value to a specific investor based on that individual's investment requirements and expectations. Like the intrinsic value method, this standard does not assume that a hypothetical buyer and seller exist; instead, the value to a specific individual is determined. As one might expect, the investment value and intrinsic (fundamental) value methods are, in many jurisdictions, similar in many respects.

Figure 12.3
Fair Market Value Standard



Source: Paul Flignor and David Orozco. "Intangible Asset & Intellectual Property Valuation: A Multidisciplinary Perspective." *World Intellectual Property Organization.* www.wipo.int/sme/en/documents/ip_valuation_fulltext.html.

Fair Value

The determination of fair value is based on local law. Each state may have statutory law or case law that encapsulates circumstances and theories that, if apply or are appropriate, cause the valuation of assets to be different from the value that would be obtained had FMV been used. Being aware of local law when valuing assets in these states can be helpful.

The differences between the standards of value can result in different values being placed on the same assets, particularly when the asset is a business or professional practice. For example, because intrinsic value is the value of a professional practice to the business owner and does not assume a sale of the practice, certain personal factors, such as the professional's age and skill level are relevant to the valuation of the practice. However, use of FMV assumes a hypothetical sale of a practice between no specific buyer and seller and, thus, the attributes of the seller have no bearing on the value of the practice.

Intrinsic value, then, is sometimes used when allowed by local law to value practices and businesses in which the personal attributes of the owner are necessary for the continued success of the practice or business.

An important point to note is that when valuing assets that are used in a business or profession, the tax basis of these assets is likely to differ from their fair market value (FMV), particularly if the asset is depreciable. In some cases, the asset may have been depreciated to a point at which its tax basis is zero, yet it still has value because it is continuing to be used to produce income in a business.

Even nonbusiness assets can have a value that differs from their historical cost. For example, a newly purchased automobile used for personal purposes may have an historical cost basis that exceeds its FMV.

Valuation of Professional Practices

The valuation of professional practices is a complex area of study. Only fundamental aspects particular to divorce are considered here. Although the following concepts are most closely associated with professional practices, they can

apply to businesses that are not considered professional practices.

The court generally either divides the income from income-producing assets or distributes the income-producing assets (or an amount equal to the income-producing asset if the asset is intangible in nature). Some of the income-producing assets that may be divisible, depending on local law, are discussed in the following paragraphs.

Licenses

Professional practices *are*, essentially, the owners and practitioners who operate them in many cases. These professionals are usually required to be licensed by the states where they practice, and the continued maintenance of a license is dependent on compliance with the law by the particular license holder. Because the license cannot be sold or otherwise traded, it may be considered an asset that is separate from the practice itself. It has no value apart from the practitioner who holds the license and, thus, strictly speaking, is not assigned a value when FMV is used as the standard of value (it does, of course, have intrinsic value to the license holder). In some states, however, a license is considered a marital (or community) asset and, thus, is divisible by giving the spouse who does not hold the license assets having a value that represents an appropriate distribution of the value of the license.

Degrees and Certifications

Some jurisdictions have determined that educational degrees and certifications are divisible. The value is determined by comparing the earning potential over the remainder of the expected working years of the spouse who holds the degree or certification to the expected earnings over an identical period of an individual who does not hold a similar degree or certificate.

Goodwill

Two types of goodwill exist: professional goodwill (sometimes called *personal goodwill*) and practice goodwill. Professional goodwill is associated primarily with an individual, whereas practice goodwill (at times called *business* or *commercial goodwill*) is associated primarily with the business. For example, assume that Sharon, who is going through a divorce, works as a medical doctor at a regional hospital that has built a solid reputation for having qualified, caring physicians, nurses, and nurse practitioners on its staff. Over the years, Sharon has acquired a reputation as a highly sought-after physician. This reputation is one factor that contributes to the professional goodwill associated with Sharon. If new patients who have not heard of Sharon visit the hospital for nonemergency services and do so because of the general reputation of the hospital in the community, the goodwill that the reputation represents is practice goodwill. Sometimes, there is a correlation between the two types of goodwill. For example, the professional goodwill associated with Sharon can positively affect the practice goodwill associated with the hospital and vice versa.

Factors besides reputation that can create professional goodwill include the professional's knowledge, skills, personality, educational institution from which the professional earned his or her degrees, and certifications.

Because goodwill is an intangible asset, its existence cannot be directly determined by the senses. Professional goodwill is implied by the demand for the services of the professional, rather than simply the demand for the services provided by the business. In a proprietorship, the existence of professional goodwill is more easily established than it is in a setting in which many professionals practice. In the latter setting, its existence can be determined by evidence that clients or patients request the professional's services or the impact on the business when the professional leaves.

In some states, professional goodwill is included in the marital estate even though it is not a tangible asset that can be divided between the parties. When it is included, other assets of equal value are usually transferred to the spouse not engaged in the professional practice. In situations in which the practice is a proprietorship, a number of courts have determined that the professional is the practice and, therefore, only personal goodwill can exist. In some jurisdictions, professional goodwill is not considered to be a marital asset subject to division, but practice goodwill is a divisible marital asset. Local law (including case law) determines whether the two types of goodwill will be separated and whether one type or the other is divisible.

Covenant Not to Compete

An issue similar to that of goodwill is a covenant not to compete. Because professional practices are not usually sold at the time of divorce, the issue arises about whether a covenant not to compete is to be considered. If the standard of value is FMV, a hypothetical sale is assumed and, thus, the assumption of the existence of a hypothetical covenant not to compete is reasonable because no rational buyer would acquire a practice if one does not exist. Some jurisdictions consider the value of a covenant not to compete the separate property of the professional and, therefore, not divisible; when other standards of value are used, a covenant not to compete may not be an issue.

Buy-Sell Agreements

Buy-sell agreements between professionals and their companies often exist. A buy-sell agreement operates on the occurrence of a specific event and requires that payment be made by the practice to the professional. The payment may be a specific price, a percentage of book value, or any other formula specified in the agreement. The event can be termination of the service of the professional, retirement, disability, or divorce. The payment required, however, may not represent the FMV of the owner's interest absent the agreement.

When performing any type of appraisal, including those for divorce, financial statements (or income tax return information, if used in place of financial statements) may need to be adjusted for the **normalization** of assets, liabilities, income, or expenses. This normalization adjustment is performed to modify financial information so that they reflect the best possible estimate of the true financial position and results of operations of the practice. Normalization adjustments often involve discretionary items expended by the professional (or manager of the practice). Normalization adjustments may also be made for unusual or infrequent transactions that are not typical to the practice. For example, if a practice owner, in anticipation of divorce, incurs expenses that are higher than usual, a normalization adjustment can be made to reduce the expense and, thus, cause the financial statements to reflect an expense level (and by extension, net income) that would normally be shown by the practice.

One area of the financial statements that is often subject to normalization adjustments is compensation of the owner-professional. Determination of reasonable compensation can be one of the most contentious areas of a divorce. Because compensation is usually a large expense of a professional practice, this adjustment can significantly affect the value of a practice. The usual purpose of this adjustment is to reflect the level of salary (at market rate) that would be incurred if the owner-professional were to be replaced. The determination of replacement cost is made by considering the skills required to perform the job duties for the business being valued. Certain factors allowed by local law may be considered when assessing reasonable compensation. (In some jurisdictions, no guidance is provided.) These factors may include personal factors, such as skills, reputation, work hours, and the ability to generate new business; situational factors, such as geographical area and the economic climate; and application of the independent investor's test, which involves asking the question, Would a disinterested party, such as a stockholder or co-owner, consider the compensation paid as being reasonable?

In some jurisdictions, the amount of salary used to determine the value of a practice may also be used to determine support. This concern is commonly referred to as *double-dipping* and occurs when the value of the business is determined by adding back excess compensation to the business' income (thus, increasing the value of the business), whereas *support* is determined based on compensation that includes the excess compensation. Thus, a double benefit is obtained by the non-practicing spouse.

Valuation of Other Assets

Certain assets, such as retirement assets and deferred compensation, deserve mention in this chapter because they represent valued assets presenting unique distribution issues.

Retirement Assets

Retirement plans may be the largest assets that a couple accumulates during a marriage. The division of these assets is very important because this division can create large tax liabilities if not properly handled.

Retirement plans can be divided into two categories: qualified and nonqualified. *Qualified plans* are plans that meet the requirements of IRC Section 401 and include defined-benefit, defined-contribution, and employee stock ownership plans (ESOPs). Plans that do not meet the requirements of IRC Section 401 are considered *nonqualified plans*.

Defined Benefit Pension Plans

Defined benefit pension plans promise workers a specific (that is, defined) monthly benefit at retirement. The amount of the benefit is known (or at least can be approximated) long before its payment to recipients and is usually based on factors such as age, earnings, and years of service. The plan may state this benefit as an exact dollar amount (for example, $300 per month) or as the result of a specific formula. In either case, the amount can be determined with a reasonable amount of accuracy and is virtually guaranteed to be paid to the employee when he or she retires because the employer bears the risk that sufficient funds might not be available at the time the retiree is to be paid.

If the employer cannot fund the pension plan, the Pension Benefit Guaranty Corporation (PBGC), a federal agency, pays benefits to retired employees and certain other beneficiaries. The PBGC does not, however, guarantee post-retirement benefits, such as health care, vacation pay, severance pay, or other benefits not considered part of basic pension benefits. Usually, the PBGC pays all pension benefits (up to a specific limit) due to retirees.

Even if neither of the spouses to a divorce action is retired, defined benefit plans that are expected to provide benefits often will be identified and valued. An alternative to valuing the plan is to use a qualified domestic relations order (QDRO) to divide the benefits using a percentage or absolute dollar amount when they are received. (Use of a QDRO is explained in the next section.)

Defined Contribution Pension Plans

A *defined contribution plan* is a qualified retirement plan in which the contribution is defined but the benefit to be paid is not currently known. This type of plan can appear in many forms and is known by various names, such as savings plan, money purchase plan, profit-sharing plan, ESOP, 401(k) plan, and 403(b) plan. A separate account exists for each employee, and the value of the account is the sum of contributions and earnings, less losses and withdrawals.

Note that with defined contribution plans, the employer's obligation to the employee ceases when the employer makes the contribution defined by the pension contract. In contrast, the employer's obligation for defined benefit plans ceases only when the employee-retiree (and, if permissible, any designee) is paid all pension contract defined benefits.

All plans differ with respect to their distribution requirements at retirement. For example, upon retirement of a covered employee, some plans require the beneficiary to take a lump-sum payout, whereas others allow the retiree to receive annual installments or convert the payout to an annuity. In divorce engagements, the practitioner should be aware of the available alternatives because these alternatives can result in a more advantageous or less advantageous payout to the nonemployee spouse.

If conflicts arise between state and federal law, federal law takes precedence. However, the IRC specifies situations in which state law controls.

A QDRO can be used to divide retirement plan benefits. A QDRO is a domestic relations order (DRO) that creates or recognizes the existence of the right of an alternate payee, such as a former nonemployee spouse, to receive all or a portion of the benefits payable with respect to an employee (or retiree) under a retirement plan. (A DRO is a judgment, decree, or order made pursuant to state domestic relations law and relates to the child support, alimony payments, or marital property rights for the benefit of a spouse, former spouse, child, or other dependent of a participant.) Each retirement plan that is to be divided pursuant to a divorce requires a separate order. A court order to divide retirement benefits is not a QDRO until it is accepted by the trustee of the plan. Until the order is qualified, it is a DRO.

Besides dividing retirement plans, QDROs can be used to pay alimony, child support, and any other divorce-related obligations. However, QDROs cannot be used to divide any city, county, state, federal, military, or railroad retirement plans. Federal government retirement plans (for example, the Civil Service Retirement System or the Federal

Employees Retirement System), require a qualified court order. Military plans require a military order, and railroad plans require railroad orders. Some municipal and county plans will not accept court orders to divide retirement benefits.

Sample language for QDROs is available in Internal Revenue Bulletin No. 1997-02, Notice 97-11, 1997-1 CB 379. Because this suggested language is general and does not address the requirements of specific pension plans, it will usually be tailored by an expert to meet the language requirements specified by the pension plan. The plans includible in the marital estate may provide model language, termed a model order; if so, this language may be acceptable, but before assisting with completing a model order, forensic accountants may need to understand the options and benefits available to the parties.

The benefit itself may be divided or awarded in a variety of ways, such as a percentage, flat dollar amount, or by a fractional method. In addition, the QDRO can stipulate that the benefit is fixed as of the date of divorce or that the final retirement benefit is prorated by means of the fractional method. This latter method may allow for some growth in the alternate payee's share. Additional options that may be specified in the QDRO include the provision that the nonemployee spouse will receive cost of living adjustments (COLAs) and can elect survivor benefits and decide which party is responsible for the cost of those benefits.

All QDROs will include a designated alternate payee. The alternate payee can be a spouse, child, former spouse, or any other dependent of the participant (covered employee) recognized as having the right to receive all, or a portion of, the benefits otherwise payable to the participant (IRC Section 414[p][1][A][i]). The order contains information such as the amount or percentage of the participant's benefits to be paid to the alternate payee, how this amount is to be determined, the number of payments, and the time period to which the order applies. The order also names each plan to which the order applies as well as the date of the divorce or division and information that identifies the participant and the alternate payee.

Usually, one of two approaches is used to draft a QDRO that applies to defined benefit plans: the separate interest approach (sometimes termed the independent interest approach) or the shared-interest approach, which is a division with or without survivor benefits. The separate interest approach results in the amount awarded being spread over the lifetime of the alternate payee, rather than the lifetime of the participant. In other words, the awarded benefit is converted to a payment based on the age and gender of the alternate payee, rather than that of the participant. (Note that some defined benefit plans do not allow the award of an independent interest to an alternate payee.)

Pursuant to a QDRO, the alternate payee can begin to receive benefits at the participant's earliest retirement age, regardless of whether the plan is a defined contribution plan or a defined benefit plan and regardless of whether the participant retires. (Note, however, that although unvested benefits can be divided, they will not be paid until they become vested.) Under a defined benefit plan, the normal retirement benefit is reduced to reflect the earlier receipt of benefits. This is not an option under governmental plans. Court orders that divide retirement benefits other than benefits divided by QDROs generally require the alternate payee to wait until the participant begins receiving retirement benefits.

Benefits cease upon the death of the alternate payee under a defined benefit plan and are generally forfeited to the plan unless otherwise allowed by the plan and specified in the QDRO. Benefits normally payable to the alternate payee may, instead, be paid to the participant or contingent alternate payees. In some plans, children of the marriage can be named as contingent alternate payees, but certain restrictions apply when naming dependents, other than a former spouse, as alternate payees. These restrictions primarily affect the length of time that benefits can be paid to these alternate payees. Some plans do not allow the benefit to revert to a participant if an independent interest is granted to the alternate payee, and the alternate payee passes away. If the survivor benefits are forfeited by the nonemployee spouse, the nonemployee spouse may be able to compensate for the loss of these benefits with life insurance purchased on the life of the employee spouse.

Other issues to consider include awarding the alternate payee any available subsidized benefits (designed to encourage early retirement), COLAs, and post-retirement increases. Unless specified in the QDRO, the alternate payee will not receive these benefits; therefore, the practitioner can assist counsel by carefully checking the QDRO for references to these benefits.

Other Types of Qualified Retirement Plans

A variety of other types of qualified retirement plans exist that may be a part of the marital estate. These include IRAs that, within limits, can be funded by pre-tax dollars, and Roth IRAs (funded with after-tax dollars), both of which can be established by individuals. Employer plans include Keogh and HR-10 plans; these plans can only be established by self-employed persons or corporations. Savings incentive match plans for employees (SIMPLE) IRAs can be set up by companies that have 100 or fewer employees and no other qualified pension plan. Simplified employee pensions (SEP), which allow employers to contribute to IRAs of employees, are more likely to be found in small businesses, as are 412(e)(3) plans, which are defined benefit plans for small businesses.

Nonqualified Plans

The division and distribution of nonqualified plans (those plans that do not meet the requirements of IRC Section 401) differ from qualified plans because they cannot be divided by a QDRO. If the plans themselves cannot be divided at the time of the divorce, they are often divided by giving to the nonemployee spouse assets having a commensurate amount of value or by paying benefits to the nonemployee spouse.

One type of nonqualified plan is an *annuity*, which is a contract issued by an insurance company designed to serve as an investment vehicle and a source of retirement income. Although contributions are made with after-tax dollars, there are a number of benefits, such as tax-deferred growth, no limit on the amount of contributions that can be made, and death benefit distributions that are not subject to probate.

Deferred Compensation Plans

Deferred compensation plans generally involve the issuance of assets, such as stock options. Options allow employees of corporations to buy shares of corporate stock, either at a fixed price or within a fixed period. They are usually used as a form of compensation. Although employers may grant or sell stock options to their employees, most are granted. Corporations grant options for several reasons (for example, options may be granted as a reward for achieving specific goals or as an incentive to work more effectively for the corporation).

Stock options can be either qualified or nonqualified. Whether the stock options are qualified or nonqualified can have a significant effect on taxable income; qualified stock options are associated with more favorable tax consequences.

Qualified Stock Options

To be qualified, the options must meet the requirements of IRC Section 422(b), which specify that the option terms must not allow exercise of the options after ten years from the date the options are granted and that the option price cannot be less than the fair market value of the stock at the time the options are granted. Certain other requirements exist, such as restrictions on transfers of the options.

Incentive Stock Options

Incentive stock options (ISOs) are the most common type of qualified stock options and may only be granted to employees of the employees' corporation, its parent, and its subsidiaries. Although ISOs have very favorable tax characteristics, significant restrictions on structuring ISO plans and the ability to transfer the options exist.

According to IRC Section 422(a), no tax will be incurred at the time of exercise of the qualified stock option if the employee who was granted the options does not dispose of the stock within two years after the grant date or within one year after the transfer of the stock to the employee and the employee was an employee of the issuing corporation (or a related corporation) from the time the option was granted until a date that is no later than three months before the date of exercise.

Certain limits exist on the FMV of ISOs that can be granted to any one individual within a calendar year. If these limits are exceeded, the options having an FMV greater than the limit might be treated as NQs.

Nonqualified Stock Options

NQs enable individuals to purchase a stipulated number of shares of company stock at a fixed price at the time the NQs are issued, upon the occurrence of a certain event, or after the passage of a specified period of time. NQs are usually subject to vesting requirements. Unlike ISOs, the exercise price of NQs can be less than market price of the underlying stock at date of grant. This type of option is nonqualified because it does not meet the requirements of IRC Sections 421–424. Another difference between ISOs and NQs is that NQs may be granted to nonemployees as well as other parties, such as vendors.

Be aware that not all employee stock option plans allow NQs to be transferred between spouses and other beneficiaries. If the options cannot be transferred, the employee spouse may either (1) hold the options in beneficial interest or set up a trust to retain the options until the nonemployee spouse desires to exercise or otherwise dispose of them or (2) distribute other assets having a commensurate amount of value.

Reload Options

When an employee exercises reload options, the employee receives additional stock options. Most often, the reason for the use of reload options is to encourage option holders to exercise their stock options early by granting replacement options. Reload options can either be ISOs or NQs; if they meet the requirements specified in IRC Sections 422(a) and (b), they are classified as ISOs.

Valuation of Stock Options

Although there are a variety of methods for valuing stock options, the two most common methods are the intrinsic value method and the Black-Scholes method (sometimes referred to as the *Black-Scholes-Merton method*). The Black-Scholes method uses a stochastic partial differential equation to estimate the value of the option from date of grant to date of expiration. The intrinsic value method involves measuring the difference between a stock option exercise price (that is, "strike price") and the market value of the underlying stock at a specific date, often the grant date. The Black-Scholes method represents a more complex mathematical approach than does the intrinsic value method, the use of which has been all but eliminated for financial reporting by publicly-traded companies (ASC 718-10-30). Each method has its advantages and disadvantages. The discussion that follows is a brief overview of each of these methods.

Intrinsic Value Method

Although the intrinsic value method is appealing due to its simplicity, its disadvantage is its limited accuracy. Accuracy is sacrificed because the time value of money is ignored. Because the value is determined by taking the difference between the current market value of the underlying stock and the exercise price, any increase or decrease in value of the underlying stock is not considered. Because the value is determined at the grant date or not long afterward, the intrinsic value method assumes that the option is marketable or exercisable at the valuation date even though, due to plan restrictions and IRC requirements, the stock options (qualified or nonqualified) are usually not immediately transferable and may not be exercisable (if vesting requirements exist).

Under the intrinsic value method, options that are considered valuable by the holder may be assigned a value of zero if the options have an exercise price that is less than the market value of the underlying stock. Although the adjusted intrinsic value method can partly be used to compensate for this lack of value recognition, any such options includible in the marital estate may be undervalued because its basis (financial and tax) can differ from its true value.

Black-Scholes Option Pricing Model

Use of the Black-Scholes option-pricing model to value employee stock options in divorce actions is more difficult than using the intrinsic value method partly because some of the variables (for example, the volatility of the stock price) must either be determined by estimate or reliance on historical data (which might not represent the future very well) before the equation can be solved. Additionally, use of estimates requires judgment and, thus, is subject to bias. Other weaknesses include the fact that the Black-Scholes model was not designed to value all types of options that can exist in divorce settings but, rather, to value publicly-traded stock options, or calls. Publicly-traded stock options are freely marketable, whereas options to purchase stock in small, closely-held companies that are not publically-

traded are not. Furthermore, incentive and certain nonqualified stock options have marketability restrictions on them and, as a result, may not be freely transferable. At times, the value produced by the Black-Scholes model has been discounted for this lack of marketability.

Determining the value of stock options is further complicated by state law, which may specify the valuation method to be used.

Inclusion of Stock Options in the Marital Estate

Whether stock options are included in the marital estate and subject to distribution depends on factors such as when the options were earned, when they vest, and the intent of the employer in granting the options. For example, if the options were earned during the marriage, courts are likely to award a portion of the options to the nonemployee spouse. Are options granted prior to the marriage, but which have vested during the marriage, marital assets to be distributed? The impact of intent can be illustrated by considering the situation in which the employer granted the options as a reward for work performed prior to the commencement of the marriage; in this case, the courts may rule that these options are not a part of the marital estate for purposes of distribution (they may, however, be available to pay support).

Although state law prevails regarding whether the options are part of the marital estate and, thus, are distributable, a few rules generally apply:

- Options that were granted during the marriage and are fully vested on or before the valuation date are usually considered marital or community property.
- Options granted to an employee spouse as compensation for future services to be performed after the date of separation (or other valuation date stipulated by local law) are usually not considered marital property.
- Options granted to the employee spouse for services performed during the marriage, but which are not yet vested, are usually considered marital property.

The amount of unvested stock options that are properly includible in the marital estate is often determined by application of a **coverture fraction** (sometimes referred to as the *time rule*). This fraction represents the portion of benefits earned during marriage and attributable to the marital estate. (Coverture fractions can also be used to determine the amount of pension value considered a part of the marital estate.) There are various ways to compute the coverture fraction. One way is illustrated by the following formula, which can be used to compute the number of options to be included in the marital estate:

$$\text{\# of options includible in marital estate} = \frac{\textit{(\# of months employee was married and working after option grant date)}}{\textit{(\# of months between grant date and vesting date)}} \times \textit{Number of options}$$

Vested but unexercised stock options can be distributed as an asset of the marital estate, valued so that marital assets of equal value are distributed, rather than distributing the options themselves or be considered a source of income and, thus, available for alimony and child support obligations. State law determines whether these options are income for purposes of support.

Usually, options are considered compensation to the recipient when they become vested, but this is not a rule that applies in all jurisdictions. For example, in one case, the excess of the market price of the underlying stock over the exercise price of the unvested options was considered to be income.[3]

[3] *Seither v. Seither*, 779 So. 2d 331, FLA 2d DCA 1999

Personal Residence

Whether the personal residence is a marital asset is usually not an issue in divorce actions. However, parties can disagree on the valuation of the residence. Usually, the value is determined by a real estate appraiser, a market analysis (by a realtor), or a sale of the property. If the residence is not to be sold before the marriage ends, the tax on potential gain arising from a future sale of the property may be taken into consideration because this reduces the proceeds to the former spouse. Another aspect that may be considered is the burden of expenses (for example, commissions, legal fees, and closing costs associated with any potential sale). Some states will not consider expenses, as well as the tax on any gain, associated with a potential sale unless the sale is to occur in the very near future. Furthermore, if the sale date cannot be reasonably determined, state law might bar consideration of these expenses on the basis that the expenses are so speculative that they cannot be reasonably estimated and, thus, are not considered when the residence is valued.

Alimony and Support

To determine alimony and support, the income of each party is determined. The amount and nature of income includible in the marital estate is governed by state law. Often, the starting point is the income shown on the income tax returns of the parties; however, the practitioner may need to make a normalization adjustment or other adjustment for items not to be considered according to state statute or case law. For example, in states in which income and expense is defined in terms of cash flow, noncash expenses, such as depreciation, would be added to the income shown on the tax return.

An analysis of tax return items to determine their inclusion or exclusion from income may reveal inflated deductions. Of particular interest are deductions such as travel and entertainment and those listed as "other deductions." The analysis of the tax return, coupled with knowledge of the assets and liabilities of the spouses, can lead the practitioner to suspect that not all taxable income of the spouses was reported or that deductions were intentionally overstated. If this occurs, the practitioner may cease work and immediately notify the attorney engaged by the spouse for whom he or she is working. Because intentionally underreporting lareg amounts of taxable income is a criminal offense, the attorney may insist that the practitioner be engaged by the attorney (if this is not already the case) so that the practitioner's work is privileged. If one of the spouses has been unaware that taxable income was understated, he or she could be relieved of marital tax liabilities by means of the **innocent spouse rules** discussed later.

Alimony

The amount of alimony (sometimes referred to as *spousal support*) that will be paid depends, just as the determination of the amount of child support does, on state law. The factors that courts often take into consideration include the needs of the recipient (with consideration given to his or her health), the lifestyle enjoyed during the marriage, the income level of the recipient, and the length of the marriage.

Different types of alimony can be awarded. These include permanent, temporary, rehabilitative, and reimbursement. Permanent alimony continues until the death of the payer or recipient or, in some states, until remarriage of the recipient. The amount is usually subject to change for factors such as the health and income-producing capacity of either of the former spouses. Rehabilitative alimony is awarded for a short (usually fixed) period and is meant to help a former spouse reenter the workforce or acquire skills necessary to support himself or herself. The divorce decree may state that alimony is subject to review, which means that the amount may be increased, decreased, or discontinued. Reimbursement alimony is paid so that a spouse can compensate the other spouse for certain expenses incurred. For example, if during the marriage one spouse worked to enable the other spouse to attend law school, the spouse who worked may be reimbursed for an amount that compensates the spouse for the time and energy expended to help prepare the law school graduate for a career.

In addition, alimony can be considered non-modifiable if the amount is fixed and cannot be changed. Alimony often is made non-modifiable as a means of equalizing the division of marital assets when a perceived inequity exists. Thus, the transfer of assets is not made at or before the date of the final divorce decree but, instead, is distributed over time. Lump-sum payments can also be used to effect a settlement of alimony. Instead of making annual payments,

a single payment (or a few payments) is made, and the number of years over which the alimony would otherwise be paid is used to discount the payments to their present value.

From the standpoint of an equitable distribution, the income tax benefits to the payer can have an impact. The deductibility by the payer and inclusion in the recipient's income can shift income from the high income tax bracket payer to a lower tax bracket recipient and, thus, enables the high tax bracket individual to pay a greater amount of alimony than he or she would otherwise have paid due to the tax savings experienced.

Case in Point

Fred and Allison are divorcing after 25 years of marriage. Fred has been a CEO of a profitable company while Allison has stayed at home and raised their two children, who no longer live at home.

Fred and Allison are discussing the amount of alimony to be paid by Fred and received by Allison. Alison's attorney has engaged the services of John, a CPA, who has pointed out that after the divorce, Fred will be in a higher income tax bracket than Allison and, as a result, the marginal income tax rate of Fred and Allison should be taken into consideration in establishing the amount of alimony.

Fred asserted that he did not want to pay more than $20,000 to Allison. John has ascertained that much of Fred's income will be taxed at a marginal tax rate of 39.6 percent, and Allison's marginal tax rate is 15 percent.

John demonstrated, by means of the following calculation, that Fred would bear the burden of $20,000 by paying alimony of $33,113 because of the tax deduction that he would receive.

$$X(1 - .396) = \$20,000$$
$$X = \$33,113$$

Allison would pay income taxes of $4,967 ($33,113 × .15 = $4,967) on the $33,113 of alimony received and will be able to keep $28,146 (which is higher than Fred wanted to pay).

Therefore, the tax deduction for alimony enables the higher tax bracket taxpayer to bear a lower burden ($20,000, in this case) than the actual amount paid ($33,113); thus, the taxpayer can pay a greater amount of alimony than he or she would pay had the alimony not been tax deductible.

These calculations exclude considerations for state and local income taxes, which vary from state to state.

To qualify as income to the recipient and as a deduction for alimony by the payer, the payments must meet the requirements of IRC Section 71 and IRC Section 215 (see box 12.2). These requirements may differ from requirements imposed by state law for the payments to be considered alimony by the court. Therefore, to qualify the payments as deductible, the divorce decree should conform to the provisions of IRC Sections 71 and 215.

Use of Insurance and Other Property as a Means of Securing Alimony

In some states, courts can order the spouse required to pay alimony to purchase a life insurance policy or maintain an existing policy to secure the amount of the alimony awarded. When the court does not order insurance, the parties may simply agree to secure the payment of alimony by means of life insurance. In either event, the proceeds of the life insurance policy are not taxable income to the recipient.

The amount of insurance benefit may either be fixed or decline over time, and the owner of the policy may be either the payer of alimony or the recipient. If the payer of alimony is the owner of the policy, the court may require him or her to maintain the recipient of alimony as the beneficiary and can order the insurance company to respond to requests for information made by the recipient.

The payment of alimony can also be secured with property owned by the payer of alimony. This property can be assigned, mortgaged, or subjected to a lien and, thus, available for satisfaction of unpaid alimony should the payer renege on his or her obligation.

Alimony trusts can also be used to increase the likelihood that alimony is paid. According to IRC Section 682, any income from an alimony trust is taxable to the recipient, not the grantor of the trust. The portion of the trust distribution that pertains to the support of minor children of the grantor is not taxable to the recipient but is taxable to the grantor.

Although not considered marital property and not subject to division, the amount of Social Security benefits to be received by a spouse may be increased by deferring the date of divorce. Unmarried persons who are at least 62 years of age and were married for at least 10 years can receive Social Security benefits based on their earnings record or can receive 50 percent of the benefit based on the record of their former spouse (the former spouse must also be at least 62).[4] This choice can result in a considerably larger benefit for the spouse whose earnings record is lower than his or her former spouse. Thus, if a married couple is planning to divorce and is just shy of the relevant criteria (for example, age and length of marriage), they might consider deferring the divorce until the lower-earnings spouse qualifies for the greater benefit.

Box 12.2 Tax Deductibility of Alimony Requirements

Payments for spousal support (that is, alimony or separate maintenance payment) may be tax deductible for the payer and income to the recipient if all the following conditions are met:

- The payments must be in cash or its equivalent.
- The payments must be pursuant to a written divorce or separation agreement.
- The divorce or separation instrument does not stipulate the payments as not includible in gross income and not allowable as a deduction.
- At the time the payments are made, the recipient and payer are not members of the same household.
- There can be no liability to make the payments after the recipient's death.

Property Distributions as Alimony

In some cases, property distributions occur as a means of paying alimony. Property most commonly distributed as alimony is that which generates income. If a significant amount of alimony is paid within the first three years of a divorce, however, the payer may have to recapture, as income, a portion of the amount he or she deducted in the previous three years. This is known as the *alimony recapture rule*. The rule applies if the amount of alimony is reduced by more than $15,000 per year in any of the first three calendar years it is paid.

For example, assume that alimony of $36,000 is paid in the first year, $26,000 in the second year, and $10,000 in the third year (due to a court-approved modification of the amount of alimony to be paid). The amount of alimony to be recaptured is $4,500, which is determined as follows: first, by subtracting the third-year payments of $10,000 from the second year payments of $26,000, resulting in a difference of $16,000, which is $1,000 greater than $15,000. This $1,000 is recaptured. Then, the second-year payments of $26,000, less the $1,000 recaptured above, are added to the third-year payments of $10,000, and this sum ($25,000 + $10,000 = $35,000), divided in half ($35,000 ÷ 2 = $17,500), is combined with the floor ($15,000) to obtain $32,500. This amount is subtracted from the alimony paid in the first year ($36,000) and the result ($3,500) is combined with the previously determined recapture amount of $1,000 to obtain the total recapture amount of $4,500. The spouse who previously included the alimony in income may deduct the $4,500.

The recapture rule does not apply to payments made under a temporary support order or to payments that are a fixed portion or percentage of income (for example, if payments are fixed at 10 percent of the payer's income and this income decreases, no amount of the previously-paid alimony is recaptured). It also doesn't apply when payments cease due to the death of one or both of the former spouses or when the recipient spouse remarries before the end of the second year following the divorce.

[4] If a spouse who chooses to draw benefits based on his or her former spouse's earnings record becomes remarried, the spouse's benefit reverts to the amount that he or she would draw based on his or her own earnings record. The spouse can resume drawing the level of benefits based on the earnings record of the former spouse if the spouse subsequently becomes divorced.

Child Support

According to IRC Section 71(c)(1), the amount payable for the support of the payer's children is not includible in gross income of the recipient. Child support payments are also not deductible because they aren't alimony. This non-deductibility of child support has prompted some individuals to mask child support as alimony. IRC Section 71(c)(2) was enacted to discourage these attempts. According to regulations pertaining to this section (IRC Regulation 1.71-1T), amounts characterized as alimony are not deductible if the amount changes due to the occurrence of a contingency related to minor children, such as the attainment of a specified age, income, or death. For example, if the amount of alimony to be paid to a former spouse who has custody of a child younger than 18 years is $1,500 per month and, according to the divorce decree, the payment is reduced from $1,500 to $1,000 when the child attains the age of 18, $500 is considered nondeductible because it is deemed child support. The divorce decree need not specifically refer to the event in terms of the child. For example, if a child for whom support is being paid turns 18, 21, or the local age of majority on April 1 and the alimony payments are to decrease by $600 per month on August 10, the IRS may challenge the deductibility of the $600 because the reduction occurred within six months before or after the child ceased to be a minor (IRC Regulation 1.71-1T).

In addition to the impact federal law has on inclusion and deductibility for income tax purposes, state law affects the amounts required to be paid as child support and, in some cases, will even specify the maximum amount that can be paid as support. The amount of child support can based on factors such as the number of children to be supported and the standard of living to which they've become accustomed. The practitioner can help determine the standard of living by performing a **lifestyle analysis**.

When determining the amount of child support to be paid, state law may specify that income is to be imputed to an underemployed payee spouse. Imputation is usually based on the earning capacity of the payee spouse when the amount of support is determined and can later be changed if circumstances warrant a change. Some states exempt from imputation underemployed spouses who care for young children or who are physically incapable of earning amounts otherwise expected.

An issue related to child support is the granting of the dependency exemption to a noncustodial parent. In the usual situation, the custodial parent is allowed to take an exemption for a dependent if certain tests (for example, support, found in IRC Section 152, Dependent Defined), are met. One of these tests (the residency test) specifies that the child must live with the parent for more than half the year if the parent is to claim the exemption. Special rules found in IRC Section 152(e) that apply to children of divorced or separated parents relax this residency requirement and allow a child to be treated as a qualifying child of the noncustodial parent if certain conditions are met, including the condition that the parents are divorced or legally separated under a decree of divorce or separate maintenance; separated under a written separation agreement; or living apart at all times during the last six months of the year. One of these conditions is that the custodial parent must sign Form 8332, Release/Revocation of Release of Claim to Exemption for Child by Custodial Parent (or a statement containing information similar to the information contained in Form 8332).The noncustodial parent must attach this form (or similar statement) to his or her income tax return. Form 8332 contains the statement that the custodial parent will not claim the child as an exemption for a specific year. Alternatively, the custodial parent can agree not to claim the exemption for more than one year (the years must be specified on the form). This form also allows a custodial parent to revoke a prior release of exemption. Executing this agreement, which can be discussed at the time of divorce, can result in tax savings for noncustodial parents and is particularly useful when the custodial parent's income is taxed at a lower marginal income tax rate than the marginal rate of the noncustodial parent.

Fraud in Matrimonial Engagements

At times, individuals will intentionally engage in efforts to misstate assets, liabilities, income, and expense in order to keep a greater amount of assets for themselves while reducing the amount of assets available for distribution to their spouses. This concealment is fraud and may likely meet the legal definition of *criminal behavior*. Fraud can be discovered by the practitioner, attorney, spouse, or other family members and close friends. The practitioner may be asked to investigate fraud that is discovered or suspected during the divorce action or allegations of fraud that arise after the divorce has been finalized. In this section, a brief introduction of ways spouses have intentionally obfuscated their correct income and financial position is given. These methods of concealment are not exhaustive but are presented to make the practitioner aware of the manner by which fraud can be perpetrated in a divorce.

The significant amount of time that elapses between the divorce filing and issuance of the final decree of divorce provides opportunities to spouses who choose to engage in fraud to reduce the marital estate. Fraud that occurs in divorce might not, however, be motivated simply by the desire to disadvantage the other spouse. It may be perpetrated to cover up extramarital affairs, or avoid negative publicity or involvement by the spouse in illegal activities, such as drug dealing or selling of counterfeit merchandise. In these situations, the spouse committing fraud does so by not disclosing on the **financial affidavit**, under oath, the assets and income related to the activity. Nondisclosure, when disclosure is required by the standard of duty owed the other party, is one method by which a spouse can conceal information. Information about assets, liabilities, income, and expenses of the marital estate can also be concealed by making false statements about the value of these items.

False statements can be oral or written. When the practitioner has reason to suspect fraud, a spouse's simple answer of "yes" to the question, "Have you disclosed all assets, liabilities, and items of income?" may be corroborated or refuted by the other spouse and by the examination of other evidence (usually documents). Be cautious: Some spouses will go to great lengths to provide written materials that are fabricated to support positions they believe are in their best interests. These documents can be created during, or in anticipation of, the divorce and may have been created long before any marital dissatisfaction arose. One example of the latter kind is the creation of dummy income tax returns to enable a spouse to fraudulently obtain a business loan.

Caution should be exercised if the income and expense shown on income tax returns is relied upon, particularly when the business is small and family-owned. Business owners can intentionally underreport income or deduct items on tax returns that were of a personal nature and not the ordinary and necessary business expenses allowed by IRC Section 162, Trade or Business Expenses. The tax returns on which the owners reported these unallowable deductions may have survived the scrutiny of an IRS audit because tax auditors often focus on certain items identified as highly likely to be misstated; the tax auditor has only a certain amount of time to examine the return; and the taxpayer may have so well concealed the unallowable items that detection is nearly impossible. In a divorce action, however, there are sources of information not always available to the IRS auditor. These sources include the business owner's family, particularly the spouse of the business owner, who might be very willing to provide information to his or her CPA and attorney but who might be unwilling to share that same information with the IRS if a divorce action was not pending. Therefore, the practitioner should not necessarily assume that because the tax return was audited and no major issues were found by the auditor that the business deductions appearing on the returns are not personal.

If the practitioner is confident that he or she has income tax returns that were filed with the IRS, these returns could be compared to any personal financial statements that were submitted to obtain loans. Although the financial statement showing assets and liabilities may be stated on a fair value basis, the income is expected to correspond to the income found on tax returns for the same period.

Case in Point

Lest an ex-spouse thinks he or she will get away with fraud committed in connection with a divorce, consider the case of Chun Wei and his wife, Joan. Five years after the divorce was finalized and while seeking to increase the level of child support, Joan received some financial documents that caused her to discover that documents that her former husband had given her during the trial were falsified.

She filed for breach of fiduciary duty, fraud, constructive fraud, intentional and negligent misrepresentation, and conspiracy, claiming that after she filed for divorce, her then husband and his bookkeeper delayed billing patients, withheld payments received on accounts receivable; and falsified financial records, financial statements, and income tax returns to incorrectly reduce the value of her husband's medical practice. Upon appeal, the California appellate court upheld her claims (*Dale v. Dale*, 66 Cal. App. 4th 1172, 78 Cal. Rptr. 2d 513 [1998]).

If one spouse has misstated tax liability without the knowledge of the other spouse, the spouse who had no knowledge of the misstatement could be relieved of a portion of the marital tax liabilities by means of the innocent spouse rules. According to IRC Section 6015, Relief from Joint and Several Liability on Joint Return, five tests must be met before the taxpayer can be relieved of the understated tax liability (see box 12.3 on the following page).

Box 12.3 Innocent Spouse Relief

Innocent spouse relief may be sought if the spouse claiming relief

- files a joint tax return, which has an understatement of tax;
- was liable for an understatement of tax due to erroneous items on the joint return;
- at the time he or she signed the joint return, did not know, and had no reason to know, that there was an understatement of tax;
- files the innocent spouse election within two years after the IRS first begins a collection action against him or her; and
- would be unfairly treated if, taking into account all facts and circumstances, he or she was held liable for the understatement of tax.

IRC Section 6015(d)(3)(C) states that an allocation of an item that gave rise to the deficiency can be made by the Secretary if the application is appropriate due to fraud committed by one or both of the spouses.

To avail himself or herself of the relief provisions, the innocent spouse must file Form 8857, Request for Innocent Spouse Relief.

IRC Section 66, Treatment of Community Income, provides relief to taxpayers who reside in community property states (taxpayers in community property states pay their share of taxes on community income) and who, for example, are not aware of certain items of income and, therefore, does not pay tax on the items.

Methods of Concealment

Spouses can conceal assets and income by using many different methods. These methods are more numerous if the spouse who does the concealing owns a business. Still, spouses who are employees have opportunities to hide assets, especially cash. For example, if the spouse is an employee, he or she could deposit part of bonus payments into a bank account whose existence is known by both spouses and deposit the balance in a bank account known only to him or her. Alternatively, the spouse could simply keep part of the bonus in cash while depositing the balance in a known bank account. One way the practitioner can uncover this type of scheme is by reconciling the W-2 form wages to the amount of cash deposited or otherwise used. The practitioner also could question the employee or, with the help of an attorney, question the employer about bonuses paid, particularly if the employee spouse has received bonuses from that employer in prior years.

Locating hidden bank accounts can provide a wealth of other information about the financial profile of the "concealing" spouse. For example, disbursement information can disclose credit cards whose balances have not been listed as liabilities of the marital estate. Requesting credit reports during the examination can help identify other liabilities that have not been disclosed.

Spouses who own businesses, such as proprietorships, partnerships, or closely-held companies, have an even greater number of opportunities to conceal income (and, thus, assets purchased using that income) or the nature of expenses. A few of these opportunities, along with potential ways to investigate them are shown in box 12.4 on the following page.

The practitioner is to maintain professional skepticism so that any important indications of concealment are adequately investigated. According to a 2010 survey conducted to investigate trust issues of couples, 32 percent of those sampled said that their spouses (or former spouses) had hidden money, purchases, bank accounts, or had lied about the amount of debt owed or money earned.[5] In a divorce, spouses have additional incentives (that is, motives) to engage in this type of activity to take revenge or simply to satisfy their greed.

[5] National Endowment for Financial Education. January 14, 2011. www.nefe.org/press-room/news/admitting-to-financial-deceptions.aspx

Box 12.4 Illustrative Methods of Concealment and Investigative Techniques

Methods of Concealment	Investigative Techniques
Revenue	
Skimming revenue	Compare revenue reflected in business records to non-financial indicators such as number of patients seen; compare sales records for the period prior to filing for divorce[1] to the period after divorce was initiated
Exchanging cash (or checks) earned in a business for products or expenses	Compare levels of cash (including checks) received prior to the time the divorce became imminent with the level of cash after divorce was initiated; compare levels of inventory and cost of sales for periods prior to filing to post-filing periods; contact suppliers to determine how they are paid and whether any changes in method of payment have recently been made
Delaying or postponing indefinitely the recognition of revenue by arranging for customers (clients) to sign sales contracts after the divorce is finalized or requesting that customers (clients) not pay until after the final divorce decree is issued	Compare revenue prior to the commencement of divorce to levels that are shown after the divorce filing; contact customers (clients) to ask them if any arrangements have been made to delay payment
Mischaracterizing revenue as loans	Analyze revenue and loans payable for periods before and after the initiation of divorce proceedings to determine whether any mischaracterizations have occurred; request loan documents and confirm loans with lenders
Expenses	
Prepaying business expenses and expensing them, rather than correctly classifying these prepayments as assets	Compare the amount of prepaid expenses after the initiation of divorce proceedings to the amount that existed prior to initiation; examine invoices and communicate with vendors about the periods the prepaid assets covered; compare cash expenditures for these types of expenses prior to and subsequent to initiation of divorce
Overpaying vendors, accompanied by the agreement of the vendors to give the business-owner spouse credit to be used against future purchases	Compare payments made to vendors after the initiation of divorce proceedings to the amounts paid prior to initiation and inquire of business-owner spouse and vendor if levels differ significantly; examine vendor statements for debit balances
Paying fictitious employees	Examine personnel files for completeness of files and other evidence that suggests the employees exist; compare Social Security numbers in the personnel files to numbers in the Social Security Death Index; attempt to interview suspected fictitious employees; obtain signatures of employees and compare to signatures found in personnel files; examine supporting documentation for payroll tax returns to determine if withholdings and expenses for all employees were included in returns

Box 12.4 **Illustrative Methods of Concealment and Investigative Techniques *(continued)***

Methods of Concealment	Investigative Techniques
Expenses	
Deducting personal expenses of the spouse as business expenses[2]	Analyze accounts, such as miscellaneous and travel and entertainment; vouch entries in the accounts to invoices to determine nature of items paid; note whether suspected expenditures were made at regular intervals (for example, payments could be for second homes or apartments); determine whether expenses are reasonable for the business
Salaries paid by the business for income earned by the business-owner spouse but mischaracterized as loans or advances to the business-owner spouse[3]	Obtain an analysis of the loan accounts from the financial records; vouch entries in the loan accounts to loan documents and board of directors minutes; examine board of directors minutes for references to agreements signifying that advances were made; if not paid by the date the divorce was finalized, inquire about the date by which the supposed liabilities will be paid; determine if these types of loans and advances have been made in the past by this business and to whom they were made

[1] Note that the period of time selected can have an impact on the investigation; sometimes, when the skimming is done in anticipation of divorce, it can occur long before the other spouse is aware that the business owner is considering filing for divorce.
[2] This action has the effect of lowering the net income of the business which, in turn, lowers the value placed on the business for purposes of the marital estate. Furthermore, it can, if not properly included in the personal income of the spouse, reduce—incorrectly—the amount of income determined by the court as available for support and, thus, negatively affect the level of support paid to the non-concealing spouse.
[3] This action, although increasing the income of the business, can reduce the personal salary paid to the business owner and, thus cause the amount of income available for support to appear low.

Summary

Forensic accountants can play many roles in matrimonial actions, particularly when assisting attorneys as they prepare for trial and during the trial itself as expert witnesses. They can also serve important roles in ADR engagements. They are to have sufficient expertise and be free from conflicts that would compromise their objectivity. Knowledge of the legal process; state law that pertains to matrimonial actions; methods of searching for assets, liabilities, income, and expenses that are not listed by the spouses on financial affidavits; and methods by which assets and liabilities are valued is crucial to the success of the practitioner in matrimonial engagements. A heightened sense of skepticism will aid the practitioner when determining whether all assets, liabilities, income, and expenses are disclosed as part of the marital estate.

The court divides the property in accordance with the law and must adhere to the rules established by the state regarding whether property is considered *marital* (also known as *community property*) or separate property. Marital property is usually divided between the parties, whereas separate (that is, non-marital) property generally is not divided. As a practical matter, the practitioner will become familiar with the relevant laws in the state where the divorce occurs.

One of the earliest actions performed by a forensic accountant is listing all assets and liabilities that could be includable in the marital estate and then, from that inventory, excluding any assets that are not to be considered because they are not subject to division. To ensure that the identification and disclosure is as complete as possible, the practitioner will usually obtain and analyze documents and resources such as tax returns and financial statements.

After the assets, liabilities, income, and losses of the marital or community estate have been identified, their value for purposes of division and distribution is determined. Most likely, the values will change between the required valuation date and the date on which the actual distribution occurs.

To determine alimony and support, the income of each party is determined. The amount and nature of income includible in the marital estate is governed by state law. Often, the starting point is the income shown on the income tax returns of the parties; however, the practitioner may need to make a normalization adjustment or other adjustment for items not to be considered according to state statute or case law.

At times, individuals will intentionally engage in efforts to misstate assets, liabilities, income, and expense in order to keep a greater amount of assets for themselves while reducing the amount of assets available for distribution to their spouses. This concealment is fraud and may likely meet the legal definition of *criminal behavior.* Fraud can be discovered by the CPA, attorney, spouse, or other family members and close friends. The practitioner may be asked to investigate fraud that is discovered or suspected during the divorce action or allegations of fraud that arise after the divorce has been finalized.

References

American Institute of Certified Public Accountants (AICPA), *A CPA's Guide to Family Law Services*. Business Valuation and Forensic & Litigation Services Section. 2005.

Review Questions

1. All of the following are true about arbitration in a marital setting except
   a. Arbitration can be binding.
   b. Arbitration can be nonbinding.
   c. Most arbitration is nonbinding.
   d. Most arbitration cannot be appealed.

2. Before a practitioner accepts a matrimonial forensics engagement, he or she considers whether he or she
   a. Can be objective.
   b. Is competent in the area of matrimonial forensics.
   c. Is a good communicator.
   d. All of the above.

3. In divorce, state law
   a. Always takes precedence over federal law.
   b. Usually takes precedence over federal law.
   c. Never takes precedence over federal law.
   d. Does not take precedence over federal law, except in the area of pensions and certain other retirement assets.

4. Debt secured by an asset and considered a marital asset in a non-community state will be divided
   a. Equally.
   b. According to the proportion of assets that are divided.
   c. According to the distribution of the asset that is used as security for the debt.
   d. According to a plan drawn up by a disinterested party other than the judge or jury.

5. The valuation date in a divorce engagement can be any of the following except
   a. Date of separation.
   b. Date of trial.
   c. Date of marriage.
   d. All of the above dates are dates on which assets can be valued in a divorce setting.

6. If an equalization note does not have a stated interest rate,
   a. A rate must be imputed.
   b. A rate need not be imputed for equalization notes used in divorce actions.
   c. A rate must be imputed only if the rate is below the market rate at the time the note was created.
   d. A rate must be imputed if the due date of the note is unreasonable.

7. In which of the following settings is the intrinsic value standard most likely to be applied?
   a. Local ownership of a national restaurant franchise.
   b. Automobile repair shop.
   c. Physician.
   d. Computer programmer.

8. A court order has been issued to divide retirement benefits in the divorce action of Pam and Jerry. The court order has not yet been approved by the trustee of the retirement plan. The court order, at this time, is a
   a. Qualified domestic relations order.
   b. Domestic relations order.
   c. Decree.
   d. Benefit separation order.

9. The reason tax consequences related to subsequent events (for example, exercise of options) are considered is that
   a. Receipt of these assets pursuant to a distribution of the marital estate should be avoided.
   b. Inadequate consideration of tax consequences can create an inequality that may be overlooked by the court and create a hardship on a party to the divorce action.
   c. The tax consequences must be disclosed to the IRS by the date the divorce is finalized.
   d. The court should determine whether one or both parties have not complied with tax law.

10. According to federal income tax laws, to be includible in the income of the recipient and deductible by the payer, alimony payments must meet all but which of the following?
   a. The payments must be pursuant to a written divorce or separation agreement.
   b. At the time the payments are made, the recipient and payer are not members of the same household.
   c. If a requirement exists to make payments after the recipient's death, the payments must be to a qualified individual (for example, a child of the payer).
   d. The payments must be in cash or its equivalent.

11. Brenda is married to Tom. Three years ago, Tom confided in Brenda that he had overstated certain expenses of his unincorporated business in order to lower the amount of taxes to be paid. Brenda knows that Tom has consistently done this for the last three years. Can Brenda avail herself of the innocent spouse rules contained in IRC Section 6015 for the amount owing for last year?
   a. Yes, because Brenda did not commit this act of evasion.
   b. Yes, but only if Brenda did not file separate tax returns during the last year.
   c. Yes, if Brenda files the election referred to in IRC Section 6015 within two years after the IRS begins collection efforts against her.
   d. No.

Short Answer Questions

1. What is the importance to forensic accountants of maintaining objectivity with respect to their role in matrimonial actions, and how does this role differ from the role played by attorneys?

2. What are three functions a forensic accountant can perform in divorce engagements?

3. What are the differences and similarities between arbitration and mediation?

4. Is it likely that a local CPA firm will practice matrimonial forensics in many different states? Why or why not?

5. What are the four factors a forensic accountant should consider before accepting an engagement?

6. What is the importance of filing a counterclaim in the context of a divorce action?

7. What are the two standards of conduct that can exist in a marriage, and what major difference between them can affect divorce actions?

8. With respect to the division of property, what is the difference between community property states and states that are not community property states?

9. In what way can an equalization note be used in a marital dissolution?

10. What are the names of three assets that deserve special attention with respect to their potential tax consequences?

11. What are the sources of documents or resources that can be used to identify assets, liabilities, and income and expenses of spouses? (Name at least four sources.)

12. What is the standard of value most often used in divorce actions to value assets and liabilities? Provide a brief description of this standard.

13. What is the purpose of normalization?
14. What is the difference between defined benefit and defined contribution pension plans? Identify the plan that provides the greater amount of risk for the spouse receiving benefits (assuming continued existence of the plan).
15. Why would a spouse who owns a business and who is a party to a divorce prepay business expenses and deduct them immediately, rather than not prepay them or, if paid early, properly treat them as a prepaid asset?

Brief Cases

1. Sally and Jim are thinking of separating but want to go to court only as a last resort. They've been told by their attorneys about alternative dispute resolution (ADR). List three approaches of ADR and briefly discuss the roles that forensic accountants can play when these approaches are used.
2. John Smith, a forensic accountant, is assisting counsel in a matrimonial engagement. One of John's duties is to determine whether adequate documents are requested during discovery. Name and discuss the benefits of using three documents that are generally helpful in locating assets, liabilities, income, and expenses in divorce settings.
3. Tom and Jenny are divorcing. Tom is the sole owner of a corporation that has expensed what Jenny's attorney believes is excess compensation. Jenny's attorney insists that the excess compensation (net-of-tax) be added back to the corporation's net income for purposes of valuing the corporation. Jenny's attorney is also seeking spousal support based on Tom's salary, which includes the excess compensation. What is the approach that Jenny's attorney is taking? Is there any problem created by this approach?
4. When determining the level of alimony to be paid to his client, attorney Jack Diamond recommended that amounts shown on Form 1040, U.S. Individual Income Tax Return, for last year be used. Are there any concerns that the other party to the divorce action might have regarding Jack's suggestion?
5. Ann Lively, a CPA, has established a working relationship with a number of attorneys in her area. One attorney, Jim Jeffries, is one for whom Ann has done a lot of work. Recently, Jim called Ann and asked her if she would be willing to assist him in a divorce action that most likely will go to trial. What is a potential objection that could be raised by opposing counsel, and how might this objection be overcome?
6. Joe and Carla have been married for 11 years. Joe brought to the marriage an apartment complex that the couple rents to others. Joe and Carla have actively managed this property during their marriage. Carla is suing for divorce and wants ownership of one-half of the property. Is she likely to succeed?
7. Linda and Justin have been contemplating divorce during the last year. This year, after they filed for divorce, a forensic accountant was engaged to value Linda's architectural firm, a medium-sized firm having between 10 and 15 employees, including several architects. The forensic accountant noticed that the firm was not as profitable last year compared to previous years. Although the issue seemed to be higher salaries, Linda claimed that she had been so distraught over the impending divorce that she could not focus on conducting business. What might the forensic accountant do to investigate further?
8. Joanna and Edward are divorcing after 12 years of marriage. Joanna had inherited a condominium from her father six years before she and Edward were married. At the time of inheritance, the condominium had a fair value of $120,000 and, when Joanna and Edward got married, had a fair value of $160,000. The appraisal of the condominium performed for purposes of the divorce resulted in a fair value of $220,000. Assuming that either Joanna or Edward actively managed the condominium during their marriage and treat most items as being equally divisible, what is the value, if any, that Edward is likely to receive?
9. Gary and Martha have been married for seven years but have agreed to divorce. Their assets include cash, certificates of deposits, personal residence, stocks in start-up companies, and a parcel of land that is located in an undeveloped area of town. The land was bought as a speculative venture by the couple. The only liability they have is a mortgage on their personal residence. Martha is a financial analyst and a risk-taker, whereas Gary works as a

salesman for an automobile parts dealer and is very conservative (a difference that caused considerable acrimony during their marriage). What factors might a forensic account take into consideration when assisting this couple determine who receives particular assets? Which assets could be distributed to Gary, and which assets could be distributed to Martha? What can be done if an imbalance of value exists?

10. Greg has been the accountant for Tom and Deanne for the last five years. During that time, he has performed accounting and consulting services for Deanne's business, Kennel Haven, a thriving business. He also prepared the income tax returns for that business as well as the joint personal income tax returns of Tom and Deanne. Most of the fees that Greg has received for the services he's performed have been due to Deanne's business (Tom earns a salary as a driver for a trucking company). Over the years, Tom and Deanne have grown apart and are now in the process of divorce. Deanne has insisted that Greg give advice to her and Tom on various aspects of the divorce and has indicated that she wants to continue using Greg as the accountant for Kennel Haven. Is there any issue that might be a concern here?

Cases

1. Jerry is the sole stockholder in a C corporation that operates a chain of retail stores that specializes in selling home furnishings, such as furniture, curtains, rugs, and garden ornaments. He started the business 15 years ago and has done so well that three years ago he began looking into ways that would help him lower the amount of corporate taxes paid each year. Things haven't been going so well on the homefront: He and his wife, Pam, have not been getting along for the last two years. Pam and Jerry have seen a marriage counselor and, during a few of these sessions, Jerry has complained about how their marital woes have adversely affected his business. "The bottom line is taking a hit because I can't keep my mind on my business," Jerry recently said to his friends and anyone else who would listen.

   Jerry and Pam soon came to the conclusion that they should divorce. They each retained separate attorneys, and you were hired as the forensic accountant by the attorney who represents Pam. You've been pouring over the financial records of the business and have noted that for the most recent year, the income tax return of the corporation (Form 1120) showed sales of $10,000,000 and cost of sales of $4,500,000. The other expenses totaled $3,750,000 leaving income before income taxes of $1,750,000.

   You note that inventory and cost of sales is determined by applying the last-in, first-out (LIFO) method. An analysis of the inventory reveals that the difference between LIFO and first-in, first-out (FIFO) (FIFO is believed to state inventory at an amount closer to its current value) is $325,000. Furthermore, you discover the following items that relate to the current year:

   - An IRC Section 179 expense of $300,000 was taken on qualified equipment during the year. This amount is $240,000 greater than the modified cost recovery system deductions that would have been taken had Jerry not claimed the IRC Section 179 expense.
   - Cost recovery deductions (that is, depreciation expense) of $5,000 for a personal vehicle (used entirely by Pam) were deducted on the corporate income tax return. Expenditures of $400 for repairs and maintenance, license tag renewal, and tolls pertaining to this vehicle were also deducted.
   - Expenditures of $10,000 that appear to have been for a personal vacation were deducted as travel and entertainment.
   - A salary of $1 million was paid to Jerry, and a salary of $250,000 was paid to Pam. You questioned Pam about the salary and found that she was unaware that she was being paid. Furthermore, she said that she wasn't involved at all in the business. When you compared Jerry's salary to the salary he had been paid over the years, you found that it had increased by 5 percent in each of the last five years until last year, when it was increased from $450,000 to $1,000,000.
   - Repair expenses appeared to be $75,000 higher in the current year than the average of repair expenses during the last five years. When questioned about this, Jerry seemed to hesitate and then muttered, "There were a lot of repairs last year, weren't there?" The maintenance person in charge of the store where the repairs were believed to have been made insisted that no repairs had been made. Further examination of the

vendor invoices revealed that the expenditures were for the acquisition and installation of an in-ground pool and materials to construct a screened-in patio. Your follow-up with Pam confirmed what you had suspected: The patio and pool work had been done at Jerry's and Pam's residence.

Required

a. What is the amount of income before income taxes for Jerry's business after normalizing the income?
b. What questions would you like to ask Jerry about the salary of $250,000 paid to Pam, and what might you do before pursuing this line of questioning? Are there any other procedures that you could perform in this situation?
c. Which items in your adjustment used to arrive at the income before income taxes in part (a), if any, do you think Jerry, his attorney, and their forensic accountant will contest?

2. Allen and Rebecca have been married for 20 years. Allen is a salesman for a large clothing retailer, and Rebecca is CEO of a medium-sized, publicly-held company. Within the last few months, Rebecca could be found at the office working 12 hour days. As a result, Allen and Rebecca are now living largely separate lives, only seeing each other for a few hours on the weekends. Due to her busy schedule, Rebecca was happy that Allen assumed responsibility for reconciling the checkbook, paying the bills, managing their investments, and preparing their joint income tax return.

Both Allen and Rebecca earn incomes in the middle six-figures and have done well over the years. Allen, though, has grown resentful of his wife's position in her firm and perceives her desire to get ahead in life as the major reason he feels neglected. The more resentful Allen becomes, the less time Rebecca wants to spend with him. She was not surprised when he hurriedly shoved their joint income tax return at her on the kitchen counter one morning before work on April 15 and said, "Sign this." She signed the return, happy that he was taking care of what seemed to be a tedious task during a time of great stress for her at work.

When Rebecca returned home that night, Allen was waiting for her. "I want a divorce, Rebecca," Allen said slowly. "Don't worry," he continued, "I've prepared a summary of our checking accounts, cars, house, and investments as well as the two loans that we have, you know, the home mortgage and the two car loans, so that we can settle this like civilized people. I just want you to be okay, so I've tried to make this as easy as possible for you." Although she was surprised by the news, she was even more surprised that he was so…so nice about it. "What a contrast to the attitude he's had during the last year," she thought, "Well, perhaps he's relieved. Apparently, this is what he wants, and he wants out without much fuss."

You are a forensic accountant and have been hired by Rebecca's attorney.

Required

a. What could Allen have done to reduce the marital estate so that he keeps more assets than the amount to which he's entitled?
b. What documents would you suggest that the attorney request during discovery?

3. Don and Cheryl have not been happy with their relationship for years. Now, their discontent has led to Cheryl filing for divorce. Cheryl has been immensely successful in her career as a corporate attorney in one of the largest firms in North America. Don is a struggling artist who, in his words, "Hasn't made it big, yet." Don has contributed to the marriage by taking care of household tasks so that Cheryl is able to focus on her career. Their teamwork seemed to have finally paid off: Cheryl became a partner in her law firm a few months ago. Cheryl's stress and long hours at work, though, has taken its toll on their marriage.

The two live in a rented apartment in Manhattan on the east side of Central Park and, before Cheryl's final push for partnership, enjoyed a life that only a few dream about. Broadway was only a few blocks away, as was Times Square and Rockefeller Center. Once a week they would visit lower Manhattan and eat at a little Chinese restaurant on Liberty Street. Those were the days they thought would never end.

Cheryl had no difficulty paying spousal support to Don, partly because of these good memories and partly because he, unlike she, had not yet achieved his dream. Although he had sold a few paintings that had fetched a considerable sum, the sales did not occur often enough for him to be fully self-sufficient. The focal issue of the divorce was the amount of support Cheryl would pay. Don enjoyed living in Manhattan because of the

creativity its surroundings fostered, but Cheryl was not willing to pay what she believed would be an amount necessary for him to live there. Her words at the last meeting with the attorneys were, "I will not pay more than $10,000 per month."

Required

a. Determine the approximate amount Cheryl could pay and still only have to pay $10,000 per month ($120,000 yearly). Assume that her marginal federal income tax rate is 39.6 percent, and her New York state marginal income tax rate is 6.85 percent. Assume that Don's federal marginal income tax rate is 28 percent, and his New York state marginal income tax rate is 6.65 percent.
b. Explain, clearly and concisely, as though you were talking to a friend who does not understand the details of accounting and tax issues, your findings in part (a).
c. Can this amount of alimony be modified in the future if Cheryl's and Don's situations change? Describe the factors that could cause a change to the future level of spousal support.

4. Debra and Andrew are getting divorced after 16 years of marriage. One of the assets to be distributed is their principal residence, which they have owned for 15 years. The federal tax law in effect assesses a capital gains tax of 15 percent on gains above $250,000, if sold by a single person and 15 percent on the gain above $500,000 for married couples, if the couple sells the house during a year in which they file a joint income tax return. The tax basis of their house is $375,000, and houses similar to theirs that have recently sold in their neighborhood have fetched prices between $900,000 and $1,300,000. (Assume they will have owned and used their home as their main home for at least two years out of the five years prior to the earliest date they contemplate selling the residence.)

   Required

   If Debra and Andrew want to maximize the amount of marital assets to be distributed, what would you recommend?

5. Kevin, who has been dissatisfied with his marriage to Lisa for years, owns an automotive repair shop that has been very profitable over the years due to the reputable work that Kevin does. In anticipation of filing for divorce, Kevin began to engage in some acts to lower the net income of his business. Two years before filing, he began to skim money. In addition, he convinced some of his suppliers to accept some of the cash and checks he had received from customers as payment for automotive parts. The combination of these actions caused the business to appear to be less profitable and one that reflected a lower level of activity.

   Required

   What are some procedures that a forensic accountant could perform to detect such schemes?

Internet Research Assignments

1. Find the state statute pertaining to divorce for your state of residence (use search terms such as *dissolution of marriage, support*, and *alimony*). Try to locate the section that addresses the distribution of marital assets and liabilities. What factors does your state consider? Does the statute refer to assets and liabilities that are non-marital?
2. Compare and contrast your findings in question 1 with information you find on the Internet for another state.
3. Visit the American Bar Association (ABA) Section of Family Law at www.americanbar.org/groups/family_law.html for resources available to practitioners (Note: If you are not a member of the ABA, disregard any information that is available only to members).
4. Visit the *Journal of Accountancy* online at www.journalofaccountancy.com/ and use its search engine to search for articles on divorce and related issues.
5. Visit the state bar association site and the state CPA society for your state of residence and use their search engines to search the term *divorce* to become familiar with resources that are available.

Chapter 13
Financial Statement Misrepresentations

Learning Objectives

- Define financial statement misrepresentations
- Describe the difference between errors and fraud in financial statements and understand the continuum of seriousness
- Explain the difference between earnings management and financial statement fraud
- Discuss the common ways revenue is improperly recognized
- Explain the common methods in which assets are misstated
- Discuss the common ways in which expenses and liabilities are understated
- Discuss common off-the-books arrangements
- List ways financial statement presentation can be manipulated
- Describe the types of opportunities, motivations, and rationalizations used by people who commit financial statement fraud
- List common red flags of financial statement fraud
- Describe the common investigation techniques used by forensic accountants
- Discuss the best practices of fraud prevention
- Describe the common ways SEC investigations are triggered and the process used by this agency to investigate violations of the securities laws
- Discuss the requirements of the Foreign Corrupt Practices Act and the major steps taken during investigations

Introduction

At times, forensic accountants will be called upon to determine whether financial statements misrepresent financial position, results of operations, and cash flows. In this respect, forensic accountants sometimes perform duties similar to those performed by auditors of financial statements, which is to determine whether financial statements were prepared and presented in accordance with an applicable financial reporting framework, such as accounting principles generally accepted in the United States of America (GAAP). (Hereinafter, the term GAAP will represent an applicable financial reporting framework, even though other frameworks are also acceptable.) Whereas an audit is usually

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

performed on an annual basis and for the benefit of owners, prospective owners, lenders, and regulatory agencies, an examination of financial statements by a forensic accountant is usually performed on an ad hoc basis and at the request of a party that either has reason to suspect that the financial statements contain misrepresentations or could experience significant losses if the financial statements are misstated.

The major difference between auditors and forensic accountants is the objective: Auditors perform procedures almost exclusively to determine whether the financial statements, taken as a whole, are fairly presented in accordance with GAAP and issue an auditor's report, whereas forensic accountants perform procedures to accumulate evidence that is admissible in a court of law. Forensic accountants may testify in court about their findings, whereas auditors usually do not.

In this chapter, the major types of misrepresentations, how they occur, and how they can be detected and prevented is discussed.

Financial Statement Misrepresentations Defined

Financial statement misrepresentations are quantitative or qualitative statements that are included or excluded from an entity's financial statements (including disclosures) that cause the financial statements to portray financial position, results of operations, and cash flows in a manner that is not consistent with the entity's underlying financial position, results of operations, and cash flows.

Notice that the preceding definition does not indicate that the misrepresentations are intentional. Misrepresentations can occur due to error or fraud. Although the forensic accountant is interested in whether the financial statements are misstated because decisions, such as business valuations, are made using these statements, he or she is also concerned about whether any misrepresentations appear to be intentional. For example, if a business is being valued for purposes of divorce and the valuation is based, at least in part, on financial statements provided, a significant misstatement (hereinafter, the term *misstatement* will be used interchangeably with the term *misrepresentation*) of the financial statements would affect the distribution of marital assets. Furthermore, if the financial statements appear to have been intentionally misstated, other statements and information provided by the spouse who was associated with the misstated financial statements will be viewed with suspicion.

It is worth noting here that financial statements that do not fairly present financial position, results of operations, and cash flows may have been prepared by persons who did not cause the misstatement. For example, if an employee skims cash receipts associated with sales, the balances of revenue, assets, owners' equity, and cash flows in the financial statements is understated. Although fraud is involved, the objective is not to affect the financial statements, but only to enrich the employee who embezzled the money. The amount skimmed most likely will not result in a material misstatement of revenue for many companies, although for small companies, the amount could be material.

A Continuum of Seriousness

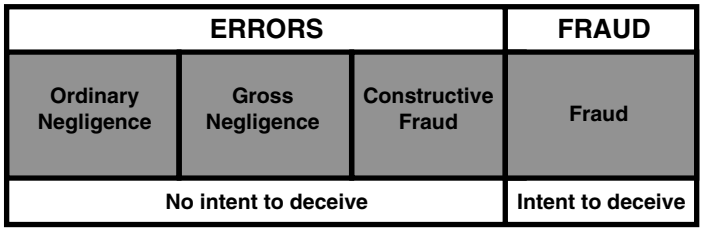
Financial statement misrepresentations can range from errors to fraud. Errors in the financial statements are the result of actions (or inactions) devoid of an intent to deceive, whereas financial statement fraud is the result of actions (or inactions) of one or more persons who intend to deceive. Fraud can be committed to cover up what was originally an error; therefore, when an error is discovered, the possibility that someone knew of the error and did not report it will be considered. In addition, there is a continuum of seriousness with respect to misstatements. The seriousness of misstatements depends on the magnitude of the misstatement and the cause of the misstatement. Large misstatements are a concern to the forensic accountant, as are misstatements that occur as a result of fraud, regardless of size. Concern that the financial statements are misleading becomes greater when the error becomes larger or the likelihood that the financial statements are misleading increases.

The act of committing an error can be due to ordinary negligence, gross negligence, or constructive fraud (see figure 13.1). **Ordinary negligence** is the absence of a reasonable level of care that is expected of persons in similar situations. For example, if an analysis of bad debt expense is made and the financial statements are to be adjusted by $76,420 but, instead, are adjusted by $74,620 (representing a transposition error), this failure to adjust the statements by the correct amount (in the absence of intent to deceive) is due to ordinary negligence.

Gross negligence is more egregious than ordinary negligence. Not only does the preparer not exercise due professional care, he or she exhibits a reckless disregard for the duty owed to the harmed individual or entity. For example, gross negligence would occur if the financial statement preparer failed (with no intent to deceive) to accrue payroll taxes payable and that amount was material. **Constructive fraud**, which is also referred to as *extreme negligence*, is worse than gross negligence and is nearly the equivalent of fraud, except that no intent to deceive is present. Constructive fraud occurs when the person responsible for preparing the financial statements delegates that responsibility to inexperienced and unqualified persons and offers little or no supervision.

Fraud occurs when a portion (or all) of the financial statements misrepresent financial position, results of operations, and cash flows, and the misrepresentation is effected by intentionally manipulating items that are presented within the financial statements, omitting items (including information that should be disclosed in the footnotes) from the financial statements, or presenting information in the financial statements in such a way (for example, offsetting liabilities against assets when offsetting alters financial ratios) that the statements are likely to mislead. Figure 13.1 provides a visual depiction of the continuum of seriousness of financial statement misrepresentations and its relationship to intent to deceive.

Figure 13.1
Range of Acts of Misrepresentation



Acts of misrepresentation can range from errors due to ordinary negligence, gross negligence, or constructive fraud. Misrepresentations can also occur as a result of fraud. Most misrepresentations fall in the "errors" category and occur without intent to deceive.

Errors can be due to mistakes involving computation of numbers (normally considered ordinary negligence, unless the preparer was inexperienced or lacked sufficient knowledge) and mistakes in the application of accounting principles (for example, failure to present the current portion of non-current debt as a current liability and omission of information properly presented in the footnotes [considered ordinary negligence if the area of accounting is not well established, or gross negligence if the misapplication was the result of failure to determine which information is appropriately presented in the footnotes]).

The preceding references to errors and fraud imply that financial statements that contain errors or fraud do not depict financial position, results of operations, and cash flows in accordance with GAAP. A permissible deviation from GAAP is worth noting: Preparers are allowed to deviate from GAAP if (1) the difference between GAAP and the method used by the preparer is not material; (2) the method used by the preparer is consistently applied; and (3) the deviation from GAAP is disclosed. Thus, CPAs who analyze financial statements for errors or fraud should be familiar with the entity's policies before making judgments about the financial statements. Inquiring of management and reading the footnotes to the financial statements may disclose any non-error, non-fraud deviations from GAAP.

Financial Statement Fraud Versus Earnings Management

Many applicable financial reporting frameworks, such as GAAP and, perhaps to a greater extent, International Financial Reporting Standards, allow preparers of financial statements to use judgment when determining the appropriateness of accounting for transactions and presentation of financial statement items, including disclosures. Although some observers may view the practice as unethical, management is allowed to avail itself of this flexibility by engaging in a certain amount of **earnings management** when it accounts for transactions and prepares financial statements. In fact, the decision to manage earnings can occur before the entity's transaction used to manage its earnings occurs. For

example, if a company is in danger of not meeting a **consensus forecast**, it may choose to sell an asset at a gain to help it meet the forecast. In addition, the company might choose a lower estimate of a contingent liability when accruing the amount, thus, recognizing a higher net income or lower net loss in the income statement (and a lower liability on its balance sheet) to help it meet the forecast. Because GAAP allows a certain amount of flexibility when determining the amount of contingent liability to report, this act by management might not rise to the level of fraud.

Not only is a certain amount of earnings management allowed, it is even expected by the market given the desirability of management to make its company appear as financially profitably as possible. If anticipated by the market, earnings management results in a discount of the share price of the company's stock. Earnings management, however, can lead to undesirable behavior. Some authorities, such as former SEC chairman Arthur Levitt, believe that chronic earnings management may lead to an erosion of earnings quality and that "Managing may be giving way to manipulation."[1]

In its most extreme form, the manipulation to which Arthur Levitt refers can be considered financial statement fraud. Both earnings management and fraud require intent; the difference in practice often is the extent of the earnings management, with fraud characterized as the more significant form of earnings management. For purposes of this chapter, **financial statement fraud** is the intentional manipulation of financial statements (including footnotes) or underlying records by the inclusion, exclusion, or alteration of information to affect the decisions of users of the financial statements. Inherent in financial statement fraud is the desire by the preparer of the financial statements (often management) to gain an advantage by undisclosed manipulation of the statements.[2] Usually, those who commit financial statement fraud are members of management, such as the CEO and CFO.

Financial statement misrepresentation cannot be called fraud unless adjudicated in a court of law. Crucial to adjudication is the determination of intent, which cannot definitively be established by external indicators (except for an unforced confession of intent). Therefore, acts that appear to be motivated by intent to defraud may simply be aggressive financial reporting that might be painted as earnings management by the defendant. However, evidence suggesting the presence of a number of external indicators, such as actions taken by management that are indicative of fraud, may provide the basis for an assertion of fraud that is accepted by a judge or jury.

Common Methods Used to Commit Financial Statement Fraud

The general methods of fraudulently misstating financial statements is by improperly accounting for transactions or events, recording fictitious transactions, and directly falsifying financial statements. An example of improperly accounting for transactions or events would be recording an expense as an asset. Recording fictitious transactions involves recording transactions that did not occur in the accounting records for the purpose of making others believe they occurred. Whereas these two methods involve making inappropriate entries in the financial records, which then results in fraudulent financial statements, the third method, directly falsifying financial statements, involves management bypassing the records and changing the financial statements themselves to depict financial position, results of operations, and cash flows in a deceptive manner. Directly falsifying financial statements is often the easiest method of fraud to detect because the financial statements will not reconcile to the underlying records. Use of the other two methods, improper accounting treatment and recording fictitious transactions, are often more difficult to detect. The discussion that follows primarily focuses on these two methods, although the financial statements can be directly modified to appear as they would have had the records underlying the statements been inappropriately altered.

Although financial statement fraud can be committed by many different means, the most frequent approach is by improperly recognizing revenue and overstating assets. Other approaches involve understating expenses and

[1] Levitt, Arthur, "The Numbers Game," Speech given at the New York University Center for Law and Business, New York, NY. 1998. www.sec.gov/news/speech/speecharchive/1998/spch220.txt

[2] The National Commission on Fraudulent Financial Reporting, often referred to as the Treadway Commission, included reckless conduct in its definition of fraudulent financial reporting. In its 1987 report, it defined fraudulent financial reporting as "…intentional or reckless conduct, whether act or omission, that results in materially misleading financial statements" (Report of the National Commission on Fraudulent Financial Reporting, 1987).The reckless conduct spoken of by the Treadway Commission is the constructive fraud discussed in this section.

liabilities and engaging in off-the-book arrangements. In the sections that follow, the most common methods of financial statement fraud are discussed.

Improper Revenue Recognition

Improper revenue recognition usually takes the form of recognizing a greater amount of revenue than warranted under GAAP. This often results in a corresponding overstatement of assets. The most common methods used to improperly recognize revenue were presented in reports issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and are discussed in this section.[3] Although these methods were used to fraudulently misstate the financial statements of publicly-held companies in the United States, there is no reason to believe that these methods have not been used by companies (both public and non-public) throughout the world.[4]

Sham Sales

Sham sales are sales that appear to have occurred but have not because either (1) an arrangement exists between the buyer and seller to return the asset after the balance sheet date, (2) a transaction that depicts a sale was only conducted (or misrecorded) to mislead, or (3) no transaction occurred, and the fraud was perpetrated either by recording one or more entries of fictitious sales, or the financial statements themselves were changed without changing the underlying records.

Case in Point

In 1986, Lincoln Savings & Loan (Lincoln) allegedly caused one of its subsidiaries to engage in a transaction that appeared to be a sale of undeveloped land to another party for a $3.5 million cash down payment and a $10.5 million nonrecourse note that was secured only by the land. An $11 million gain was recorded by the Lincoln subsidiary. The alleged sale occurred only after certain oral guarantees were made by Charles Keating, Lincoln's principle shareholder. These guarantees included promises that Lincoln would reimburse the buyer for the down payment on the purchase, the Lincoln subsidiary would be responsible for developing the property, and the buyer would be able to sell the land at a profit within a year after the purchase.

Determining whether an arrangement existed between a buyer and seller involves inquiry of the buyer and an analysis of ongoing activities between the buyer and seller. A related scheme is called *round-tripping*, whereby the seller ships goods to customers, records the shipment as a sale, and then provides funds to the customer to pay the seller.

At times, merchandise has been shipped to a location under the control of the seller, and a sale has been recorded. This type of activity can be investigated by determining whether the locations where the shipments were delivered are owned or under the control of the seller or related parties.

In other cases, loans have been recorded as revenue. Standard bank confirmations can be used to determine the existence of loans that do not appear as loans in the financial records and statements. Far more difficult to discover are loans made by shareholders (or other related parties) that are credited to revenue. An analysis of the period after the balance sheet date will often disclose repayments of these loans (although repayments may be characterized as reimbursements and broken up into smaller payments that cannot easily be linked to the amount shown as sales).

[3] The Committee of Sponsoring Organizations of the Treadway Commission (COSO) has issued several reports on fraudulent financial reporting, beginning with its first report issued in 1987.

[4] The data COSO used came from ***Accounting and Enforcement Releases*** (AAERs). The SEC issues AAERs during, or at the conclusion of, an investigation against a company, an auditor, or an officer for alleged accounting or auditing misconduct. AAERs contain information on the nature of the misconduct, the individuals and entities involved, and the effect of the misconduct on the financial statements.

In some cases, no transaction occurred, yet one or more fictitious sales were intentionally recorded. These sales may or may not be supported by fraudulently-created sales orders, sales invoices, and shipping documents.

Sham sales are most likely to be recorded at or near the end of the accounting period, after management has determined that it needs additional income reported in the income statement to meet expectations. Forensic accountants will be aware that sophisticated perpetrators of sham sales may even use cash from other sources as payments on accounts receivable that represent the sham sales.

If the forensic accountant suspects that sham sales have been recorded, the forensic accountant could examine overdue accounts receivable as well as write-offs of overdue receivables and documentation supporting the sales and write-offs while carefully considering the possibility that the documentation may have been fabricated. In addition, the forensic accountant may confirm details of selected sales, including the date of sale, rights of return, and delivery terms (including the shipping destination) with the buyer. Recording sham sales usually occurs outside the normal operating system and procedures used to record sales; therefore, determining the method by which the suspected sales were recorded and when the sales were recorded (for example, during the last month or two before the end of the reporting period) can be helpful in determining the legitimacy of the sales.

Premature Revenue Recognition

Premature revenue recognition is the recognition of revenue before it is earned. Premature recognition overstates revenue of the current period by recognizing revenue that is appropriately recognized in one or more future periods. As a result, not only is the revenue of the current period overstated, revenue of one or more future periods is understated. This can result in pressure to find ways to increase (perhaps inappropriately) the revenue of future periods to compensate for the lower level of revenue expected to be reported.

According to GAAP, (FASB *Accounting Standards Codification* [ASC] Topic 605, *Revenue Recognition*),[5] revenue is to be recognized according to the realization principle, which requires meeting two criteria before recognition occurs:

- The earnings process is complete (or virtually complete).
- Reasonable certainty exists about collectability of the assets to be received as compensation.

The SEC has issued additional guidance with respect to recognition of revenue in Staff Accounting Bulletin (SAB) No. 101, *Revenue Recognition in Financial Statements* (as amended by SAB No. 104, *Revenue Recognition, corrected copy*). The additional guidance stipulates that the realization principle has been met when all of the following exist:

- Persuasive evidence of an arrangement exists.
- Delivery of the product has occurred, or the services required by the contract have been provided.
- The selling price is fixed or determinable.
- Collectability of the assets to be received in the exchange is reasonably assured.

Premature recognition of revenue can be as simple as the act of recognizing revenue at the point of receiving an order, rather than at the more appropriate point at which the seller has fulfilled its obligation to the buyer by shipping the merchandise or performing the service. Determination of whether revenue has been prematurely recognized can be more difficult when the contract with the customer requires several deliverables (for example, products or services). These arrangements can range from relatively simple arrangements for the delivery of multiple products on a single date (for example, when an entity sells a personal computer and printer to a customer and delivers each at the same time) to complex arrangements that involve the delivery of many products (or services), such as when a seller designs and builds equipment for a customer and agrees to maintain the equipment over an extended period. To properly recognize revenue associated with these **multiple deliverables** arrangements, the seller must

[5] At the time of publication, FASB had proposed additional guidance (Proposed Accounting Standards Update, *Revenue Recognition [Contracts with Customers]*) that, if adopted, would supersede most of the guidance presently provided in FASB *Accounting Standards Codification* (ASC) 605, *Revenue Recognition*, and would provide a more comprehensive approach to revenue recognition. The discussion in this chapter is largely unaffected by the new proposals.

determine whether the substance of the sale is one arrangement or many (the existence of several contracts does not mean that there are several arrangements; in substance, they may be one arrangement). The essence of whether an element (a "deliverable") is a part of an arrangement is whether the element is an essential part of the functioning of the total product or service. If it is not, revenue associated with an element is recognized when the element is delivered. Premature recognition can occur in these cases due to the considerable judgment involved in determining the substance of the arrangement.[6]

Improper Cut-Off of Sales

Improper cut-off of sales occurs near the end of the current accounting period and results in either an overstatement or understatement of sales of the current period. Usually, the intent is to overstate sales by inappropriately recording sales that should be recognized in the next period as sales for the current period (this act is sometimes called *holding the books open*). (Although less common, an understatement can occur if management desires to defer recognition of some sales to a subsequent period, for example, by intentionally delaying shipment or misrecording a shipment that occurred during the current year as a sale of a subsequent year.) Sales of items to be shipped are usually recognized no earlier than the time of shipment because this is the earliest point at which the seller has fulfilled its commitment to the buyer (and usually is the earliest date title transfers to the buyer). Therefore, determination of whether cut-off was improper for shipment of product involves ascertaining the entity's policy of recording sales: Is it when shipment occurs, or is it according to shipping terms?[7] The policy should be applied consistently. Improper cut-off can be detected by examining shipping documents for a sample of sales to determine when shipment occurred or when the transfer of title was to occur. If the intent of management is to shift sales to a subsequent period, unusual delays in issuing invoices can accompany this type of scheme. Improper cut-off may be more difficult to detect if services, instead of product, was sold.

Recognition of Conditional Sales

Revenue associated with conditional sales is not recognized until the conditions of the sales are satisfied. A *conditional sale* is a sale in which the buyer takes possession of and receives the right to use the product, but title remains with the seller until the party (buyer or seller) obligated to perform the condition satisfies the condition agreed to between the buyer and seller. For example, assume the buyer purchases property on an installment basis that spans several years. If the title does not transfer until the buyer fully pays for the property, the sale is a conditional sale. Usually, profit on installment sales is to be recognized during the periods in which the buyer pays for the product (that is, the profit is earned during the periods in which the buyer satisfies the condition by paying for the product). If, for example, the entire profit on a three-year installment sale is recognized in the first year of sale and not over the three-year period, premature recognition has occurred, and revenues are overstated. Note that profit recognition can inappropriately be deferred if management wishes to enhance the financial results of a later period. Inappropriate recognition of revenue can be detected by examining sales contracts and confirming terms with the customer.

In some cases, **side agreements**, or side letters, can change the terms of a sale. For example, a seller could strike a side agreement with a customer to guarantee the resale by the customer of merchandise it sold to the customer. The guarantee can be as simple as the seller agreeing to buy back the merchandise if the customer has not sold it by a specific date. Thus, the sale is not appropriately recognized as a sale until the customer has resold the merchandise by the date specified or waives the guarantee. Abuse in this area occurs when the seller records a conditional sale earlier than the date on which the condition expires. Side agreements are difficult to detect unless the customer is unaware that the seller desires confidentiality about the agreement. Thus, customer inquiries, particularly about their understanding of the conditions under which they could return merchandise, may be effective in certain circumstances.

[6] Additional guidance on arrangements and the circumstances under which revenue is associated with arrangements can be found in FASB ASC 605-25.

[7] If the terms of shipping are F.O.B. (Free on Board) Shipping Point, the title to the merchandise transfers from the seller to the buyer at the point of shipment. If the terms are F.O.B. Destination, title does not transfer from the seller to the buyer until the merchandise reaches the seller. Although recording sales when the title transfers is theoretically correct, sellers are allowed to record sales when merchandise is shipped, regardless of the shipping terms, if the sellers consistently record sales when shipment occurs.

An analysis of the activity between the seller and the customer could also prove beneficial in disclosing buy-backs of merchandise.

Another type of conditional sale is merchandise subject to approval by the customer. For example, a seller may ship custom merchandise to a customer with an agreement to allow the customer to use the product for a definite time period, sometimes called a *trial period*, to determine whether it wants to keep the merchandise. If the likelihood that the customer will return the merchandise within the trial period is reasonably high, the sale is not recorded as a sale until the trial period has expired. Note that treatment of potential returns exists along a continuum: In most cases, the likelihood of return is low, and no provision is required; if the likelihood of return is somewhat higher, an allowance method may be employed. If, however, the likelihood of return is high (and it sometimes is, in the case of custom merchandise), the shipment is not to be recorded as a sale until the seller is reasonably assured that the merchandise has been accepted. As in the case of side agreements, fraudulent reporting occurs when transactions are recorded as sales before recognition of the sales is appropriate.

Misstatement of Percentage-of-Completion Contracts

Similar to inappropriate recognition of revenue on conditional sales is the misstatement of revenue that can occur when percentage-of-completion contracts are used. The percentage of completion method requires several estimates; anytime estimates are required to determine revenue (or profit) or expense, the potential for fraud exists because of the inherent judgment required. Determination of the profit to be recognized in any one period is dependent on the percentage of completion which is computed by using the total estimated costs for the contract. Increasing (decreasing) the profit recognized during the current period occurs when the percentage of work completed during the period is increased (decreased).

For example, assume that Bridge Constructors, Inc. (Bridge) entered into a contract to construct a bridge in Saline County. The contract specified that the contract price (that is, the total revenue to Bridge) is $8 million. Bridge estimates that the cost of the project (that is, the total estimated costs for the contract) will be $6 million. Therefore, the gross profit expected to be realized by Bridge is $2 million ($8,000,000 – $6,000,000 = $2,000,000). In the second year of construction, the costs incurred by Bridge to date are $4 million. The percentage of completion is 67 percent ($4,000,000 / $6,000,000 = .667). The gross profit earned to date is $1,340,000 ($2,000,000 × .67 = $1,340,000). If the gross profit recognized during Year 1 is $600,000, the gross profit to be recognized in the current year (Year 2) is $740,000 ($1,340,000 – $600,000 = $740,000). (The method illustrated here is method B, discussed in FASB ASC 605-35-25-84; an alternative, method A, is discussed in FASB ASC 605-35-25-83.)

In the preceding example, if Bridge had desired to fraudulently overstate gross profit, it could have reduced its estimate of the total costs for the contract, thus, increasing the percentage of work completed and the amount of gross profit to be recognized. For example, had it revised downward its total estimated costs to $5,500,000, its percentage of completion in Year 2, to date, would be 73 percent ($4,000,000 / $5,500,000 = .727), and its gross profit earned to date would be $1,460,000 ($2,000,000 × .73 = $1,460,000). The gross profit to be recognized in Year 2 would be $860,000 ($1,460,000 – $600,000 = $860,000).

Another method that can be used to determine the revenue to be recognized on a long-term construction contract is called the *survey method*, and it, too, relies on an estimate, usually made by engineers, of the progress made on completing the contract. Because it uses an estimate, this method, like the percentage of completion method, is subject to manipulation.

Detection of misstated percentage-of-completion contracts requires the examination of contracts, any change orders (including unapproved change orders), a schedule of billings and payments, and any communication between the company contracting for the construction and the construction company. Documentation of underlying costs incurred could be inspected. Employment of a specialist who possesses adequate knowledge of construction accounting may be beneficial in determining whether the contracts are being executed properly and accounted for correctly.

Unauthorized Shipments

Channel stuffing, or making unauthorized shipments, involves the seller's practice of shipping more merchandise inventory than the seller's distribution channel is capable of handling at the time of shipment. In these cases, the

customer never ordered the merchandise. The purpose of channel stuffing is to increase sales for the period when the channel stuffing occurs. Engaging in channel stuffing to misstate financial statements usually occurs near the end of a period to increase the amount of sales on the income statement (and accounts receivable on the balance sheet). It can result in a return of merchandise after the end of the period, price concessions to the buyer after the end of the period if shipment back to the seller is more costly than granting concessions, or the buyer retaining the merchandise, which could result in a lower amount of sales in the period subsequent to the period in which the channel stuffing occurred. (This lowering of sales can lead to other types of financial statement fraud so that the results of operations of the subsequent period meet or exceed the expectations of users of the financial statements.)

Case in Point

The SEC filed a complaint against McAfee, Inc., a Santa Clara, California-based manufacturer and supplier of computer security and antivirus tools. In its complaint, the SEC charged that McAfee used a variety of undisclosed methods to aggressively oversell its products to distributors in amounts that far exceeded the distributors' opportunities to sell the products. The allegation of channel stuffing included the assertion that McAfee had improperly recorded the sales to distributors as revenue. It offered its distributors lucrative sales incentives, such as deep price discounts and rebates, to persuade the distributors to buy and stockpile McAfee products. Distributors were also secretly paid millions of dollars to keep the excess inventory, instead of returning it for a refund, which would have resulted in a reduction of McAfee's revenues. The SEC further alleged that McAfee concealed the fraud from investors by, for example, incorrectly recording the payments and discounts that it offered to distributors and improperly manipulating reserve accounts to increase inadequate sales reserves and cover the costs of the distributor payments. The SEC complaint asserted that as a result of its actions, McAfee reported false and materially misleading financial and other information in financial statements.

In other cases, companies have shipped defective or partially completed merchandise but billed for the shipments at the price charged for fully-functioning or fully completed merchandise.

Determining whether channel stuffing has occurred can involve

- comparing the level of shipments of merchandise near the end of the period to the level of shipments earlier in the year;
- comparing prices charged near the end of the year for evidence of deep discounts offered to entice customers to buy;
- analyzing returns and allowances (including adjustments that were made after the end of the period to the accounts receivable accounts of customers), and
- determining whether the merchandise was shipped directly to customers or to an off-site warehouse (where the merchandise could be parked until needed by the customer).

Related to unauthorized shipments is the practice of shipping only part of the merchandise ordered by the customer but billing for the full order. If the amount of merchandise shipped is significantly less than the full order, only part—not all—of the revenue for the order should be recorded. Detecting such a practice involves comparing shipping invoices to sales invoices, examining customer files for correspondence, and reviewing customer accounts to determine whether these customers' accounts were reduced for the amount of merchandise billed but not shipped.

Consignment Sales

Consignment sales involve product that, prior to the actual sale, is located on premises not owned by the seller (the *consignor*). In other words, it is merchandise sold by an entity (called the *consignee*) on behalf of the consignor. Sales of consigned merchandise are not recorded until the sale is made by the consignee. Intentional premature recognition of sales revenue can occur when the consignor deliberately records revenue when the merchandise is shipped to

the consignee (that is, before it is sold). This type of fraud can be discovered by determining the identity of companies that have acted as consignees for the consignor in the past, inquiring of knowledgeable staff about the status of consigned merchandise, and contacting companies believed to be consignees to determine the type and quantity of unsold merchandise it is holding for the consignor and any selling arrangements that exist between it and the consignor (for example, commissions).

Bill-and-Hold Sales

Bill-and-hold transactions are sales of merchandise inventory that the seller is holding for the buyer. If the transaction meets the requirements of a bill-and-hold sale, the seller may record the transaction as a sale, and the buyer records the transaction as a purchase. The requirements include the following:

- The buyer must request that the transaction be on a bill-and-hold basis.
- The buyer must have a substantial business purpose for engaging in a bill-and-hold transaction.
- The buyer must assume the risks of ownership (SAB No. 101).

The buyer might not be able to take physical possession of the merchandise for various reasons. The most common reason is that the buyer currently has no room to store the inventory. The potential for abuse occurs because the seller is not required to transfer the merchandise to the buyer soon after the obligation to purchase the merchandise is incurred. In the usual scenario for sales of merchandise, evidence that a sale occurred is provided (that is, the shipment of merchandise). In a bill-and-hold transaction, however, shipment does not immediately occur. Thus, recording a transaction as a sale before the transaction meets the requirements to be recorded as a sale is much easier when the transaction is a bill-and-hold sale.

Case in Point

Sunbeam allegedly engaged in transactions that it characterized as bill-and-hold sales to accelerate income into periods earlier than periods the sales (if they would have occurred at all) should have been recorded. These transactions did not meet the requirements specified by GAAP. For example, Sunbeam initiated the sales (not its customers, as required by GAAP), offered its customers financial incentives to engage in bill-and-hold transactions (the SEC stated that the criterion of having a "substantial business purpose" was not met if the buyer's only reason for engaging in the transaction was to obtain the various incentives offered by the seller), and created various side agreements that allowed customers to not assume the risks of ownership.

Detecting inappropriately recorded bill-and-hold sales involves

- determining from management whether bill-and-hold arrangements exist,
- confirming the terms of the arrangements with customers to determine whether any abuse of this arrangement exists,
- interviewing warehouse personnel to ascertain whether the merchandise is held in the seller's warehouse or at another location, and
- physically examining the merchandise to determine whether it is adequately segregated from inventory owned by the seller.

Misstatement of Assets

When revenue is overstated, assets are often overstated. For example, if fictitious sales are booked at the end of an accounting period to increase revenue and, thus, increase net income, generally, the accounts receivable account will also be increased. If management has created adequate support for these fictitious transactions in its system, such as customer contact information, confirming a sample of accounts receivable will often be ineffective in finding these nonexistent sales because management will simply respond to the confirmation request.

The use of estimates to establish and adjust the allowance for doubtful accountants sometimes tempts companies to underestimate the allowance account and bad debt expense. This has two consequences: An understatement of the allowance for doubtful accounts results in an overstatement of net accounts receivable (because the allowance account is a contra-asset account to accounts receivable), and the lower amount of bad debt expense artificially inflates income. Another way an overstatement of accounts receivable is achieved involves the act of **re-dating**, which is performed by adjusting (extending) the due date of a receivable so that the receivable is not classified as overdue and, thus, subject to write-off.

Inventory is another common asset that is misstated. Overstating ending inventory increases income before income taxes by a similar amount. Because inventory is often a large asset of manufacturers, wholesalers, and retailers, misstatement of this asset can have a significant effect on the bottom line and has been a popular approach to misrepresenting financial statements. This overstatement can occur by misstating the cost assigned to each item in the inventory or by misstating the number of items in ending inventory.

Case in Point

The SEC filed a complaint against Health Management, Inc. (HMI) alleging, among other things, that HMI had told its external auditors that almost $2 million of inventory had been in transit on the day that inventory was counted (this amount of in-transit inventory was abnormally large relative to the amounts of year-end in-transit inventories of prior years). According to the story told by HMI, the inventory was transported using one of its own vehicles, rather than being shipped as usual by using a commercial delivery company. This inventory, however, did not exist. As a result of this and other allegedly fraudulent acts, such as understating the allowance for doubtful accounts, HMI overstated its net income for the year by 72 percent.

Case in Point

Without admitting or denying the findings of the SEC, Fischer Imaging Corporation submitted an Offer of Settlement to close a matter in which the SEC asserted that Fischer had, among other acts, overstated its inventory account by inappropriately valuing excess and obsolete inventory from its discontinued product lines. In addition, the SEC stated that Fischer had double-counted some of its raw materials and had valued products that customers had returned as though they were operational.

Inventory can also be overstated by including in inventory products that are being sold for another company (consigned merchandise) and inventory already sold but held for customers due to bill-and-hold arrangements.

The property, plant, and equipment account has also been a popular account to misstate due to its size. One common approach is to capitalize amounts that should have been recorded as expenses. Detecting this type of scheme includes examining invoices of items added to the property, plant, and equipment account; comparing names of vendors who are commonly paid for products or services that are usually expensed to the names of vendors indicated on the invoices supporting additions to property, plant, and equipment; and conducting discussions with knowledgeable company personnel and vendor personnel.

Case in Point

One of many types of financial statement manipulation occurred with WorldCom, who capitalized expenditures for "line costs," which are fees WorldCom paid to third-party telecommunication network providers for the right to access the third parties' networks. According to GAAP, these fees should be expensed and may not be capitalized. However, beginning in 2001, WorldCom's management improperly recorded line costs in the property, plant, and equipment account, rather than in its expense account. This reclassification allowed WorldCom to meet analysts' consensus forecasts by materially understating its expenses and, therefore, its earnings. WorldCom allegedly took advantage of its knowledge of the auditors' approach to auditing the property, plant, and equipment account. It knew the auditors would perform analytical procedures on the financial statements, including the property, plant, and equipment account, and that the auditors would determine the amount of audit work it would perform based on the results of these analytical procedures. WorldCom had experienced a decline in property, plant, and equipment acquisitions but realized that the auditors, who knew nothing about this decline, would not perform extensive work on the account if the account balance was similar to that of prior years. By transferring line costs to the property, plant, and equipment account, it caused the balance of the account to be similar to its balance of the prior year and, therefore, in line with the auditors' expectations.

In some cases, asset overstatements may be related to misappropriation of assets or embezzlement by either management or employees who are not management. For example, if an employee misappropriates inventory for his personal use and does not have access to the records, inventory is overstated by the amount misappropriated. Unless the deficiency is caught by, for example, a comparison of the records with the inventory physically on hand, the balance of the inventory account will continue to be overstated. Overstatements that affect the financial statements can also occur as a result of *kiting* and *lapping*. In the case of kiting, a check written on an account at one bank is not recorded as a decrease to that account, while the deposit of these funds is recorded as an increase in an account maintained at another bank; as a result, the same assets are double-counted and result in an overstatement of the financial statements. When lapping is used, a deficiency of assets due to embezzlement is not properly reflected in the financial statements; thus, accounts receivable is overstated.

With Ponzi-type schemes, the fraud will typically involve the creation of fictitious assets as a way of covering up the underlying fraud scheme. The fictitious assets may be on-the-books or off-the-books. On-the-books schemes usually involve the presentation of fraudulent financial statements that include overstated assets and the issuance of individual investor statements that show inflated account balances. The correct balance of assets is often much lower due to misuse of the funds by the schemer. In an off-the-books Ponzi scheme, the perpetrator will publish correct financial statements while, at the same time, fraudulently inflate account balances shown in individual investor account statements.

Occasionally, assets are misstated by understating their bases. When one company acquires another, it may write down as many depreciable or amortizable assets as possible so that depreciation and amortization will be lower in the future than it would otherwise be, and the company acquired will appear more profitable. This understatement of identifiable assets in a business combination can also result in a higher amount allocable to goodwill, which is a non-amortizable asset.[8] Although goodwill is tested at least yearly for impairment, difficulties in determining the fair values associated with testing may enable management to resist making a writedown of goodwill that is appropriate.

In divorce cases, assets may be purposely understated so that one spouse receives a lower distribution of marital assets than he or she would otherwise have received.

Misstatement of Expenses and Liabilities

Understatement of expenses can also cause the financial statements to be misrepresented. If done intentionally, fraud has occurred. Often, the understatement of expenses results in an understatement of liabilities, particularly if the expenses are understated at the end of the period.

[8] Certain non-public companies are now permitted to amortize goodwill according to the AICPA's Financial Reporting Framework for Small- and Medium-Sized Entities and FASB Accounting Standards Update No. 2014-2.

Three basic approaches to understating expenses are as follows:

1. Failure to record accrued expenses
2. Misclassification of expenses as assets
3. Undervaluation of expenses

The failure to record accrued expenses usually occurs near the end of an accounting period and, if not due to oversight, may have been motivated by the desire to reflect a lower level of expenses on the income statement and liabilities on the balance sheet.

Case in Point

The SEC instituted public administrative proceedings against Centuri, Inc. for various infractions of the Securities Exchange Act of 1934 by one of its wholly-owned subsidiaries. The infractions included understating certain expenses, which resulted in materially understating its accrued liabilities by 14.5 percent of the amount it reported in its Form 10-K. The understatement resulted from the failure to properly accrue amounts it owed for expenses, such as employee vacation pay, associated payroll tax, property tax, and income tax.

Note that when accrued expenses are not properly recognized at the end of the appropriate fiscal year, financial position is also affected. For example, if management fails to accrue expenses at the end of 20X1, not only will net income be inappropriately higher for 20X1, the accrued payroll liability will be understated at the balance sheet date. This manipulation of the financial statements will return to haunt management during the next period in 20X2, when the expenses that should have been accrued at the end of 20X1 are paid. As a result, expenses in 20X2 will be inappropriately high and net income inappropriately low. This effect on 20X2 may motivate management to commit additional fraud in 20X2 to mitigate the ill effects the 20X1 manipulations had on the 20X2 financial statements. Not only does this timing issue result in a counterbalancing effect when failure to accrue expenses properly occurs, it is also an issue with each of the other two basic methods of understating expenses.

To determine whether expenses were properly accrued at the end of a period, the forensic accountant can examine documentation of expenditures made after the end of the period to determine whether any part of the expenditures were properly attributable to the prior period. In addition, the payee can be contacted to determine (or confirm) the period to which the expenditures pertain.

Expenses may be understated if management misclassifies the expenses as assets. An illustration of this is the WorldCom reclassification of line expenses as property, plant, and equipment, discussed earlier. This type of misstatement can also occur when cost of goods sold is misclassified as ending inventory (for example, by overstating ending inventory). The overstatement of ending inventory understates cost of goods sold, which is often the largest expense on the income statement for manufacturers, wholesalers, and retailers. This understatement of expenses in the current period also results in an overstatement of expenses in the succeeding period, thus, increasing the pressure on management to inappropriately cover the fraud by committing additional fraud.

Companies can also understate expenses by undervaluing expenses, particularly those that involve estimates, such as bad debt expense, contingent liabilities, and warranties. Note that each of these types of expenses involves some degree of judgment. Judgment, in turn, relies on subjectivity. Misstatements that involve judgments can be benignly explained by differences in perception. Management, however, can take advantage of the subjectivity inherent in the formulation of estimates and produce values that are highly biased. The assertion that an estimate is biased is difficult to prove, given the degree of subjectivity present in estimates. Forensic accountants can accumulate circumstantial evidence of bias by comparing for several reporting periods the estimate of the amount of expenses to the actual burden subsequently borne by the company.

Not only can liabilities be understated by failure to accrue expenses at the end of the reporting period, but they can also be understated by misclassifying the liabilities as revenue. Although payment of the liability poses a problem,

the immediate increase to revenue may be the only manner by which a company can achieve (albeit fraudulently) earnings targets. Payments on the liabilities may then be misclassified as reductions to revenue or increases to expenses (or assets).

Liabilities can be overstated when companies establish reserves for the purpose of using them to increase future income. These types of reserves are termed **cookie jar reserves** because management may reach into the reserves and pull out amounts it believes are needed to smooth earnings or meet internally-set earnings targets. Although reserves may be appropriately established to provide for anticipated contingencies, such as litigation costs, environmental liabilities, and potential liabilities associated with business combinations, some companies have inappropriately used these reserves to mask less-than-appealing operating results. Reserves may be created by increasing (debiting) an expense account and increasing (crediting) the reserve account or by increasing (debiting) the cash account for monies received and inappropriately increasing (crediting) a reserve account.

Case in Point

The SEC alleged that Dell Inc. (Dell) employed cookie jar reserves to cover shortfalls in operating results over a three-year period. Use of these reserves made Dell's financial results appear to consistently meet Wall Street earnings targets. The SEC further alleged that use of these reserves allowed Dell, for each of the three years, to materially misstate its operating expenses as a percentage of revenue, which was an important financial measure that Dell emphasized to investors. Dell created the reserves by crediting a reserve account, rather than a revenue account, for payments received from chip manufacturer Intel (the payments were received in exchange for Dell's promise to use Intel's chips exclusively in Dell's computers).

The SEC also asserted that during the same time period, Dell failed to properly increase its reserves in accordance with GAAP to cover the costs of closing a Dell facility in Texas.

As a result of the SEC's allegations, Dell agreed to pay a $100 million fine.

Off-the-Book Arrangements

Off-the-book arrangements are arrangements that are not reflected in the financial statements (including footnotes) and can be used by companies to hide their liabilities or entice customers to engage in transactions by promising that the customers will be held harmless for their participation. The Lincoln Savings & Loan case, discussed earlier, is an example of an off-the-books arrangement in which the purported buyer of the land was protected from significant loss. Such arrangements pose potential harm to those uninformed about the arrangements (including investors and lenders) because of the contingent liability that exists.

Lessees' use of non-cancelable lease agreements has become a concern for regulators because of the contingent liability that exists. The non-cancelable payments can be quite sizable and, even though GAAP requires these liabilities to be disclosed in the footnotes to financial statements, they can be easily overlooked by users of financial statements. In a report required by SOX, the SEC stated that $1.25 trillion of these non-cancelable lease obligations exist and are not shown on the balance sheet. Examination of lease agreements for non-cancellation clauses and then comparing the clauses to disclosures in financial statements will provide evidence of whether disclosures are adequate.

Enron, a multinational, diversified company, was able to keep $14 million of debt off its consolidated balance sheet through the use of special purpose entities (now called *variable interest entities*). The FASB has responded to the public's outcry over the legitimate exclusion of certain operations from balance sheets by modifying its rules (located in ASC 810-10-15) related to the consolidation of variable interest entities. Although the modification has increased the level of ownership that must be held by an independent investor from 3 percent to 10 percent, fraud can still be committed by companies by having related parties provide the funds to meet the 10-percent threshold and, thus, retain control over the operations as well as increase the attractiveness of the balance sheet. In fact, Enron allegedly did just that: it committed fraud by providing funds to investors so that the investors could use the funds to meet the threshold required to establish the special purpose entities. As a result, it offloaded some of its debt to an entity that it controlled.

Other types of off-the-book arrangements that can result in misstated financial statements include kickbacks. Kickbacks can result in overvalued inventory due to inflated costs required to cover the kick-back payments. In some cases, companies have received shoddy merchandise due to kickbacks, which has not only resulted in overvalued inventory but also in higher costs due to the return of merchandise by customers. Investigating kickbacks could involve comparing the volume of transactions over time associated with each vendor. If the volume of shipments from one vendor becomes larger over time relative to the volume of shipments from other vendors (or if the number of vendors becomes smaller over time), suspect vendors could be investigated for ties to company employees. Questioning employee personnel may also provide information about inappropriately close relationships between salespersons and suppliers. Examining customer correspondence files or communicating directly with end users of the products may disclose shoddy workmanship.

An activity somewhat related to off-the-book arrangements but that is not really an arrangement is **skimming**. Skimming is the unauthorized taking of cash before the cash can be reported on the books as revenue. This activity is formally termed *defalcation* and misstates financial statements by understating assets and revenue. Skimming is difficult to detect because the misstatement is not on the books. Besides reviewing video recordings of cash handling, a comparison of the levels of cash receipts over a sufficiently long period may assist in uncovering this type of misstatement.

Inappropriate Financial Presentation

Besides engaging in off-the-book arrangements, companies may either misstate the presentation of balance sheet items, income statement items, or cash flows or fail to provide adequate disclosures. Although these issues are usually detected during a financial statement audit, they may not be detected either because the auditors fail to notice these issues or an audit has not been performed. The latter usually occurs if the business is small and audits are not required by parties such as lenders or owners.

Misstatement of the presentation of financial statements can occur when two accounts (or line items) are offset against each other when the right of offset does not exist. The right of offset does exist for accounts receivable and its contra-account, allowance for doubtful accounts. If, however, the right of offset does not exist and accounts are inappropriately combined, financial statement ratios may be affected. For example, if an asset and a related liability are offset against each other and the asset has a larger balance than does the liability so that a net asset results, the debt-to-equity ratio (total liabilities/total equity) will be lower than it would have been had the liability not been offset against the asset. In this case, intentional offset might have occurred because a lender may have specified a maximum debt-to-equity ratio that would have been exceeded had the misstatement not occurred.

Misstatements on the statement of cash flows include the mischaracterization of a nonrecurring item of positive cash flow as an operating (recurring) item of cash flow. This can give the false impression that the item will recur. Amounts on the income statement can also be mischaracterized. For example, items that are extraordinary may be characterized as ordinary items, or items that will not recur may be classified as recurring.

Case in Point

Quest Communications International Inc., previously one of the largest telecommunications companies in the United States, was charged with mischaracterizing its revenue earned by selling indefeasible rights of use (IRU) and some of its capital equipment. An IRU is an irrevocable right to use a specific fiber strand or specific amount of fiber capacity for a specified time period. Quest had previously identified the IRUs as its principal asset in its communications with the SEC. The sales of IRUs were referred to internally by Quest as "one-hit wonders." The SEC alleged that Quest had, in its filings with the SEC, fraudulently characterized nonrecurring revenue from IRU and equipment transactions as recurring "data and Internet service revenues" to meet revenue expectations that it created. This mischaracterization enabled Quest to cover up its worsening financial condition and artificially inflate its stock price.

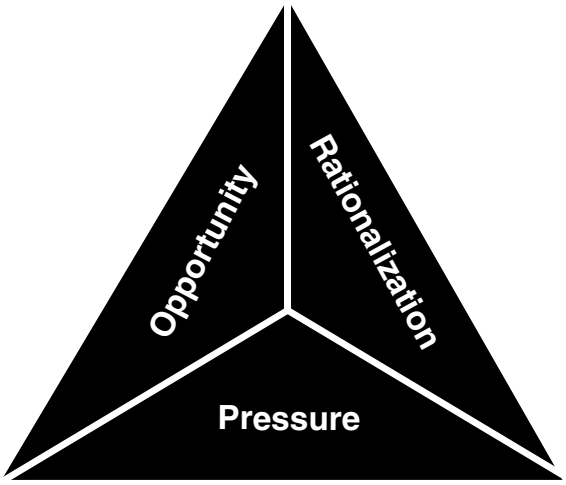
Failure to provide adequate disclosures can also result in misstated financial statements. One area of particular concern is related party relationships. The nature of related party relationships and transactions may, under certain conditions, increase the risk of material misstatement of the financial statements. Because of the close relationship, these transactions may not be conducted under usual business terms and conditions and may have been initiated to engage in fraudulent financial reporting. According to GAAP and SEC rules, related party relationships and transactions are to be appropriately identified, accounted for, and disclosed in the financial statements. Undisclosed related parties may be identified through data-mining procedures used to identify persons and entities that appear frequently in the books and records (or who have engaged in transactions that are material to the entity); those who are not believed to be related parties can then be eliminated from consideration. Once persons or entities suspected of being related parties are identified, background checks can be performed. Identifying transactions that appear to have no business purpose may also be helpful when identifying related parties. In addition, examining loans receivable and payable and sales and purchase agreements for guarantees may prove useful in uncovering previously undisclosed related parties.

Who Commits Financial Statement Fraud?

Perpetrators and the Fraud Triangle

Two primary groups of people commit financial statement fraud: those who are attempting to obtain something of value in the future and those who are trying to cover up a fraud already committed (for example, misappropriation of assets; financial statement fraud committed in the past). The opportunity, motivation, and rationalization (known as the fraud triangle depicted in figure 13.2) for committing financial statement fraud usually differ between the two groups.

Figure 13.2
The Fraud Triangle



Opportunity

Before financial statement fraud can be committed, the perpetrator must have an opportunity to influence the financial statement preparation or presentation, or both. This influence can be at a relatively low level, particularly if the company has a weak governance structure. For example, if a division manager desires to cover up the poor performance of his division, he might artificially increase revenue. This division is combined with others and, if the division

in which the fraud occurred is a significant component of the financial statements, the fraud may affect the decisions of users of the financial statements.

Usually, financial statement fraud is committed by higher level managers and officers, such as the CEO or CFO. These persons, by virtue of their positions, have ample opportunity to influence the entity's reported financial position and results of operations because they can override controls that were designed to stop this type of behavior. For example, WorldCom became famous partly because the size and timing of its top-side journal entries which were alleged to have been made at the direction of its officers.

Owners of small businesses or proprietors of professional practices who have at least a rudimentary level of knowledge of the income statement can also commit financial statement fraud. For example, if a dentist seeks to understate his income due to an impending divorce, he may report a lower amount of daily revenue for several months (this might involve surreptitiously modifying the amounts recorded by office staff before they're entered into a bookkeeping program).

Employees of small companies may have a greater opportunity to misstate financial statements in connection with a fraud due to relatively poor internal controls. For example, if an employee has access to cash and also keeps the records of a small business, the employee may be able to embezzle money from his or her employer and cover up the defalcation by making entries in the records, thus, leading to financial statement misrepresentation.

Motivation

As mentioned previously, the motivation for financial statement fraud generally differs between those who commit financial statement fraud to obtain something of value in the future and those who commit financial statement fraud to cover up a fraud already committed.

Typically, those who commit financial statement fraud to obtain something of value in the future are trying to meet shareholder, analyst, or others' (such as regulatory) expectations or are trying to obtain a loan (or meet loan covenants). These motivations are discussed in the following paragraphs.

Covering Up Poor Income Performance

Market expectations may exceed the actual performance of an entity; therefore, management may attempt to create the false impression that it performed better than it actually did. In addition, management may be expected to meet internally-set earnings targets. At stake may not only be the positions of the CEO and CFO but the entire management team. The mindset of "making the numbers" can create the impetus to not only meet, but exceed, expectations.

The motivation can also be due to the need for additional funds from various sources, such as an initial public offering, the issuance of additional shares of stock, or borrowings. Because financial statements play an integral role in the acquisition of additional funds, the intentional manipulation of financial statements may be seen by the company as especially necessary if the true financial health of the company is poor.

Creation of Business Opportunities

To obtain money for personal purposes, a number of Ponzi scheme perpetrators have committed fraud by providing fraudulent financial statements to potential investors as a means of persuading these people to invest money with them. In other cases, perpetrators have used false financial statements to attract business partners in order to obtain their money, only to disappear when discovery of the scams seemed eminent.

Compliance With Bond Covenants

The desire to comply with bond covenants can result in financial statement fraud. *Bond covenants* are promises that the entity owning the bonds will perform certain activities or that certain levels of metrics will be met. Examples include limits on the amounts of dividends that can be paid or ratios, such as debt to equity or debt to assets, that the debtor must meet. If an entity does not comply with its bond covenants, the bonds may be called by the lender and, thus, become immediately due. Having a lender call a bond may create undue hardship on the entity that owes the lender because the entity may not have adequate cash or sources of funds it can use to pay off the bonds. Fraud is committed if the records that provide the information necessary to determine whether the bond covenant was met are misstated. For example, if the bond covenant is defined as not exceeding a specific ratio of debt to equity, any act

that lowers the numerator or increases the denominator will cause this ratio to be lower and, thus, increase the likelihood that the bond covenant will be met. Misclassifications, such as characterizing debt as revenue (which decreases debt and increases equity), will result in a favorable reduction to the ratio, as would the understatement of expenses (which increases equity). For example, assume an entity has a bond covenant that requires it to not exceed a 1 to 5 debt-to-equity ratio and that it incorrectly reduces a contingent liability of $400,000 by increasing revenue by the $400,000 (which, in turn, will increase owners' equity). This action results in a lower debt-to-equity ratio of 1.6 to 8.4, a reduction that enables it to meet its bond covenant (see table 13.1).

Table 13.1 Debt to Equity Example

	Balance before misclassification of debt as equity debt (credit)	Debits	Credits	Balance after misclassification of debt as equity debt (credit)
Assets	$10,000,000			$10,000,000
Liabilities	(2,000,000)	$400,000		(1,600,000)
Owner's equity	(8,000,000)		$400,000	(8,400,000)
Totals	$ 0	$400,000	$400,000	$ 0
Debt-to-equity ratio	1:4 (25%)			1.6:8.4 (19%)

Greed

The desire for more of anything that brings pleasure and opportunity can cloud the judgment of otherwise reasonable persons and lead to financial statement fraud. Financial statement fraud can be committed to increase the market price of stock so that the holder of the stock has a higher likelihood of profiting. But the incentive to fraudulently misstate financial statements is not just the desire for more money. It can also be due to the desire for power, which might be enjoyed for the recognition it provides or used to obtain things of value, much as money is used.

Greed can also be a factor in the intentional manipulation of financial statements to achieve bonus targets and, thus, be paid bonuses. However, if management cannot manipulate the financial statements so that they meet bonus targets, it may choose to inappropriately write off assets as expenses or write down assets and reserves so that reported future earnings are more likely to be high enough to meet bonus targets.

Greed may also be the reason behind the desire to improve the image of a company by means of intentional manipulation of financial statements. If a company's image is improved, the people who improved the image will reap benefits they might not otherwise receive.

At times, the personality characteristics of the business' corporate officers, partners, or proprietors can increase the likelihood that financial statement fraud will occur. For example, a CEO might be a person who has a high desire to achieve or is living a lifestyle that is beyond his means. By committing financial statement fraud, he satisfies the desire to achieve or, if living an excessive lifestyle, may be granted bonuses or be able to sell company stock at artificially high prices to fund his lifestyle.

Desire to Gain an Unfair Advantage

At times, persons may be motivated by the desire to gain an unfair advantage over others. Financial statements may be misstated when used to sell a business or during a divorce. If, for example, a business owner is divorcing his spouse, the owner may intentionally misstate the financial statements so that the spouse receives a lower amount of marital assets. A similar situation exists when various persons are expected to contribute to a business venture based on the fair value of their personal and business assets. The person may choose not to report all the assets he or she owns, report fictitious liabilities, or misstate the fair value of reported assets and liabilities to support the lower amount contributed. Underreporting business income (and issuing misstated financial statements to correspond to the underreporting) may occur when parents complete the Free Application for Federal Student Aid form when applying for monies to fund their children's education. Reducing income may be an act to gain an unfair advantage by

small businesses, particularly when business owners or managers wish to evade taxes and are sophisticated enough to realize that discovery of the tax fraud may be less likely to occur if the financial statements agree with filed income tax returns.

Fraud Committed to Cover Up or Compensate for Frauds Already Committed

Financial statement fraud may be perpetrated to conceal a fraud already committed or to compensate for a fraud that has already occurred. The first category includes employees who have misappropriated their employer's assets or have engaged in other illegal activities, such as bribery. The second category includes those who, because they committed financial statement fraud in the past, now feel pressure to commit financial statement fraud to compensate for the detrimental effects of a fraud previously committed.

Concealing Misappropriations of Assets and Other Illegal Activities

Financial statement fraud is sometimes committed by employees who convert assets, such as cash, inventory, or equipment to their own use and have the opportunity to influence recordkeeping of the misappropriated asset. Thus, this type of fraud usually only thrives in environments that have poor internal controls (specifically, insufficient separation of duties). For example, if an employee has access to the business' checking account and colludes with a fellow employee who is charged with reconciling the bank account, the **larceny** may be successfully concealed and fraudulent financial statements prepared based on these records. In some cases, the larceny is committed against a corporation by one or more of its officers. In these cases, detecting the theft is much more difficult because officers usually can circumvent the controls that normally would operate to appropriately classify outflows of funds. For example, without proper authorization by the board of directors, a CEO could have the corporation pay for personal expenditures, such as travel and entertainment, and reflect the expenditures as normal operating expenses. Financial statements, then, would be misstated due to the inappropriate presentation of personal expenses as business expenses. This type of situation allegedly occurred when the former CFO of Digi International circumvented Digi's internal controls by approving his own expense reports that included unauthorized hotel and entertainment expenses that were for personal purposes (he also allegedly approved other employees' falsified travel and entertainment expense reports over a five-year period).

If members of management have engaged in other illegal acts, such as violations of the Foreign Corrupt Practices Act of 1977 (FCPA) (discussed in the following text), management may attempt to cover up activities that could produce significant fines for it and the entity for which the illegal activities were performed. Thus, the financial statements most likely will not properly reflect the payment of bribes or other unlawful disbursements disallowed under law.

Covering Up Financial Statement Fraud Committed in the Past

In the past, management may have committed financial statement fraud that is now producing adverse effects on the current-year financial statements. Fraud that involves timing issues, such as the premature recognition of revenue, often produces lower levels of income in subsequent periods. For example, if management has inappropriately accelerated the recognition of revenue on certain contracts into year 1, year 2 revenue levels will be lower by the amount of revenue inappropriately recognized. Management, then, may feel pressure to compensate for the lower level of revenue by finding some other means of increasing revenue (or decreasing expenses). Management again might choose to engage in premature recognition of revenue or some other fraudulent means by which to compensate for past fraud.

Rationalizations

Rationalizing one's actions is the process of finding an acceptable reason to excuse one's behavior. It arises from the human need to reconcile actions to the values people believe they hold. Those who misrepresent financial statements usually rationalize the misrepresentation as a means of helping others. These rationalizations can be global, local, or familial. Global rationalizations emphasize the harm to society that could occur if the company ceased doing business. The perpetrator of financial statement misrepresentation, poised as a "white knight," believes he or she contributes to society by providing goods or services that society needs. Local rationalizations operate when management

focuses on the adverse effects the company might experience if the misrepresentation were not to occur. For example, management may justify its misrepresentation based on the possibility that innocent employees could lose their jobs if the company did not meet market or lender expectations. Familial rationalizations represent justifications based on the assumed effect nonperformance of a misdeed could have on the perpetrator's family and close friends. With each of these types of rationalizations, the perpetrator sees himself or herself as a good person who protects others so that they are not harmed.

Red Flags and Risk Factors

Red flags are indicators of financial statement fraud but not conclusive proof that fraud exists. The sources of these red flags will often be investigated to determine whether they represent fraud or are simply an anomaly devoid of fraud. Because the presence of red flags represents an increased risk of financial statement fraud, they should be investigated if important. See box 13.1 on the following page for common categories and examples of red flags.

The existence of one red flag, unless it is highly significant, does not usually indicate a high likelihood of financial statement fraud. Therefore, the combination of individual significance and number of red flags affects the forensic accountant's judgment about the extent of examination that is necessary.

Risk factors are events or conditions that increase the likelihood that financial statement fraud will occur. As can be seen in box 13.1, some of the red flags also represent risk factors. For example, if management issues a voluntary forecast in which it states that the company will achieve a particular earnings target, management will most likely experience pressure to meet the amount forecasted. The company has a higher risk of financial statement fraud if management believes it cannot meet the forecasted amount by legitimate means. Some risk factors may not be directly observable, such as management's intent or attitude; unless these factors are disclosed by management itself or by someone close to management, knowledge of these factors may not exist until a fraud has been perpetrated. Similar to red flags, risk factors will be considered in the context of the environment in which the entity operates; thus, their importance depends on various considerations, including any other risk factors that are present. Fraud may even occur when no red flags are present. Therefore, the forensic accountant will exercise professional skepticism so that he or she is mindful that the ever-present possibility of fraud exists.

The company's size may affect the level of risk that the company becomes a victim of financial statement fraud. Financial statement fraud tends to be more likely in small companies, although when it occurs in larger companies, the losses tend to be larger and affect a greater number of people. Small companies often do not have the resources to implement an effective set of internal controls and suffer from lack of separation of duties. The ill effects of a lack of separation of duties may be overcome by owner involvement, but, in many cases, small companies are owned and operated by people who are more entrepreneurial than they are knowledgeable about controls.

Risk factors are related to the opportunities, motivations, and rationalizations discussed earlier. Usually, the greater the number of opportunities a person has to commit financial statement misstatement, the higher the risk that misrepresentations will occur. This is also similar to motivations. For example, if the company sets an unreasonably high level of income that must be met before management is awarded bonuses, management is more likely to manipulate the financial statements so that the level of income is met, and bonuses are awarded. Likewise, the easier management can rationalize its actions, the more likely management will intentionally misstate financial results.

In typical financial statement fraud cases, the company is suffering weak or declining earnings, and the CEO or CFO tends to be involved in the fraud. Such frauds tend to be more likely in the presence of weak audit committees or with board members who are not independent.

Investigation Techniques

In addition to standard audit procedures used by auditors of financial statements, such as the inspection of documents supporting a transaction, forensic accountants often apply investigation techniques to determine whether, and to what extent, fraud exists. The investigative techniques often employed by forensic accountants include public document reviews and background investigations, interviews of knowledgeable persons, the use of confidential sources, analysis of physical and electronic evidence, physical and electronic surveillance, undercover operations, nontraditional analysis of financial transactions, ratio analysis, and use of common-size financial statements. These techniques, as they relate to financial statement misstatements, are discussed in the following list.

Box 13.1 Common Red Flags and Examples

Red Flags	Examples
Company Characteristics	
Complex organizational structure	Numerous related affiliated companies that appear to serve no useful function
Weak corporate governance structure	Inattentive audit committee; board heavily composed of inside or grey directors
Weak internal control processes	Lack of supervision; inadequate separation of duties, particularly between physical possession of assets and recordkeeping
Unusually complex transactions with third parties	Transactions that appear to be round-trip sales
Frequent change of auditors	Auditor changes that occur more frequently than usual for companies in the industry
History of questionable reporting	Misstatements that have resulted in restatements of financial statements
Highly optimistic operating results broadcast to public	Voluntary management forecasts that contain overly optimistic financial results
Management and Personnel	
Aggressive management style	Strong pressure for quick results without corresponding controls; managers who have domineering personalities
Unusually high management dependence on operating performance	Management whose primary means of support is the company for which it works
Inadequate personnel practices and environment	Poor hiring and training practices
Accounting Anomalies	
Unusual accounting practices	Use of accounting principles or methods that are not commonly accepted by the industry in which the company operates
Higher than usual frequency of financial statement restatements	Regulatory agencies require the company to restate its financial statements more often than commonly required for companies in the industry
Unusual transactions recorded at year-end	Transactions that result in a significant increase in revenues
Misrecorded or unrecorded transactions	Significant transactions that, if recorded properly, would negatively affect income
Operating Anomalies	
Frequent transfers among entity bank accounts	Kiting schemes
Unusual transactions that appear in the records	Transactions that are not consistent with the operations of the entity
Unusual transfers to offshore banks	Transfers to offshore banks that do not appear to have a substantive business purpose
Frequent or unusual related-party transactions	Related-party transactions that do not appear to have a substantive business purpose

Box 13.1 Common Red Flags and Examples *(continued)*

Red Flags	Examples
Financial Condition and Operating Environment	
Weak (or weakening) financial condition	Earnings losses; failure to meet market expectations; worsening of debt to equity ratios
Worsening company operations	Abnormal declines in customer demand for company's products or services
Worsening (or bleak) industry environment and conditions	Recession or depression affecting the company's industry; downward trend of demand for company's products and services
Sudden Improvement in Operating Performance	
Improved financial position and results of operations at year-end, especially if not consistent with similar entities in the industry	Sudden increase in net assets or net income, or both
Unusual events	Inordinate need to borrow money, impending divorce, or sale of business

- *Public document reviews and background investigations.* Public records reviews include examining property, corporate, and partnership records; civil and criminal records; and the stock-trading activities of management and members of the board of directors. These public records can be public databases where property deeds are filed (such as online records of county offices) and private databases that are usually found online and for which access requires payment of a fee. Background checks can be beneficial not only in determining whether the person investigated has a criminal past but also in determining the connections the person has to geographical areas where related parties may be located or to others suspected of participating in the financial statement misstatement.
- *Interviews of knowledgeable persons.* These interviews normally begin with peripheral witnesses and end with persons suspected of directly participating in the fraud. Suspects believed to be most responsible for the fraud will usually be interviewed last to preserve evidence and reduce the likelihood that the interviewee will have time to think of a plausible story to offer as a smokescreen. Subjects in a fraud examination may not be willing participants and, therefore, less cooperative than those to whom an inquiry is directed during an audit of the financial statements. Therefore, forensic accountants are to be aware of the possibility that the information provided by interview, whether from a target or a sympathetic observer, is at least partially untrue. Interviews are covered in more depth in chapter 8, "Fraud, Prevention, Detection, and Response."
- *Use of confidential sources.* When working with confidential sources, the practitioner usually takes care not to promise absolute confidentiality because the practitioner might be subpoenaed in the matter, or the employer might grant a waiver of confidentiality. Further, the practitioner is careful not to place undue reliance on information obtained from a confidential source because, in some cases, confidential sources may have hidden motives. The best practice is to corroborate, whenever possible, information obtained from confidential sources.
- *Analysis of physical and electronic evidence.* Forensic accounting experts also rely on laboratory analyses of physical and electronic evidence. In many cases, such analyses involve computer forensic techniques. For example, communication about financial statement fraud that may have been deleted from a computer drive might be recovered by computer forensic experts. A notable example of analysis of electronic evidence is the

database access WorldCom internal auditor Gene Morse performed by working late to avoid detection by management. See chapter 11, "Digital Forensics," for more information on the use of computers to perform forensic analyses.

- *Physical and electronic surveillance.* Physical and electronic surveillance is of limited use when investigating financial statement fraud. A video recording that also contains audio may be of use if the persons being recorded are discussing their involvement (or the involvement of others) in misstating financial statements. An attorney will often be consulted to determine whether audio recordings can be conducted without the person's consent and the settings in which audio (and video) recordings are permissible. For example, an employee may have a reasonable expectation of privacy in his or her office; therefore, a recording of the person's conversations in that setting may not be evidence that can be used in a court of law.
- *Undercover operations.* Undercover operations are not often used when investigating financial statement fraud and, when used, can be dangerous, particularly if the practitioner is discovered by the perpetrators. The involvement of law enforcement or a private investigator may be required because of the precautions that are to be taken and to comply with state law, which may restrict performance of certain services to persons who are licensed private investigators.
- *Nontraditional analysis of financial transactions.* Forensic accounting experts use special methods to analyze financial transactions that may differ from analyses performed by auditors of financial statements. One technique is data mining of the records underlying the financial statements. Data mining may be appropriate if the number of transactions is voluminous, and the records are in an electronic format. For example, the transaction database could be searched for transactions that have similar addresses or have a P.O. box number as the address.
- *Ratio analysis.* Ratio analysis used in the detection of financial statement misstatements is a quantitative analysis that compares two financial statement amounts for the purpose of detecting an indication of misstatement. Examples of common ratios used to detect financial statement misstatements are shown in box 13.2 on the following page. For these ratios to have meaning, they are compared to the same ratios for prior periods to determine whether they have increased or decreased relative to the prior periods and to industry averages to determine whether they are higher or lower than industry norms. As with any analytical procedure, any indications of important misstatements should be investigated further to determine the reason the ratios differ from those of prior periods or industry averages.
- *Vertical and horizontal analysis.* The techniques of vertical and horizontal analysis are employed to more easily detect changes that have occurred between time periods. Vertical analysis is used to express the elements of a financial statement, such as a balance sheet or income statement, as percentages of a base. For example, the amount of cost of goods sold in an income statement can be expressed as a percentage of sales. The resulting financial statements are often referred to as *common size financial statements* because each element of the financial statements is expressed in terms of a common base. The resulting percentage can be compared to similar percentages of prior years and to industry averages. The primary advantage of using common size financial statements is the relative ease with which financial statement elements of the one period can be compared to other periods. For example, comparing salaries for one year, expressed as a percentage of sales for that year, to salaries of another year, expressed as a percentage of sales of that year, is easier than comparing salaries, expressed in currency, between the years. The larger the dollar amount of the salaries, the more difficult the comparison of dollar amounts becomes. Horizontal analysis expresses the change between years of financial statement elements in terms of a percentage. This "change percentage" can highlight the increases or decreases of financial statement items relative to a prior period. The benefit of using horizontal analysis is similar to the benefit of using vertical analysis: Expressing differences in terms of a percentage makes analysis of changes easier to perform than simply expressing the change in dollar amounts. Table 13.1 contains an example of vertical and horizontal analysis.

Box 13.2 Examples of Common Ratios Used to Detect Financial Statement Misstatement

Name	Formula	Notes[1]
	Liquidity Ratios	
Current	$\frac{\textit{Current Assets}}{\textit{Current Liabilities}}$	Downward trend could indicate financial difficulties.
Quick	$\frac{\textit{(Cash+Cash Equivalents+Net Receivables)}}{\textit{Current Liabilities}}$	Conservative measure of liquidity; desirable position is a ratio greater than 1:1.
Inventory to Working Capital	$\frac{\textit{Inventory}}{\textit{(Current Assets – Current Liabilities)}}$	A high ratio can indicate operating problems.
Current Assets Turnover	$\frac{\textit{Net Revenues}}{\textit{Current Assets}}$	A high ratio indicates an efficient use of working capital and better liquidity.
Inventory to Current Liabilities	$\frac{\textit{Inventory}}{\textit{Current Liabilities}}$	Extent to which company relies on inventory to meet its current obligations.
	Profitability Ratios	
Gross Profit Margin (Percentage)	$\frac{\textit{(Net Revenues – Cost of Goods Sold)}}{\textit{Net Revenues}}$	Can provide indications of side agreements; issues with inventory counts and pricing.
Operating Profit Percentage	$\frac{\textit{Operating Profit}^{2}}{\textit{Net Revenues}}$	Can indicate misstatements of revenue and expenses.
Net Income Before Taxes Percentage	$\frac{\textit{(Net Income Before Taxes+Extraordinary Items)}}{\textit{Net Revenues}}$	A more consistent measure than Operating Profit Percentage because it removes the effect of taxes.
Net Income After Taxes Percentage	$\frac{\textit{Net Income After Taxes}}{\textit{Net Revenues}}$	An indication of profitability.
Return on Assets	$\frac{\textit{Net Income After Taxes}}{\textit{Total Assets}}$	Extent to which assets are used to increase equity.
Return on Equity	$\frac{\textit{Net Income After Taxes}}{\textit{Stockholder's Equity}^{3}}$	A measure of how effective stockholders' equity is used to produce income.

Box 13.2 **Examples of Common Ratios Used to Detect Financial Statement Misstatement *(continued)***

Name	Formula	Notes[1]
	Efficiency Ratios	
Accounts Receivable Turnover	$\frac{\textit{Sales on Credit}}{\textit{Average Accounts Receivable}}$	A decreasing ratio can indicate loose credit policies or poor collection efforts.
Accounts Receivable Collection	$\frac{(360 \textit{ or } 365)}{\textit{Accounts Receivable Turnover}}$	Increasing ratio means a company is taking longer to collect its receivables.
Inventory Percentage	$\frac{\textit{Inventory}}{\textit{Total Assets}}$	Extent to which inventory, relative to other assets, is relied upon to produce income.
Inventory Turnover	$\frac{\textit{Cost of Goods Sold}}{\textit{Average Inventory}}$	An indication of whether too much or too little inventory is owned.
Days in Inventory	$\frac{(360 \textit{ or } 365)}{\textit{Inventory Turnover}}$	The lower the number of days, the more efficient the company is at managing its inventory.
Assets Turnover	$\frac{\textit{Net Revenues}}{\textit{Total Assets}}$	Generally, a higher ratio indicates financial effectiveness.
Property, Plant, and Equipment (Fixed Assets) Percentage	$\frac{\textit{Property, Plant, and Equipment}}{\textit{Total Assets}}$	Extent to which the company relies on fixed assets to produce income.
Accounts Payable Turnover	$\frac{\textit{([Cost of Goods Sold – Beginning Inventory]+Ending Inventory)}}{\textit{Average Accounts Payable}}$	Usually, an increasing ratio is better than a decreasing ratio because it means that the company is paying of suppliers at a faster rate.
Accounts Payable Days Outstanding	$\frac{(360 \textit{ or } 365)}{\textit{Accounts Payable Turnover}}$	Same as the Accounts Payable Turnover ratio, except this ratio is expressed in terms of days.
Net Revenues to Working Capital Turnover	$\frac{\textit{Net Revenues}}{\textit{Working Capital}}$	A high ratio is better because the company is generating more sales relative to the assets it uses to generate the sales.

Box 13.2 **Examples of Common Ratios Used to Detect Financial Statement Misstatement *(continued)***

Name	Formula	Notes[1]
Net Fixed Assets to Stockholders' Equity	$\frac{\textit{Net Fixed Assets}}{\textit{Stockholders' Equity}}$[3]	A ratio of more than 1 means that stockholders' equity is using debt to finance a portion of its fixed assets; if less than 1, stockholders' equity is financing not only the fixed assets but also a part of the working capital.
Capital Structure Ratios		
Debt to Equity	$\frac{\textit{Total Liabilities}}{\textit{Stockholders' Equity}}$[3]	A relative measure of debt to stockholders' equity.
Current Debt to Equity	$\frac{\textit{Current Liabilities}}{\textit{Stockholders' Equity}}$[3]	A high ratio is generally not considered desirable since it requires the imminent expenditure of assets to meet the current obligations.
Operating Funds to Current Portion of Noncurrent Debt	$\frac{\textit{(Net Income After Taxes+Noncash Expenses)}}{\textit{Current Portion of Noncurrent Debt}}$	An indication of the company's ability to meet its current obligations.
Times Interest Earned	$\frac{\textit{Net Income Before Taxes}}{\textit{Interest}}$	An indication of how well currently-earned income can contribute to the satisfaction of debt service.
Noncurrent Debt to Equity	$\frac{\textit{Noncurrent Debt}}{\textit{Stockholders' Equity}}$[3]	A relative measure of noncurrent debt to stockholders' equity.

Source: Adapted from AICPA FVS Practice Aid 06-3, *Analyzing Financial Ratios*

[1] Interpretation of these ratios should be made within the context of the industry in which the company for which the analysis is being undertaken operates.

[2] *Operating profit* is net income less discontinued operations and extraordinary items.

[3] Use average stockholders' equity if equity transactions that are material and unusual have occurred.

Table 13.2 Examples of Vertical and Horizontal Analysis

	Vertical Analysis				Horizontal Analysis	
Balance Sheet	**Year 1**		**Year 2**		**Change**	
Elements	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**
Cash	$ 264,768	5	$ 250,394	4	$ (14,374)	–5
Accounts receivable (net)	1,853,378	35	2,439,564	43	586,186	32
Inventory	794,305	15	829,382	15	35,077	4
Plant and equipment (net)	2,382,916	45	2,129,752	38	(253,164)	–11
Total assets	$5,295,367	100	$5,649,092	100	$353,725	7
Accounts payable	$1,482,703	28	$1,778,679	31	295,976	20
Non-current debt	952,240	18	936,582	17	(15,658)	–2
Common stock	530,000	10	530,000	9	0	0
Paid-in capital	794,768	15	794,768	14	0	0
Retained earnings	1,535,656	29	1,609,063	29	73,407	5
Total liabilities and equity	$5,295,367	100	$5,649,092	100	$353,725	7
Income Statement	**Year 1**		**Year 2**		**Change**	
Net sales	$ 326,451	100	$ 458,792	100	$132,341	41
Cost of goods sold	228,516	70	284,451	62	55,935	24
Gross profit	97,935	30	174,341	38	76,406	78
Selling expenses	29,381	9	55,055	12	25,674	87
Administrative expenses	52,232	16	45,879	10	(6,353)	–12
Net income	16,322	5	73,407	16	$ 57,085	350

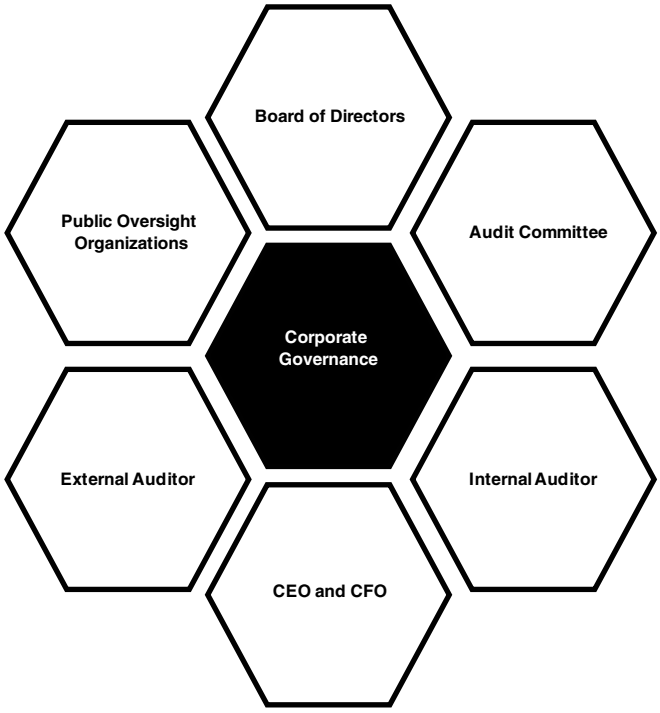
Based on the preceding analysis, the vertical analysis indicates that year 2 accounts receivable, as a percentage of total assets, has increased significantly relative to accounts receivable of year 1, whereas the percentages of other assets have either remained nearly the same or decreased. Likewise, year 2 accounts payable, as a percentage of total liabilities, has increased significantly, relative to the year 1 accounts payable percentage. In the income statement, year 2 gross profit, expressed as a percentage of sales, has increased substantially relative to the year 1 gross profit percentage, due to a sizable decrease in cost of goods sold. The horizontal analysis indicates that year 2 net sales increased significantly relative to year 1 net sales and that selling expenses of year 2 also increased significantly. One would expect that selling expenses would increase if net sales increased. These findings may be investigated further to determine whether the increase in the dollar amounts of accounts receivable and net sales are attributable to legitimate factors, such as increased training of sales staff (which may account for the increase in net sales and selling expenses) and whether the increase in gross profit could be due to the acquisition of inventory throughout the year at lower costs (which could reduce cost of goods sold and contribute to an increase in gross profit). The results could also be due to errors or an intentional misstatement of the financial statements. For example, the increase to accounts receivable and gross profit could have been engineered partly by increasing accounts receivable and net sales by a fictitious amount. Cost of goods sold may have been falsely understated by transferring amounts from that account to other accounts, such as selling expense, inventory, or plant and equipment.

Forensic accountants may use any investigative technique as long as its use is allowed by law in the jurisdiction where the forensic accountant practices. Consulting legal counsel is suggested if the forensic accountant is unsure about whether use of a technique is lawful.

Prevention of Financial Statement Fraud: Best Practices

Preventing financial statement fraud not only reduces the likelihood that financial statement fraud will occur, it also assists the company so that it can more efficiently and effectively achieve its mission. For example, many of the pillars of strong corporate governance (activities by which corporations are governed) discussed in the following list serve this dual goal of fraud prevention and operating excellence. The six pillars of strong corporate governance, illustrated in figure 13.3, are as follows:

Figure 13.3
Six Pillars of Strong Corporate Governance



1. *Board of directors.* The board of directors is a group of individuals that are elected by corporate stockholders to act as their representatives and are the highest level of management in a corporation. The board's responsibilities include establishing broad corporate policies and objectives and making decisions on issues such as the products and services to sell, whether to engage in corporate acquisitions, employment and compensation of corporate executives, how to fund operations (by either borrowings or issuance of stock), approval of annual budgets, and dividend policies. Board membership reflects the interests of both management and shareholders. **Inside directors** are usually employees, officers, major shareholders, or someone significantly related to the corporation. Any board member who is not an inside director is considered an outside director. Directors who have potential or existing business ties to the firm but who are not employed by the firms for which they serve as directors are sometimes referred to as *affiliated directors* or **grey directors**. The board typically chooses one of its members to be the chairperson. Boards of U.S. publicly-held companies usually comprise an average of nine members (state law may impose a minimum) and have at least two subcommittees: an audit committee and a compensation committee.
2. *Audit committee.* The audit committee is a subcommittee of a corporation's board of directors that is charged with the responsibility of overseeing financial reporting and disclosure. Its role also includes assessing the appropriateness of accounting policies, oversight of external auditors, regulatory compliance, and the assessment of, and response to, risks that face the corporation. It has the power to conduct investigations into suspected

misstatements of the financial statements. All U.S. publicly-traded companies must maintain a qualified audit committee in order to be listed on major stock exchanges. Audit committee members must be independent outside directors, including a minimum of one person who qualifies as a financial expert. An audit committee financial expert should understand economic and accounting principles, how financial reporting choices and accounting policies can affect a company's financial statements, and internal controls and procedures.

3. *Internal auditor.* Among the many responsibilities internal auditors have, one important one is examining the financial position and results of operations of companies. Like external auditors, their actions are almost as much preventative as they are detective. Their examination of financial statements, reports, and operations enable them to recommend improvements to policies directed at strengthening governance. Internal auditors have a distinct advantage over external auditors: Internal auditors are more likely to be privy to information about the inner workings of a company than external auditors, who may be on the client's premises for only a short time each year. As a result, internal auditors are more likely to acquire a sense of the company's operations, which allows them to better compare operations to the financial presentation of operations in the financial statements. Their contribution to strong corporate governance depends on the extent to which they are independent of the company divisions they investigate and the persons to whom they report.
4. *CEO and CFO.* The CEO and CFO are important pillars of strong corporate governance because of their power and ability to set a tone at the top that conveys, through example, a policy of the fair presentation of financial position and results of operations, which is carried out by means of an adequate system of internal controls. The CEO and CFO positions are so important that Congress, in Section 302 of SOX, requires the CEO and CFO of publicly-held companies to file reports with the SEC to certify, in each quarterly and annual report, that the report does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements not misleading. Furthermore, the CEO and CFO are to certify that the financial statements, as well as other financial information included in the report, fairly present, in all material respects, the financial condition and results of operations of the company. Section 906 of SOX provides for stiff criminal penalties for not complying with the requirement to certify the financial statements and information. Hiring an ethical CEO and CFO contributes greatly to corporate governance.
5. *External auditor.* Not only does the external auditor serve as a detective, he or she also serves in a preventative role due to the anticipation of the examination of a company's financial statements. External auditors facilitate the movement of capital among entities and government by adding credibility to financial information. One aspect of external auditing that aids in the investigation of financial statement misrepresentation by means other than the innocent misapplication of accounting principles is the requirement (found in AU-C section 240) that auditors brainstorm about how fraud could have been committed by the audit client, consider how weaknesses in internal controls could allow the perpetration of financial statement fraud, and plan and perform the audit with these considerations in mind.
6. *Public oversight organizations.* These organizations include the SEC, PCAOB, and GASB. Although the SEC is an agency of the U.S. government, the PCAOB and GASB are independent organizations that have significant government responsibilities. These organizations are emboldened by law to protect the public. For example, the SEC has the power to penalize companies that issue misstated financial statements (including fraudulent financial statements) and the individuals responsible for the issuance of these financial statements.

Each individual or group in the pillars should be highly qualified, independent, and take seriously all governance responsibilities. If these pillars work as intended, the likelihood that financial statement fraud will occur is greatly reduced.

Implicit in the six pillars is accountability to shareholders in terms of management of the corporation, stewardship of resources, and reporting of results and financial condition. Accountability can be assessed more easily if the corporation operates as a transparent entity (to the extent, of course, that corporate trade secrets are not disclosed), which can act to reduce the likelihood of fraud committed by the corporation because fraud is an activity conducted in private.

The formulation and implementation of best practices in preventing fraud begins with the board of directors, who contribute to prevention by setting antifraud policy and hiring ethical top-level executives. The CEO and CFO

should set realistic operating budgets so that those involved in financial reporting do not feel pressure to misstate the financial statements and should take swift corrective action with respect to employees who participate in intentional misstatement. Proactive policy and hiring, though, are necessary, but not sufficient, determinants of prevention. Employees, particularly those who are associated with the preparation and presentation of financial statements, could periodically be reminded of the potential adverse repercussions of financial statement fraud (for example, loss of jobs, fines, imprisonment), their obligation not to participate in financial statement misstatement, and the importance of reporting any suspicions of irregularities to the proper persons (or board of directors) in the organization. Although the act of reporting is detective, a potential perpetrator's knowledge that he or she will be reported and penalized if he or she participates in misreporting can serve a preventative purpose.

SEC Investigations

In some cases, the SEC may conduct an investigation into a company for financial statement misrepresentations, including fraud. Such investigations can be triggered by any of several possible events, including the following:

- A review of forms filed with the SEC
- Routine inspections of persons or entities regulated by the SEC
- Tips from the public
- Referrals from other government agencies
- News reports
- Information received as a result of other SEC investigations

SEC investigations normally begin when the company being investigated receives a letter indicating that the SEC is opening an investigation. In this informal phase, the SEC has no formal subpoena power and relies on the cooperation of the target company. Procedures performed by the SEC staff include a review of the financial statements and related filings, examination of brokerage records and trading data, and interviewing persons the staff believes have knowledge of possible violations. The informal phase ends with a recommendation by the staff to the commissioners of the SEC. The recommendation can be to close the case, seek sanctions, or issue a formal order of investigation.

If the SEC issues a formal order of investigation, staff investigators may then issue subpoenas to compel persons to testify and produce books, records, and other relevant documents. After the formal investigation is conducted, the staff will recommend that no further action be taken if no violation of securities laws was found or that the SEC pursue enforcement action against the company and individuals.

If the recommendation is that enforcement action be taken, the staff will give the defendant a **Wells notice**, which indicates that the staff intends to commence enforcement proceedings. The company has 30 days to provide to the staff a **Wells submission**, a brief that argues against sanctions. The staff will then consider the company's arguments and modify, reverse, or reaffirm its original recommendation to pursue enforcement action. If the staff recommends enforcement action to the commissioners, the commissioners can decide not to pursue punitive measures against the defendant, file a civil suit in federal court, or have the matter adjudicated by an administrative law judge.

SEC investigations generally remain private until the company discloses the investigation in a financial report, the SEC files a court action, or the SEC begins an enforcement action.

The Foreign Corrupt Practices Act

In addition to, or wholly apart from, an SEC investigation for financial statement fraud, a company may be investigated for potential violations of the FCPA (as amended, 15 USC Sections 78dd-1, et seq.). The FCPA was enacted to address the issue of corporate bribery of foreign officials.

The FCPA is jointly enforced by the SEC and the Department of Justice (DOJ). Penalties for violations of the FCPA can include significant fines for companies and fines and prison sentences for complicit individuals. From approximately 2006 to the present, enforcement of the FCPA increased dramatically. The FCPA applies to U.S. publicly-traded companies (or any company that must file reports under the Securities and Exchange Act of 1934) and any officer or other agent of these companies. Other countries have laws similar to the FCPA. International companies

contemplating foreign mergers and acquisitions should consider special risks. A parent company can be liable for FCPA violations of a subsidiary, and a foreign subsidiary may be in violation of the FCPA at the time of merger or acquisition.

FCPA Requirements

Generally speaking, the FCPA imposes recordkeeping and internal control requirements and forbids the payment of corrupt payments (that is, payments made with corrupt intention). The record-keeping requirements mandate adequate, detailed recordkeeping. The internal control requirements include a system of internal controls to provide or require the following:

- Reasonable assurances that transactions are executed in accordance with management's authorization.
- Asset recording and accountability necessary to produce correct financial statements.
- Access to assets is limited according to management's authorization.
- Recorded accountability for assets is periodically compared to existing assets, and appropriate actions are taken to correct deviations.

The provisions requiring adequate recordkeeping and a system of internal controls are enforced by the SEC.

The FCPA defines *corrupt payments* as (1) payments or gifts made to foreign officials to obtain or keep business, regardless of whether the bribe produces actual business, and (2) improper payments or gifts through third parties made at the behest of foreign officials, including charitable and political contributions. The definition of *foreign officials* is very broad and includes public officials and private individuals affiliated with state-run organizations. In some cases, local laws may exempt payments that might otherwise be forbidden under the FCPA.

No materiality threshold applies to corrupt payments. As a result, a small payment can result in severe civil and criminal penalties for the company and its employees. Expenditures that are particularly scrutinized include travel and entertainment expenses and gifts and donations. Expenditures that are for the payment, gift, offer, or promise of anything of value are not considered corrupt if the expenditures were lawful under the written laws and regulations of the foreign official's country. Promotional expenditures are exempt if they are bona fide and reasonable and relate to the promotion, demonstration, or explanation of products or to the performance of a contract with a foreign government. Facilitation payments made to foreign officials may be allowed by the FCPA (because they do not induce the official to perform an act that he or she is not required to perform), but these payments may be illegal under local law. Enforcement of the corrupt payments provisions are handled by the DOJ.

FCPA Investigations

FCPA investigations can be very complex, especially if multiple countries are involved. Forensic accountants and legal counsel may need to have knowledge not only about the FCPA but also the relevant foreign laws. In addition, the forensic accountant should be able to ascertain the location of the company data and understand any relevant privacy laws for data acquisition and review.

The DOJ favors self-reporting and proactive behavior. However, self-reporting may cause a waiver of the attorney-client privilege.

Major steps in the investigation process include engagement planning (including a determination of the scope of the investigation); a pre-deployment team meeting; site visits and data collection; document reviews, analyses, and interviews; discussions of investigative findings and reports; and completion and follow-up.

Case in Point

Alcoa, a global aluminum producer, was charged by the SEC for violating the FCPA when its subsidiaries repeatedly bribed government officials in Bahrain for the purpose of maintaining business. Alcoa was expected to pay $384 million to settle the SEC charges and a related criminal case.

Archer-Daniels-Midland Company, an Illinois-based global food processor, was charged by the SEC with violating the FCPA for not preventing illegal payments made by its foreign subsidiaries to Ukrainian government officials. It agreed to pay more than $36 million to settle the charges.

Total S.A., the France-based oil and gas company, was charged by the SEC with violating the FCPA by paying bribes to intermediaries of an Iranian government official who, after payment, used his influence to help the company obtain contracts to develop oil and gas fields. Total S.A. agreed to pay $398 million to settle SEC and criminal charges.

Summary

Financial statement misrepresentations can be the result of a continuum of acts that range from ordinary negligence to fraud. These actions are either errors, which are unintentional acts, or fraud, which involves intent to distort financial position, results of operations, or cash flows. Misstatements usually affect items in the income statement and the balance sheet. Fraudulent overstatements of revenue and assets more frequently occur than do fraudulent misstatements of expenses and liabilities.

Generally, financial statements are misstated by improperly accounting for transactions or events, recording fictitious transactions, and directly falsifying financial statements. Recording expenses as assets, recording fictitious sales that did not occur in the accounting records, and misstating accounts appearing on the financial statements are some of the ways perpetrators depict financial position, results of operations, and cash flows in a deceptive manner.

The most frequent approach used to misstate financial statements is by improperly recognizing revenue and overstating assets. Sham sales, premature revenue recognition, improper cut-off of sales, and misstatement of percentage-of-completion contracts are a few means by which revenue and assets are intentionally overstated. Other methods that are not so obvious include channel stuffing, recognizing consignment sales before the actual sales occur, and inappropriate use of bill-and-hold sales. At times, an act of fraud by an employee, such as the skimming of cash receipts, can cause the misstatement of financial statements.

Misstating revenue usually produces a misstatement of assets. For example, booking fictitious sales at the end of a fiscal year overstates accounts receivable. The misstatement of assets does not, however, depend on a misstatement of revenue. Understating bad debt expense simultaneously overstates assets (net accounts receivable) and income.

Understating expenses and liabilities sometimes occur when management fails to record accrued expenses, misclassifies expenses as assets, and undervalues expenses. Companies engage in off-the-book arrangements to hide their liabilities or entice customers to engage in transactions by promising that the customers will be held harmless for their participation. Sometimes liabilities are intentionally overstated initially to provide for an overstatement of net income later; this situation occurs when reserves are inappropriately established and then later reversed.

Companies can also misstate financial statements by either misstating the presentation of balance sheet items, income statement items, or cash flows or by failing to provide adequate disclosures. These approaches are more often found in small businesses that are not required to be audited.

Those who perpetrate financial statement fraud are often owners or officers of companies who have the opportunity and motivation to misstate financial statements. Financial statement fraud may be committed, for example, to cover up poor operating performance, create business opportunities, comply with debt covenants, satisfy greed, and gain an unfair business advantage. Financial statement fraud may also be committed to cover up misappropriations of assets or financial statement fraud previously committed. Perpetrators of financial statement fraud usually rationalize their actions so that they see themselves as good people.

Various red flags, such as owners or officers who have an aggressive management style and the recording of unusual transactions at year-end, may indicate the presence of fraud and should be investigated if important. Several types of investigation techniques, such as public document reviews and background investigations, enable forensic accountants to determine whether, and to what extent, fraud is likely to have occurred. Ratio analysis and vertical and horizontal analyses can also play a significant role in providing an indication that financial statement misstatement has occurred. The prevention of financial statement fraud can be aided by incorporating best practices, which include the existence of internal and external auditors and audit committees composed of outside directors.

The SEC may investigate companies for financial statement misstatement and can impose punitive measures against companies and their employees. The U.S. government can also investigate companies for violations of the FCPA, which includes failure to meet their record-keeping and internal control requirements and the payment of corrupt payments.

Review Questions

1. Tom, in anticipation of preparing annual financial statements, failed to adjust the perpetual inventory records to the physical count taken at year-end. Most likely, Tom has committed
   a. Ordinary negligence.
   b. Gross negligence or constructive fraud.
   c. Fraud.
   d. None of the above.

2. Earnings management is
   a. Expressly forbidden by GAAP.
   b. Often expected by the market.
   c. Universally accepted as an ethical practice.
   d. Engaged in by companies only during periods in which they experience dismal operating performance.

3. King Company sold merchandise to Princeton, Inc. for $100,000 near the end of its fiscal year. King used the $100,000 it received from the sale to pay off a loan it owed to Princeton. This type of transaction is specifically called
   a. A conditional sale.
   b. Round-tripping.
   c. A sale.
   d. A consignment sale.

4. Multiple deliverables arrangements provide opportunities to engage in
   a. Channel stuffing.
   b. Recording sham sales.
   c. Overstating expenses.
   d. Premature revenue recognition.

5. Candace was instructed by her supervisor to change the dates on certain accounts receivable. She couldn't remember which way to re-date the receivables. Which of the following acts is the one that her supervisor most likely wants her to perform?
   a. Change the date so that it is farther out in the future.
   b. Change the date so that it is closer to the present date.
   c. Either (a) or (b).
   d. Neither (a) nor (b).

6. Stevens Construction Company, Inc. has two bank accounts at different banks and occasionally transfers money between the two accounts. Which of the following combinations shown in the following bank transfer schedule would overstate the balance of cash at June 30, the end of its fiscal year?

Bank Transfer Schedule				
	Disbursements		Deposits	
	Recorded on books	Recorded by First National Bank	Recorded on books	Recorded by Fifth National Bank
a.	6/30	7/2	6/30	6/30
b.	6/30	6/30	6/30	7/3
c.	7/3	7/4	6/30	7/2
d.	7/3	7/4	7/2	7/3

7. Overstated contingent liabilities that management can use to artificially increase income of subsequent periods are sometimes called
   a. Accrued liabilities.
   b. Cookie jar reserves.
   c. Accrued revenues.
   d. None of the above.

8. Winsome Company borrowed money from one of its major customers, Quirky, two years ago. The current balance of the liability is $100,000 (Winsome's only liability), and the current balance of the accounts receivable that Quirky owes Winsome is $20,000. The total equity of Winsome is now $400,000. Winsome wants to offset the liability with the receivable and report a net liability in the financial statements. Will this proposal of Winsome, if carried out, have any effect on the debt-to-equity ratio of Winsome?
   a. No.
   b. Yes, it will decrease the debt to equity ratio of Winsome.
   c. Yes, it will increase the debt to equity ratio of Winsome.
   d. Yes, and Winsome's proposal is appropriate under GAAP.

9. Often, the rationalization for committing financial statement fraud is
   a. To help others, such as employees and stockholders.
   b. To satisfy a level of greed of the perpetrator of the fraud.
   c. To inflict damage to the capital markets.
   d. To compensate for a feeling of helplessness.

10. Which of the following statements is true?
    a. Boards of directors composed mainly of inside directors are no more indicative of an increased risk of fraud than boards not heavily composed of inside directors.
    b. Voluntary management forecasts that contain overly optimistic financial results are not a red flag.
    c. An improved financial condition of a company is a red flag but only if its industry is also experiencing similar improvements.
    d. An abnormal decline in customer demand of products or services provided by a company is a red flag.

Short Answer Questions

1. What is the major difference between auditors and forensic accountants?
2. What is financial statement misrepresentation?
3. Are forensic accountants concerned about financial statement misstatements that are not intentional? Why or why not?
4. What are the three levels of seriousness with respect to errors? Provide a short definition of each level of seriousness.
5. What differentiates fraud from a deviation from GAAP that is allowed by GAAP?
6. What is financial statement fraud?
7. What are the three general methods of fraudulently misstating financial statements?
8. What is the most frequent approach taken to commit financial statement fraud?
9. What are the three basic approaches to understating expenses?
10. What are the potentially deleterious effects that kickbacks and off-the-books arrangements have on a company?
11. What are three reasons (motivations) for why a person would commit financial statement fraud?

12. What are the differences among global, local, and familial rationalizations?
13. What is the relationship among the opportunities, motivations, and rationalizations of a person who commits financial statement fraud to risk factors?
14. What are the similarities and differences between vertical and horizontal analyses?
15. Of what importance are the positions of CEO and CFO as part of strong corporate governance?

Brief Cases

1. Near the end of its fiscal year, Auto Suppliers, Inc. (ASI), a wholesaler of auto products, engaged in channel stuffing and offered its customers inducements to keep the merchandise, rather than send it back in the next accounting period. ASI did not disclose this practice in its financial statements or in the management discussion and analysis section of its annual report. What are the concerns with respect to this practice, and how might a forensic accountant determine that this practice occurred?
2. Harmon Company, a small retailer of small electrical devices, such as cell phones and cameras, suspected that one of its employees was skimming cash at the point of sale. What effect, if any does this have on financial statements, and how might Harmon investigate this theft?
3. Smithton, Inc. established a policy of recording sales at the time it ships merchandise to customers. Some of the merchandise it ships is to consignees. It records the shipments to consignees as sales at the time it ships the merchandise. Is this permissible under GAAP? Why or why not?
4. Johnson Suppliers is a wholesaler of janitorial supplies that built its reputation on being fair to its customers. For its best customers (those who purchase a lot of merchandise from Johnson), it often modifies the terms of the sales to induce customers to continue their use of Johnson as a supplier. It does not disclose these arrangements in its financial statements or to its auditors. What is the name usually given to this practice, how might Johnson modify the terms of the sales, and how might a forensic accountant detect such arrangements?
5. Luxury Furniture, Inc., a non-public company, was having difficulty maintaining the level of income it had reported for several years due to increasing competition, which required it to reduce prices on its products. One of its principal shareholders loaned it $50,000 so that it could more easily meet its monthly expenses. The CFO of Luxury recorded the loan by increasing (debiting) cash and increasing (crediting) revenue. The CFO drew up a payment schedule, which was agreed to by the shareholder-lender and which designated three unequal payments of $7,500; $14,000; and $28,500 on the loan. Equipment was increased (debited), and cash was decreased (credited) for each of these repayment amounts. This sale caught your eye when scanning the sales journal because no sales tax had been collected on the sale. Suggest two procedures you could use to detect this scheme.
6. Caravan Company, a corporation that is not required to have an annual audit, is being sold by its sole owner, and you have been hired by a potential buyer to perform a forensic examination to determine whether certain assets are overstated. You notice that during the current year, Caravan experienced a decrease in its inventory turnover relative to last year. Before interviewing the person in charge of accounting, you begin to speculate on what could have caused this ratio to decrease. What could be likely reasons for this decline?
7. LazorTech is a corporation that owns a chain of copy stores located in the northeast area of the United States. LazorTech is solely owned by Henry Atwell, an entrepreneur in his early 60s. LazorTech appears to be less profitable than similarly sized companies in that industry. If the operating performance of LazorTech is intentionally being understated, what could be the reasons for the understatement? Can there be a difference in motivations for understating revenue versus overstating expenses?

8. Allen Tidwell is the sole owner of incorporated business, Ace Antenna (Ace). Ace is a wholesaler that sells commercial stoves. Allen had Ace apply for a $900,000 loan to expand Ace. After the First National Bank of Xenophon rejected Ace's loan application, Allen concocted a scheme in which he would inflate revenue by creating a fictitious company called Taget Stores. Allen had Ace ship merchandise and record sales from Taget during the three months immediately before Ace applied for a loan from the Fourteenth Third National Bank. To make detecting the sham sales more difficult, Allen caused an affiliated company, Krudak, to make a $200,000 payment to Taget so that Taget could then make a payment on the accounts receivable it "owed" to Ace. What type of arrangement is this, and how could a forensic accountant investigate these types of transactions? Would your procedures be affected if shipment of the stoves had not occurred, yet the sales were recorded?

9. Larry Potsdam was the CFO of Project Assist, Inc. (Assist). Assist is a non-profit corporation that serves disabled elderly persons and students in the New York area. During the period from March 20X1 to approximately June 20X3, Larry embezzled $578,243 of Assist's funds by using Assist's accounting system to retain on the payroll selected employees who had been terminated. When the terminated employees were paid, he electronically deposited the terminated employee's salary into a personal bank account that he had set up for each terminated employees' pay. Larry used the embezzled funds to pay for his living, travel, entertainment, and home improvement expenses. Discuss how various aspects of strong corporate governance might have been helpful in decreasing the likelihood that a person like Larry would have successfully embezzled money.

10. Creative Crafts, Inc. (Creative), a small yet highly profitable company, has approached Crafts, Inc. (Crafts) to determine whether Crafts is interested in acquiring it. Crafts and Creative are non-public companies. Crafts is about 10 times the size (in terms of capitalization) of Creative and observes the best practices of corporate governance, whereas Creative is a small operation of five persons and has been in existence for less than one-quarter of the time Crafts has existed. Crafts has never purchased a small business, and a long time has elapsed since Crafts was a small operation; as a result, the CEO of Crafts, Jim Dunbar, is asking your advice about what it should be aware of with respect to this company.

Cases

1. Ultra Suppliers, Inc. (Ultra) supplies commercial building retailers with metal products, such as doors. Ultra's plant accountant, Dan Johnson, became responsible in January 20X1 for providing periodic sales data to general accounting and ensuring that this accounting data conformed to GAAP. Johnson knew that Ultra would include this data in its financial statements. Early in 20X1, Johnson offered a bill-and-hold arrangement to Ultra's largest customer, Sanex, and Sanex readily agreed to the arrangement. Johnson would recognize revenue when it sent an invoice to Sanex, which was prior to shipment. Ultra also offered to nullify any sale made to Sanex if Sanex demonstrated that it could not make at least a 30-percent profit on the merchandise.

   During 20X1, Johnson provided Ultra with monthly sales data that included this revenue from its bill-and-hold transactions. During the middle of 20X1, Johnson attended a continuing professional education seminar on revenue recognition. This seminar included a section that covered the proper recognition of revenue from bill-and-hold transactions. After returning from the seminar, Johnson spoke with the CFO of Ultra, Jeff Billings, about the recognition of revenue from the bill-and-hold arrangements, and Billings agreed that Johnson should continue accounting for the bill-and-hold transactions as he had in the past.

   Required

   a. Under what circumstances is a seller allowed to recognize revenue under a bill-and-hold transaction?
   b. From the information presented about Ultra, is Ultra properly recognizing revenue from its bill-and-hold transactions? Why?
   c. If Ultra is an SEC-registered company, what are some of the possible ramifications of this practice? (Hint: Look at SEC Release No. 45853, dated May 1, 2002, In the Matter of Michael A. Kolberg and Dale E. Huizenga, Respondent.)

2. James Birch is the principal owner of ABC Company, a medium-sized company that sells office equipment to an office supply company that operates in the Midwest. Recently, James received an anonymous tip that the financial statements of ABC for the most recent year, 20X2, were fraudulent. James has contacted you, a forensic accountant, to perform an analysis of the company as a starting point of an investigation. You have organized the information into the following table:

ABC Company						
	Vertical Analysis				Horizontal Analysis	
Balance Sheet	Year 20X1		Year 20X2		Change	
Elements	Amount	%	Amount	%	Amount	%
Cash	$ 1,035,263		$ 643,258			
Accounts receivable (net)	5,738,932		8,532,970			
Inventory	9,250,164		8,432,581			
Plant and equipment (net)	12,593,298		12,789,315			
Total assets	$28,617,657		$30,398,124			
Accounts payable	$ 739,582		$ 738,431			
Non-current debt	1,075,213		985,234			
Common stock	400,000		400,000			
Paid-in capital	953,621		953,621			
Retained earnings	25,449,241		27,320,838			
Total liabilities and equity	$28,617,657		$30,398,124			
Net sales	$16,358,172		$20,951,359			
Cost of goods sold	9,814,903		9,179,156			
Gross profit	6,543,269		11,772,203			
Selling expenses	1,938,251		2,539,487			
Administrative expenses	2,583,421		3,062,512			
Net income	2,021,597		6,170,204			

Required

a. Complete the table.
b. What areas, if any, appear to deserve closer examination? Why?
c. For any areas identified in (b), name two procedures that you could perform to determine whether the area is misstated.

3. Gail Picard was recently approached by Productions, Inc. (Productions), a large non-public company to assist it in determining whether Argot Enterprises (Argot) is a good candidate to acquire. Argot is a medium-sized non-public company that buys products from manufacturers and resells them to retailers. Gail was provided with Argot's year-end financial statements and access to its employee and financial records. Interviews with Argot employees uncovered rumors that the major stockholders of Argot had been looking for a company to acquire

it, and many employees expressed concerns that they would lose their jobs. One employee, who worked as a lower-level clerk in the accounting department, stated that a year ago, Argot had experienced some cash flows problems, but that any crisis associated with this issue had seemingly been averted quickly. An examination of the financial statements revealed a profitable company that didn't appear unusual, except for a couple of perplexing issues: Cash flows seemed to have decreased considerably relative to the amount of net income that was reported, and the company had an unusually low level noncurrent debt. Gail's quick look at Argot's balance sheet also revealed a relatively high balance in receivables.

After Gail collected this information, she sat back and pondered the situation: A company with high net income but a significant decrease in cash flows and an insignificant amount of noncurrent debt. "Seems like this company is doing well except for its cash flows. And what about the year-ago cash flow problems it experienced?"

Required

a. What should Gail do at the outset of this engagement?
b. In addition to having a copy of the current year financial statements, what other information would you suggest that Gail request from management?
c. What are some questions Gail might ask management?
d. Name a couple of procedures Gail might want to perform.
e. What could have happened with Argot that would explain the high net income, decrease in cash flows, and low level of noncurrent debt and the company not being involved in fraud?
f. What could have happened with Argot that would explain the high net income, decrease in cash flows, and low level of noncurrent debt and have involved an inappropriate misstatement of its financial statements?

4. Argon Company entered into an arrangement whereby it acquired equipment from Matthews, Inc. on June 1, 2025. Payments on the property are to be made monthly until the balance is paid in full on May 31, 2027, at which time the title to the equipment transfers to Argon. For the last three years, Matthews has shown increasing profitability, and the year 2025 appears to be its best year ever. It desires to continue to report profitable years and, thus, chooses not to report any of the profit from the Argon sale in 2025. When questioned by its internal auditors, management states that the collectability of the installment sale is questionable and, in the interest of being conservative, it has chosen to defer recognition of the profit associated with the sale.

Required

Are Matthews' actions defensible according to GAAP, and what can the internal auditors do to determine whether Argon is financially viable?

5. Evans, Inc. (Evans), a calendar-year non-public company, is audited by external auditors on an annual basis. Six months after the annual audit was completed, Fitch, Inc. approached Evans' shareholders and offered to buy an 80-percent interest in the company by acquiring stock in Evans. The valuation of the stock was to be determined by the financial statements for the nine-month period ended September 30. Shortly after September 30 and before the valuation was completed, Fitch received an anonymous tip that revenue for the nine-month period (January?September), and the accounts receivable balance at September 30 was overstated. A forensic accountant skilled in examination was asked to collect evidence on the possible overstatement of revenue and receivables.

Required

What might the forensic accountant want to ask Evans' external and internal auditors?

Internet Research Assignments

1. Go to www.sec.gov/index.htm and find the "Enforcement" section on this page. On the "Litigation Releases" page, search the first quarter of the year 2014 for Litigation Release LR-22902 for Diamond Foods, Inc. Summarize the facts of this case, including the resolution of this case by Diamond Foods, Inc.
2. Search the Internet for the SEC Release No. 7976 on Sunbeam Corporation. List the schemes in which Sunbeam allegedly participated.
3. Locate the speech titled, "Financial Reporting and Accounting Fraud" given by Andrew Ceresney, co-director of the Division of Enforcement at the American Law Institute Continuing Legal Education, Washington, DC, in September 2013. Is Andrew convinced that fraud has decreased in the post-SOX era, and what does he say about incentives to manipulate financial statements? What does he say about the importance of pursuing financial fraud? What name does he give to audit committees?
4. As a pillar of strong corporate governance, external auditors can play a vital role in the detection (and prevention, by means of employee awareness of the audit function) of financial statement fraud. Find AU-C section 240, *Consideration of Fraud in a Financial Statement Audit*, and identify the objectives of the auditor with respect to a financial statement audit.
5. Find the U.S. Government Accountability Office manual *Government Auditing Standards*, often referred to as the "Yellow Book." Find at least two references in the Yellow Book that refer to AICPA standards with respect to the responsibilities of a GAO auditor.

Chapter 14
Economic Damages

Learning Objectives

- Explain the role of damage experts
- Describe what is needed to prove damages
- Describe general types of damages in litigation
- Identify circumstances when lost profits or loss of value may be measures of business damages
- Explain the basic considerations for measuring lost profits damages
- Explain the basic considerations for measuring loss of value damages
- Describe damages from incurring extra costs
- Recognize the role of mitigation in measuring compensable damages
- Identify the legal principles related to lost profits damages
- Outline the kinds of damages related to intellectual property
- Explain the basic considerations for measuring damages in litigation related to individuals

Introduction

This chapter describes economic damages in the context of American civil litigation. These kinds of damages are one form of legal remedy that can be imposed by a court of law.[1] Litigation requiring damage measurements can arise for many reasons. Common causes of action include contract claims (such as breach of contract) and torts (such as negligence, tortuous interference, fraud, and personal injury). Each cause of action generally has a body of law that

[1] *Remedies* are ways that courts can impose penalties, enforce rights, or otherwise impose its will. Other than damages, legal remedies include restitution, specific performance, injunction, and rescission. Forensic accountants may face some of these other remedies. *Restitution* occurs when a court orders a party to give up their gains to another party. When courts order *specific performance*, they require a party to perform a particular act and incur the consequences. In contract matters, specific performance occurs when a court orders a party to perform terms stated in a contract. *Injunctions* are ways that courts require a party to perform or refrain from doing a specific act. If a party fails to comply with the court's injunction, they may face a penalty. *Rescission* is a form of relief, often in contract law, whereby a court unwinds a contract between parties. If possible, it takes the parties back to the time before the contract occurred.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

defines it and prescribes what kind of damages an injured party can recover. Thus, damage experts function under constraints established by law related to a particular matter.

Strictly speaking, the notion of damages is a legal concept, rather than an economic subject. Financial experts assist juries and judges with the application of the law to damages for a particular set of facts. Damage measurements are numeric and often complex, and they tend to be beyond the knowledge of many others. Thus, as described in chapter 7, "Engagement and Practice Management," experts are called in to assist triers of fact in this determination.

The discussion in this chapter is necessarily general because we cannot possibly account for all the variations and nuances in the law and particular sets of facts, given our scope. American laws vary across jurisdictions, and courts may have interpretations and local practices that differ from other courts. Moreover, the facts and circumstances in particular cases may lead to variations in damage theories and measurements.

The focus of our discussion is financial, rather than legal, although we link our discussion to some legal aspects. In practice, when a conflict exists between an economic issue and a legal issue, the law almost certainly trumps the economic issue when it comes to damage measurement. One may need to inquire whether the law treats some financial aspects differently from the literature and practices on which financial experts rely, and follow any legal prescription.

General Knowledge for Damage Experts

Roles of Damage Experts

As stated in chapter 7, "Engagement and Practice Management," in litigation services, an expert provides assistance in actual or potential proceedings before a trier of fact in disputes between parties. In this section, we discuss the role of the damage expert. Such an expert can be a **consulting expert**, who does not usually give sworn testimony, or a testifying expert, a person who is expected to give sworn testimony before the trier of fact. As a consulting damage expert, he or she usually assists a client or client's attorney in areas related to damages. In contrast, testifying damage experts assist a trier of fact in understanding matters related to damages.

Under the law, for damages to be awarded in civil litigation, an injured party must prove

- another party committed a wrongdoing (the liability portion of a case), and
- as a result, the injured party suffered damages (the damage portion of a case).

A testifying damage expert generally provides opinions about the amount of damages. In certain kinds of cases, this expert may also be asked to give an opinion on the liability component, such as accounting or valuation malpractice. Further, such experts may be asked to give opinions about the link between liability and damages, known as *proximate cause* or, commonly, *causation*, which is described later in this chapter.[2]

Proving Damages

Evidentiary laws generally require injured parties to prove with a reasonable degree of certainty that they suffered a loss. Speculative evidence of damages tends to be either declared inadmissible or given little weight. Courts do not provide a concrete method for defining the degree of certainty, and what guidance they do provide is not consistent. Moreover, some jurisdictions apply an evidentiary standard other than "reasonable certainty" for particular areas of law related to damages. We discuss reasonable certainty later in this chapter.

[2] A particular damage expert will need to have relevant expertise and facts to give specific opinion testimony about a liability issue or proximate cause.

Case in Point

In *Texas Instruments, Inc. v. Teletron Energy Management, Inc.*, 877 S.W.2d 276 (Tex. 1994), the court recognized that the reasonable certainty standard of proof is intended to be flexible to accommodate a variety of circumstances in claims for lost profits.

Experts have important roles in litigation, and judges provide oversight of expert testimony. Damage evidence put forth by an injured party may include expert testimony. Such testimony normally includes technical and other matters beyond ordinary understanding. Evidentiary rules and standards, such as Federal Rules of Evidence (FRE) 702 and 703, and the *Daubert* and *Kumho Tire* cases discussed in chapter 6, "Litigation Services," apply to individuals serving as testifying experts and providing opinions, including damage opinions, before courts of law. Such rules generally address the admissibility of expert opinions. FRE 702, *Daubert*, and *Kumho Tire* evaluate the reliability of an expert's methodology and proper application of the case facts to the expert's opinion. For damage evidence to be admissible, it needs to be reasonably certain in many jurisdictions.

Proving damages for businesses and individuals can be challenging because of evidentiary standards. As we will see in this chapter, such damages can be calculated as **lost profits** and lost wages. For businesses and individuals with a history of earnings, such loss estimates might be inferred from this history, in some degree, making the task of meeting the reasonable certainty standard easier. In contrast, for businesses and individuals with little or no history, the task is more difficult.

General Kinds of Damages

One way to categorize economic damages commonly faced by damage experts is **compensatory damages** and **punitive damages**. Speaking simply, compensatory damages are meant to make the injured party whole or, alternatively, to put the injured party in the same economic position as immediately prior to the injury, as if the event never occurred. Such damages are monetary, usually with the party at fault paying money to the injured party. In contrast, punitive damages are provided in addition to compensatory damages, intended to punish the party at fault. Such damages are usually monetary and paid to the injured party.

Compensatory Damages

Common types of compensatory damages faced by damage experts include lost profits, **loss of value**, unjust enrichment, and **extra out-of-pocket costs**, for business litigation and lost earnings, loss of value, and extra out-of-pocket costs, for litigation involving individuals. We discuss these areas later in this chapter. For such damages, experts may be needed to review documents, testimony, and so on to understand historical financial information and other relevant facts and form judgments about what would have happened, or what will likely happen, to the injured party but-for the wrongdoing (the **but-for condition**). In this framework, a damage expert will often make financial measurements in hypothetical conditions of but-for the injury, make financial measurements in actual conditions given an injury, and calculate the loss as the difference.

Next, we take this framework and put it into context. When financial measurements relate to a business with temporary losses, one often measures the difference as lost profits. A common approach is determining a firm's profits in the hypothetical but-for condition and in the actual condition, with the difference being lost profits. For permanent losses, the difference is a loss of value (or diminution of value). In these kinds of cases, a standard approach is to value an injured firm shortly before the injury and again shortly after the injury, with the difference being the loss of value. In the context of litigation involving individuals and their wages, such differences may be lost earnings (lost wages). In property claims for both businesses and individuals, differences can be measured as a loss of value in a particular property. Further, unjust enrichment is a damage theory that seeks to disgorge the ill-gotten profits of a wrongdoer and pay them to the injured party. Another kind of compensatory damage measure is extra out-of-pocket costs. Such

damages measure the costs an injured party incurred that would not have otherwise been incurred but-for the injury. These kinds of damages are often historical in nature in that they measure extra costs that have already occurred. In some instances when extra costs are ongoing (for example, future medical costs related to a personal physical injury), compensatory damages may be awarded for expected extra costs in the future.

As noted previously, compensatory damages are intended to make an injured party whole, which, speaking simply, means not less than or more than whole, but exactly whole. Multiple approaches for measuring damages may be used, such as those described previously, but not in a way that double counts damages. Double counting makes an injured party more than whole. For instance, claims for loss of value plus lost profits may double count damages. If, for example, an injured party claims lost profits over the past three years and also claims a loss of value as of the time of the injury, it is almost certain some double counting has occurred. Care is needed when expressing opinions using multiple approaches so that double counting does not occur. Although this point sounds elementary, in many circumstances, it is not obvious in the first instance whether double counting actually exists.

Compensatory damages often account for the passage of time. When a litigation matter goes to trial, the trier of fact awards damages at the time of the verdict. Losses, however, may be incurred at times before and after the time of the verdict. For instance, lost profits may be related to periods in the past and future. If lost profits were $1 million per year for each of the past three years, a damage award of $3 million would not make the injured party whole because of the time value of money. In many jurisdictions, the law provides that the wrongdoer must also pay interest on losses that occurred in the past. For expected ongoing losses, damages will be measured as the present value of **future losses** in many jurisdictions.

Punitive Damages

The intent of punitive damages, as noted previously, is to punish a wrongdoer. On average, courts award such damages to the injured party in addition to compensatory damages. Generally, local law prescribes when courts may allow punitive damages and factors that might be considered in assessing magnitude. The amount sometimes depends on a wrongdoer's net worth and liquidity. Speaking simply, the intent is to inflict pain on the party at fault but not put them out of business. Financial experts may be needed to assess a wrongdoer's net worth, liquidity, and expected viability after paying punitive damages.

Legal Terminology

The preceding discussion about common types of damages is from the perspective of financial experts. In the legal community, judges and attorneys use terminology that largely differs from the language used by financial experts. *Black's Law Dictionary*, eighth edition, lists almost 70 terms for various kinds of damages.[3] Such terminology may have important legal implications because it can appear in cases having precedent value. Many of these particular terms, however, may not be relevant to experts as a practical matter.

Commercial Litigation

Damages in Business Litigation

Economic damages related to businesses often take the form of lost profits or loss of value. Figure 14.1 illustrates two circumstances in which loss has occurred. First, figure 14.1a shows a firm with a history of profitability that suffers a temporary loss of profits. The dashed line shows an estimate of the firm's profits in the hypothetical but-for condition. The solid line shows the firm's actual profits. During the **loss period** from t_1 to t_2, actual profits are lower than **but-for profits**, and the difference is the firm's lost profits. In these circumstances, lost profits measurements are a way to determine damages. Next, figure 14.1b shows a firm with a history of profitability suffering an immediate and total

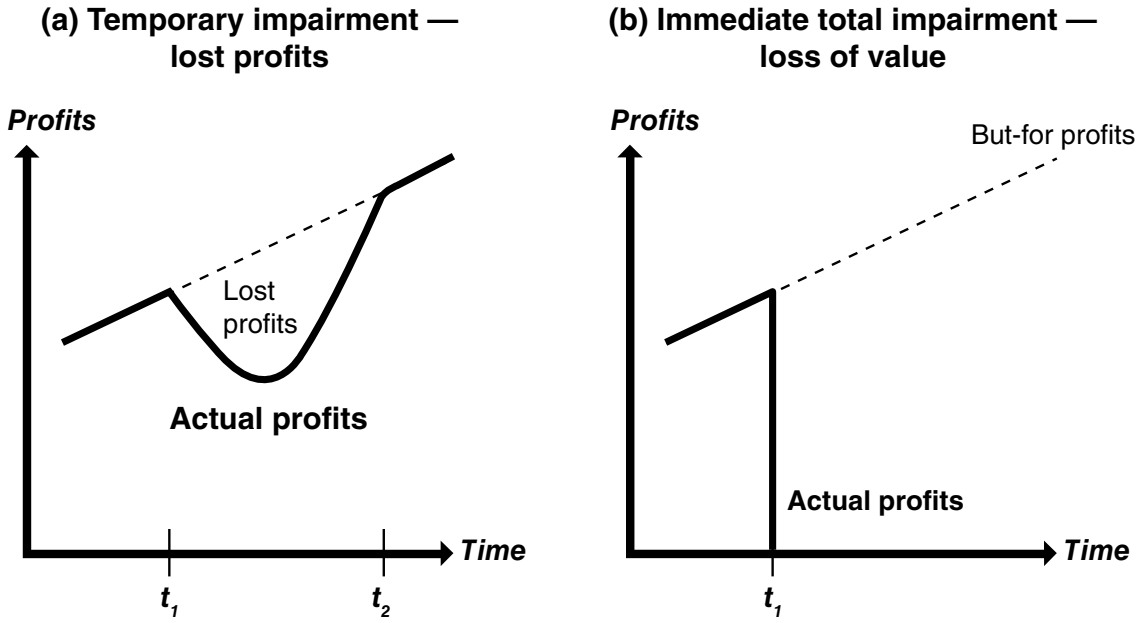
[3] For instance, *Black's Law Dictionary* has terms for *actual damages, consequential damages, continuing damages, expectation damages, general damages, liquidated damages, nominal damages*, and *special damages*.

destruction of its profits at t_1. In these circumstances, loss of value may be an appropriate damage methodology by valuing the firm immediately before t_1.[4]

Case in Point

In *Aetna Life & Casualty Co. v. Little*, 384 So. 2d 213 (Fla. Dist. Ct. App., 4th Dist. 1980), the court said, "Lost profits and loss of use may be a proper item of damages if the property or business is not completely destroyed. [citation omitted] However, where the property or business is totally destroyed we hold the proper total measure of damage to be the market value on the date of loss."

Figure 14.1
Examples of Lost Profits and Loss of Value Circumstances



Lost Profits Damages

Lost profits is a common form of damages in business litigation. In such cases, an injured business has lower (or no) profits because of a wrongdoing. Case law is abundant with descriptions of lost profits damages and provides guidance in many areas, but, generally speaking, attorneys are not familiar with ways to measure damages and leave this task to experts.

Income and Cash Flow Methods

Measurement of lost profits damage can take the form of lost accounting income or lost cash flow. We cannot generalize too much about these two approaches because the choice depends on the facts and circumstances of a particular case. Court opinions addressing lost profits may not literally mean losses of net income or pretax income as accountants define these terms. Generally, one can calculate losses using accrual-based measurements (income approach) or cash-based measurements (cash approach). Courts provide little guidance on these methods. In some matters, the

[4] Other circumstances may exist. For instance, a firm can suffer a slow death when it is injured at t_1, continues operating for some time incurring lost profits, and later shuts down at t_2. One might measure damages in such circumstances based on lost profits while the firm is still operating from t_1 to t_2 and the firm's but-for value when it shuts down at t_2.

results of the two methods show little difference but, in some cases, the difference is large. Factors contributing to large differences between the two methods include length of loss period and timing differences between the two methods, such as accruals and capital assets.

Take an example in which an injured firm would have purchased capital items, such as equipment, to produce its lost revenues.[5] The cash flow approach will show the equipment cost in the year paid. In contrast, the income approach will depreciate the equipment cost over its useful life of multiple years.

Table 14.1 shows calculations for a three-year loss period, with losses measured on the cash and income approaches. The firm would have paid $9,000 to purchase capital assets related to its lost revenues, and these assets had an economic life of three years. The first lines of the two panels are identical, showing the lost incremental operating cash flow before accounting for the capital assets. Panel A shows loss calculations using the cash basis damages method, and panel B reports calculations using the income basis damages method. In the first year, there is a loss of $3,000 using the cash approach and a profit of $3,000 with the income approach. The treatment of the capital items causes this difference. The cash approach deducts the $9,000 in the year paid. In contrast, the income approach deducts depreciation expense, spreading out the $9,000 over three years.[6] The total damages are $12,000 for both methods shown in the right-hand column in both panels.

Table 14.1 Comparison of Cash Basis and Income Basis Damage Methods—Three-Year Damage Period

	Year 1	Year 2	Year 3	Total
Panel A: Cash basis damages				
Incremental operating cash flow	$6,000	$7,000	$8,000	$21,000
Incremental capital improvement	–9,000			–9,000
Cash basis losses	–3,000	7,000	8,000	**12,000**
Panel B: Income basis damages				
Incremental operating cash flow	$6,000	$7,000	$8,000	$21,000
Incremental depreciation	–3,000	–3,000	–3,000	–9,000
Income basis losses	3,000	4,000	5,000	**12,000**

The next example alters the case facts by shortening the loss period from three years to two years. Table 14.2 is the same as the previous table, except for the removal of the third year. Because the loss period of two years differs from the three-year economic life of the capital assets, the total losses in the right-hand column for both panels are now different. Measuring losses with the cash basis damages method, the losses are $4,000. The income basis damages method calculates losses as $7,000. The $3,000 difference is the remaining net book value of the capital items at the end of the second year. Not only are the total losses different, but the annual losses differ as well.

[5] These examples are adapted from Wagner, MJ, "How do you measure damages? Lost income or lost cash flow?," *Journal of Accountancy*, 169(2): 28-33 (1990).

[6] This example assumes an injured firm pays for the capital items in cash. If the firm borrows to finance these items, these effects change.

Table 14.2 Comparison of Cash Basis and Income Basis Damage Methods—Two-Year Damage Period

	Year 1	Year 2	Total
Panel A: Cash basis damages			
Incremental operating cash flow	$6,000	$7,000	$13,000
Incremental capital improvement	–9,000		–9,000
Cash basis losses	–3,000	7,000	**4,000**
Panel B: Income basis damages			
Incremental operating cash flow	$6,000	$7,000	$13,000
Incremental depreciation	–3,000	–3,000	–6,000
Income basis losses	3,000	4,000	**7,000**

Table 14.1 illustrates timing differences when the overall totals of both methods are identical, but the annual losses differ. As you will see, the annual differences result in different damage amounts because of time-value-of-money calculations. Table 14.2 also has timing differences, but the effects do not completely offset each other, leaving an economic impact because the loss period differs from the economic life of the capital assets. This characteristic also contributes to a difference in damage measurements.

The next two tables illustrate the effects of time-value-of-money calculations from the earlier three-year example. Table 14.3 calculates damages as if losses are prospective, occurring after the trial date. Annual losses are discounted back to the trial date to a present value for determining damages. The calculations assume a 10-percent discount rate for all years and that annual losses occur evenly throughout each year and mid-year discounting. Damages using the cash basis damages method are $9,511. In contrast, damages using the income basis damages method are $10,267. Damages differ by $756, even though total losses of $12,000 are identical. The timing of the annual losses causes the $756 difference.

Table 14.3 Difference in Present Values—Three-Year Damage Period

	Year 1	Year 2	Year 3	Total
Cash basis losses	$–3,000	$7,000	$8,000	$12,000
Present value at year 0	–2,860	6,067	6,304	**9,511**
Income basis losses	$3,000	$4,000	$5,000	$12,000
Present value at year 0	2,860	3,467	3,940	**10,267**

Table 14.4 computes damages as if they are retrospective, occurring before the time of trial. Damages consist of the annual losses plus **prejudgment interest**. The calculations assume an annual 10-percent compounded interest rate and mid-year convention used in the preceding table. The trial date is at the end of the third year. The table shows damages of $12,659 by applying the cash basis damages method and $13,666 with the income basis damages method. Damages differ by $1,007. Similar to the preceding table, damages differ because of the timing of annual losses, even though the total losses of $12,000 are identical.

Table 14.4 Difference in Future Values—Three-Year Damage Period

	Year 1	Year 2	Year 3	Total
Cash basis losses	$–3,000	$7,000	$8,000	$12,000
Future value at year 3	–3,807	8,076	8,390	**12,659**
Income basis losses	$3,000	$4,000	$5,000	$12,000
Future value at year 3	3,807	4,615	5,244	**13,666**

These examples illustrate lost profits damage measurements using the cash basis and income basis damages methods. One method measures losses based on cash flow and the other on accounting income. Differences in these two methods generally arise from how financial transactions are reported on income statements and balance sheets for accounting purposes. Specifically, differences tend to arise from accrual and capital items. Generally speaking, these items lead to timing differences for the year the transactions affect accounting income. As shown in these examples, such differences may have important effects on damage measurements that are not intuitive.

Length of Damage Period

Measuring lost profits occurs for some specified time horizon. The starting point for these losses often correlates to the first occurrence of a wrongdoing. Such actions could be the time a contract breach happened, the first occurrence of negligence or fraud, and so on. The end of the damage time horizon depends on the particular facts and circumstances in a case.

- *Contract claims.* For contract claims, it might seem logical in the first instance that the contract term determines the end of the loss period, but contract claims can get complicated in relation to the time horizon for the loss period. When a contract term is lengthy, the facts of a particular case may be that measuring losses is uncertain or that fulfillment of contract terms over a longer horizon is uncertain. In some cases, courts have not allowed losses for an entire lengthy contract term. This point illustrates an application of a legal principle followed in many jurisdictions that lost profits must be proven with some degree of certainty.

  Although a contract term with a shorter horizon may seem obvious for establishing the end of a loss period, in some cases, a party might argue that a contract would have renewed but-for the wrongdoing when renewal provisions exist. Such arguments make the loss period longer. These arguments are stronger if the parties have a history of contract renewal.

  If an injured party is able to fully mitigate their loss within a relevant contract term, then such damages stop at this point. We discuss mitigation later in this chapter.
- *Torts.* Loss periods in tort actions tend to end whenever related losses no longer occur or cannot be measured. Thus, loss periods generally begin when a tort first occurs[7] and ends when the injured party no longer suffers losses or when damages can no longer be measured. In the context of business operations, the end of a loss period may be when the operations return to normal or when losses are fully mitigated. In some cases, however, losses may be ongoing and permanent.

When a loss period ends after the trial, some describe pretrial losses as **past losses** (or past lost profits) and post-trial losses as future losses (or future lost profits). This perspective effectively separates the past and future by the trial date. This split may seem obvious but, in practice, one may determine this separation months before trial.

[7] If, for some reason, economic losses start after a tort first occurs, then the loss period starts at that time.

General Damage Models

One can generalize many damage models into the following:

- Before-and-after methodologies
- Yardstick (or benchmark) methodologies
- Market share methodologies
- Underlying contract methodologies
- Wrongdoer's ill-gotten profits methodologies

This listing is not necessarily all-inclusive but likely captures most models in practice.

Before-and-After Methodologies

A *before-and-after methodology* to estimate lost profits compares the firm's performance before the wrongdoing to its performance after the wrongdoing. Presumably, the firm is doing worse after the wrongdoing on average. Using the framework described earlier, one might estimate the injured party's **but-for sales** or profits. *But-for sales and profits* are a firm's hypothetical sales and profits, respectively, if a wrongdoing had not occurred. A before-and-after methodology infers a firm's past experience into the loss period. Put differently, this methodology predicts that an injured party would have had performance after the wrongdoing similar to its performance before the wrongdoing. Such performance might be measured as revenues, unit sales, profits, and so on.

The decline in a firm's performance may not be fully attributed to the wrongdoer. Firms may have worse performance for other reasons that confound a damage analysis. For instance, if a loss period coincides with another event, such as an economic downturn, the question becomes how much of the underperformance was caused by the wrongdoer. Under the law, only the portion of losses linked to the wrongdoer is compensable as damages.

Yardstick (or Benchmark) Methodologies

A *yardstick* (or *benchmark*) *methodology* tends to compare an injured firm's actual operations after the injury to a different business operation for a similar time frame. The other operation might be another firm, averages of other firms or an industry average, or a different operation of the injured party, such as another location or production line. A variation of this approach is comparing the injured firm's actual performance after the injury to its predicted performance obtained from an earlier forecast.

Legal evidentiary standards on reliability suggest that a selected benchmark be reasonable for estimating damages. A consideration is whether a benchmark is reasonably similar to the injured firm for the purpose of determining damages. Benchmark criteria depend on the facts and circumstances of a particular case. Such criteria might include customer makeup, geographic proximity, and operating under similar pre-injury or but-for conditions. When applying forecasts as a benchmark, such information ought to be unbiased in terms of the instant litigation and reasonable. Strictly speaking, benchmarks do not need to be perfect matches compared to an injured firm, but any important differences may need to be considered in an analysis.

Market Share Methodologies

A *market share methodology* is based on the size of a broad market of certain goods or services and an injured firm's share of that market before and after a wrongdoing. Presumably, the firm's percentage market share falls after the injury or is otherwise lower than expected. This kind of methodology might be used when information exists that quantifies sales or some other measure of a broad market of goods or services (such as an industry's total revenues) and an injured firm's share of the market measure. When such information exists, an advantage of this methodology is that it can account for fast-changing industries.

An example of this methodology follows. Assume an injury occurs at time t, and trial occurs at t+2. The first column of table 14.5 shows historical industry sales through t+1 and forecasted industry sales starting in t+2. We can observe the industry growing rapidly. The table's second column shows the injured firm's actual sales through t+1 and forecasted sales in the actual condition given the injury. The third column reports the firm's actual share of market sales through t+1 and forecasted share afterwards. We can see the firm's market share increase until the time of injury and then decline through the time of trial. During the post-trial period, a forecast predicts the firm's market share will

decline and then increase, but at a level still below pre-injury levels. The fourth column shows the firm's market share in the hypothetical but-for condition. In this condition, an estimate of the firm's but-for market share is needed starting at the time of injury.

Given this data, we can observe the firm has lost, or will likely lose, market share after the injury compared to its expected share in the but-for condition. For instance, the firm expected market share of 16 percent but-for the injury, but actually had 10-percent market share during *t*+1. One can calculate but-for sales as the product of industry sales and the firm's but-for market share. Then, one can measure lost sales as the difference between but-for sales and firm sales that appear in the second column. For *t*+1, but-for sales are $192, derived by multiplying $1200 by 16 percent, and lost sales are $72, the difference between $192 and $120. Lost sales can serve as a basis for calculating lost profits.

Table 14.5 Data for Market Share Analysis

			Firm's Market Share	
	Market Sales	Firm's Sales	Actual Condition	But-For Condition
t-3	$500	$50	10%	N/A
t-2	$550	$66	12%	N/A
t-1	$700	$98	14%	N/A
Time of injury				
t	$900	$108	12%	15%
t+1	$1,200	$120	10%	16%
Time of trial				
t+2	$1,400	$112	8%	17%
t+3	$1,500	$120	8%	17%
t+4	$1,800	$162	9%	17%
t+5	$2,000	$180	9%	17%

N/A = Not applicable

Underlying Contract Methodologies

In some circumstances, contract terms can be used for lost profits calculations. Such contracts may contain enough information for some of the measurements. For instance, in a breach of contract claim, assume that two parties entered into an agreement in which a seller would sell 100 custom products to a buyer at specified prices over a 5-year period, but the buyer failed to complete the transactions. These contract terms may be enough to measure the injured firm's lost revenues.

Wrongdoer's Ill-Gotten Profits Methodologies

In some kinds of legal cases, the law provides the remedy of disgorging a wrongdoer's ill-gotten profits and paying them to the injured party.[8,9] A name for the related damage theory is *unjust enrichment*. Put simply, the legal theory is that a wrongdoer profited by violating the law, and these profits should be taken from them and paid to the injured party.

For damage measurements, this perspective looks at the sales and profits of a wrongdoer, rather than those of an injured firm. Thus, the focus is on the wrongdoer's financial data. As discussed, the objective of compensatory damages is to make an injured party whole and double counting makes them more than whole. For unjust enrichment

[8] For instance, the law generally allows unjust enrichment damages in infringement claims related to design patents, trademarks, copyrights, and trade secrets, but not for utility and plant patents.

[9] The principle described here is similar to restitution provisions for violations of securities laws.

remedies, care is taken to avoid double counting damages if one claims both a wrongdoer's profits and an injured party's lost profits.

Some particular legal issues may exist for unjust enrichment remedies. For instance, in some kinds of cases, an injured party claiming unjust enrichment need only prove the amount of a wrongdoer's revenues related to the action, rather than proving the wrongdoer's associated profits. After proving these revenues, the burden of proof shifts to the wrongdoer for proving its relevant costs and any portions of profit attributable to other factors. Simply put, the burden of proof in unjust enrichment damages may differ from that of lost profits damages.

Avoided Costs in Lost Profits Measurements

One way of applying the general damage models discussed in the preceding section is for estimating lost revenues. To derive lost profits from lost revenues, one generally deducts costs that the firm avoided by not producing and selling the goods or services. Equation 14.1 illustrates this notion.

$$\textit{Lost revenues} - \textit{Avoided costs} = \textit{Lost profits} \tag{14.1}$$

Conceptually, in claims for lost profits, a firm suffers economic damages because it did not sell certain goods or services, measured as revenues the firm did not receive, minus costs the firm avoided by not generating these revenues. We might call this second part **avoided costs** or **foregone costs**. Suppose a firm buys a product at a wholesale price of $100 and sells it for a retail price of $150 and incurs no other costs. Its profit for this item is $50. If a customer breached a contract by not buying one unit of the product, the firm suffers an economic loss of $50. It does not suffer an economic loss of $150 because it did not need to incur the cost of $100 by not buying the product. In this example, $150 is lost revenue, $100 is the avoided cost that the firm does not incur, and $50 is the firm's lost profit.

The preceding example showing avoided cost is straightforward because the firm incurs a single direct cost to sell one unit of product. In practice, firms may incur many kinds of costs related to product sales. This characteristic makes cost estimation relatively complex in many instances.

In the way of background, accountants may classify costs as variable, fixed, and semi-variable. In this framework, variable costs vary directly with the firm's revenues, but fixed costs do not. Semi-variable (alternatively known as *semi-fixed* or *step*) costs vary over a wider range of revenues but stay fixed within a narrower range of revenues. For instance, when revenues range between *A* and *B*, a certain cost is $100; between *B* and *C*, the cost is $200; and between *C* and *D*, the cost is $300. The function of this semi-variable cost looks like a set of stairs when graphed.

Avoided costs do not fit neatly into this accounting framework. For lost profits measurements, avoided costs are whatever costs a particular injured firm avoids because it does not generate the lost revenues. Such costs might include variable, semi-variable, and fixed costs in the accounting sense. For instance, when lost revenues are associated with a new plant facility that would have been constructed but-for the loss and was not actually built, the firm likely avoided many kinds of expenditures, such as costs of construction and acquiring fixed assets. Accountants would classify many of these expenditures as fixed costs, but such costs may be classified as avoided for lost profits damage measurements.

A generalized specification for avoided costs is not possible because the facts and circumstances of a particular case need assessment to identify and measure avoided costs linked to a particular set of lost revenues. The length of time that a firm loses revenues may have an effect on the kinds of costs that a firm can avoid. When the loss period is relatively short, firms may have fewer kinds of costs they can avoid. But when the loss period is relatively long, firms generally have opportunities to avoid more kinds of costs.[10]

In practice, multiple methodologies exist to estimate costs. One can group such methodologies as *non-statistical* and *statistical*. Non-statistical methodologies for estimating avoided costs include approaches used in ordinary accounting and financial analysis practice. In contrast, statistical methodologies include regression analysis to examine the relation between a firm's revenues and costs.

[10] One might link this notion to microeconomic cost curves, when economic theory predicts that all firm inputs are variable in the long run.

Practical Constraints Limiting Losses

When measuring lost profits, one may need to consider whether an injured firm faces any practical constraints operating in a hypothetical but-for condition. In the but-for world, an injured firm is usually performing activities related to lost revenues and its other operations. Upon introducing operations related to the lost revenues, the firm might face some practical limitations. In this condition, a firm is theoretically operating at a level to create the lost revenues plus revenues from its other sources. This perspective views an injured firm that has more activity than it actually experiences. One may need to assess whether the firm has the ability to operate at this higher level of activity.

One kind of practical constraint is production capacity. For instance, if a firm lost $10 million in revenues when a customer breached a contract and had $20 million in revenues from other customers, a practical matter is whether the firm had any constraints for creating $30 million in revenues. If this firm was a manufacturer with a factory capacity of only $25 million in revenue, it lacked plant capacity for producing goods worth $30 million. This firm might have replaced the lost contract with some new business when it realized that it had excess capacity.[11] For damage measurement, it may be necessary to reduce the amount of lost revenues for such constraints. In this example, lost revenues might be limited to $5 million, rather than $10 million, because with the $20 million in other revenues, the firm reaches its plant capacity of $25 million.

In addition to production capacity, another kind of constraint is financing capacity. Firms may need new financing to acquire assets or provide working capital needed to perform work related to a set of lost revenues in the but-for condition. Common financing sources are debt and equity, plus a firm's retained earnings. In the hypothetical but-for condition, a firm may face limitations in financing capacity if it needs to obtain significantly more capital to operate at a higher level. For instance, if a firm needs several millions of dollars of new capital to perform the work related to the lost profits claim, could the firm have obtained the capital given the conditions at the time? If not, the magnitude of lost revenues may be constrained.

Other kinds of practical constraints are possible. For instance, smaller firms might face managerial capacity. Firms need managers to operate effectively. Smaller firms may have practical limits in obtaining the quantity or quality of managers for a particular operating level. Another example applies to larger firms. Such firms might face practical limitations related to market share constraints. Assume a firm has a 20-percent share of the total market and, in the but-for condition, it would have a larger market share of 30 percent by adding the lost revenues. Whether a market share of 30 percent is practical may depend on market conditions and other factors.

The constraints described in this section cannot be generalized too much. Application depends on the facts and circumstances of a particular case. Figure 14.2 shows two injured firms and the relation of lost revenues to total revenues in but-for conditions. Firm A has lost revenues that are relatively small compared to its total revenues. In contrast, firm B has a much larger proportion of lost revenues. Practical constraints may vary in these two firms. For instance, examination of production constraints may be more relevant for firm B because lost revenues make up a much larger proportion of the firm's total operations in the but-for condition.

Time Value of Money in Lost Profits Damages

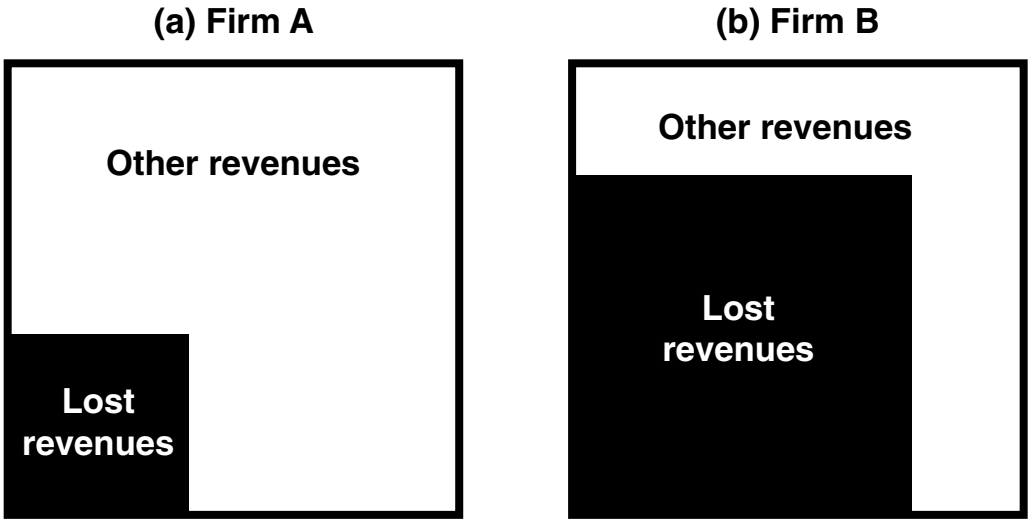
Lost profits have a time component associated with them. Measurements of lost profits relate to a particular year, quarter, month, and so on. The distance from the particular time of a loss to some relevant date in a lawsuit, often the trial date or date of judgment, generally requires some adjustment to account for the passage of time. The time-value-of-money concept is well-documented in finance and accounting literature. Forms of it also appear in the law.

Past Losses

Laws in certain jurisdictions may require particular treatment of past losses to account for the passage of time. Such treatment may be to apply a prescribed interest rate to losses that occurred in the past for determining interest payable to the injured party. The legal term for this treatment is *prejudgment interest*. This treatment effectively measures lost profits damages as all lost profits that have occurred in the past, expressed in **nominal amounts**, plus prejudgment interest on these losses. As we will see, this methodology is referred to as the *ex post approach* for prejudgment interest on lost profits.

[11] Such replacement of lost business with new business is a form of mitigation, discussed later in this chapter.

Figure 14.2
Example of Two Injured Firms in a But-For Condition



In many jurisdictions, the law specifies a particular interest rate (sometimes called the *statutory interest rate*) and calculation methodology. If the law is silent about the magnitude of an interest rate, then a market interest rate might be used. In such cases, local law or local legal practice may provide guidance about whether market interest rates should be based on a particular kind of asset.

Future Losses

Lost profits for future time periods generally require adjustments to account for the time value of money. Speaking simply, damages related to future lost profits expressed in nominal terms are the present value of these future losses. Legal cases describe these kinds of adjustments in various ways. From an economic perspective, these are present-value calculations.

Measurements related to future time periods generally require calculations to adjust these amounts to their present value. After determining the amounts of future lost profits in nominal amounts, one needs a discount rate for the present-value calculations. Next, we describe these kinds of discount rates.

For over two centuries of American jurisprudence, the law on lost profits damages provides relatively little guidance on how discount rates ought to be measured. Relatively few precedent-setting cases discuss discount rates for such damages in detail. Further, these cases are not consistent, leaving damage experts to wrestle with present-value calculations for lost profits matters. One can classify discount rates described in relatively few legal cases into three groups: risk-adjusted discount rates, injured party's expected return on investing the award, and safe rates of return as a matter of law. The first two items are matters of fact based on a particular lawsuit and often require an expert to determine the discount rate. The third item is a matter of law whereby a court imposes a safe rate of return based on statute or case law. These three areas are discussed further in the following paragraphs.

First, risk-adjusted discount rates are well-documented in the finance literature. Simply put, these discount rates are rates of return that investors require based on the degree of risk of a particular asset or set of cash flows. The underlying theory is that investors are risk adverse and require an incentive to invest in riskier assets, rather than safer assets. Put differently, investors require higher rates of return for riskier assets because they prefer safety, other things being equal. We can say the same for expected future cash flows. Investors require higher rates of return for a set of risky future cash flows. One can observe this positive correlation between risk and return in empirical data. We further discuss this correlation and methodologies for quantifying such rates of return in chapter 15, "Valuation Fundamentals."

The second kind of discount rate described in legal cases on lost profits damages is an injured party's expected return for investing the damage award. This approach can be illustrated in a simple example. Assume that an injured

party expected to receive $1000 one year from now and was denied the opportunity by a wrongdoer. The injured party can be made whole by awarding them an amount less than $1000, placing this award in an investment, and in one year, the investment, consisting of principal and interest, will be worth $1000. Given this example, the particular rate of return is linked to the kind of investment in which an injured party can or ought to invest.

The third kind of discount rate that case law describes is a safe rate of return when required by law in a particular jurisdiction. This approach largely takes discount rate estimation out of the economic world and into law. When the law requires this approach, then present-value calculations will use a safe rate, generally based on interest rates of safe assets, for the discount factor.

This discussion assumes that lost profits measurements are expressed in *nominal* amounts rather than **real amounts**.[12] Some economists, however, may make loss forecasts in real amounts. In such cases, discount rates should be adjusted for inflation for consistency.

Ex Ante and Ex Post Approaches

Courts vary in their approaches for calculating prejudgment interest and present-value calculations for lost profits. Strictly speaking, such variations are legal matters, rather than economic. One may need to defer to law or local legal practice to determine if and how prejudgment interest is assessed on lost profits and how present-valuation calculations ought to be made.

Figure 14.3 shows two such approaches for these calculations: ex post and ex ante. We might think of these approaches as two ways to account for the time value of money in lost profits damages. For each approach, we begin with a lost profits claim in which an injured firm has lost profits before and after the trial date. At the top of figures 14.3a and 14.3b, lost profits appear in a timeline where the loss period begins and ends, and a trial date occurs during the loss period.

The ex post approach of lost profits damages, shown in figure 14.3a, first takes past lost profits and adds prejudgment interest on these losses. Such interest generally accrues from the time of each cash flow event, such as annual or quarterly lost profits, through the date of trial. Thus, if a firm has lost profits for three years in the past and lost profit measurements are annual, prejudgment interest is calculated using three periodic amounts. Next, this approach generally calculates the present value of future loss profits from the time of each cash flow event back to the trial date. Total loss profits damages consist of all past lost profits in nominal amounts, prejudgment interest on past lost profits, and the present value of future lost profits using the time of trial as the measurement date.

Figure 14.3b shows the ex ante approach for such calculations. First, this approach generally discounts all lost profits—past and future—back to a present value as of the time of injury.[13] Next, prejudgment interest is determined on this amount calculated from that date to the time of trial. Total lost profits damages consist of the present value of all lost profits as of the time of injury and prejudgment interest on this amount.

This discussion so far relates to ex post and ex ante approaches for calculating prejudgment interest and present-value calculations. Unfortunately, the ex post and ex ante terms are used in another context that may cause confusion. The alternative context may be applied jointly with these calculations or applied independently.

The alternative use of these two terms is an assumption about a particular measurement date for damages. Damage measurements are based on conditions and information that exist on this particular date. Conditions affecting firms and individuals change over time, and the precise date for a set of conditions may affect the magnitude of damages. In this context, the ex post perspective assumes one has full knowledge of all facts as of the present time (including through the trial date). In 1933, the U.S. Supreme Court alluded to this perspective as the Book of Wisdom. Simply put, it means that one will consider all information through the present time for litigation matters. In 1933, the Supreme Court said[14]

> At times the only evidence available may be that supplied by testimony of experts as to the state of the art, the character of the improvement, and the probable increase of efficiency or savings of expense…. This will generally be the case if the trial follows quickly after the issue of the patent. But a different situation is presented if years have gone by before the evidence is offered. Experience is then available to correct uncertain prophecy. Here is a book of

[12] Real amounts are nominal amounts adjusted to remove the effects of inflation.

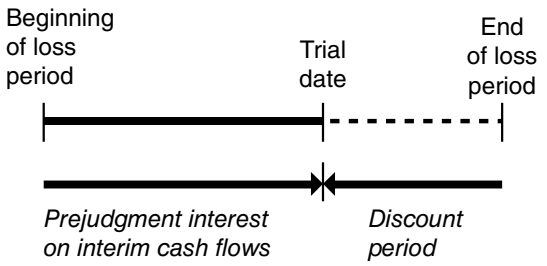
[13] The law may specify an alternative date.

[14] *Sinclair Ref. Co. v. Jenkins Petroleum Co.*, 289 U.S. 689 (1933).

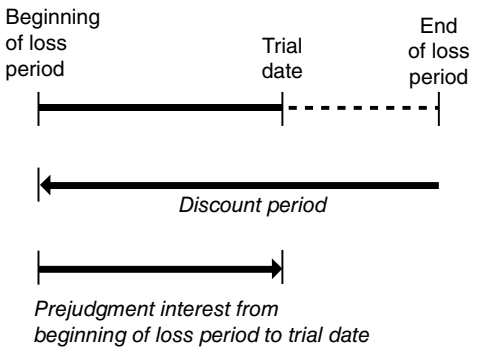
wisdom that courts may not neglect. We find no rule of law that sets a clasp upon its pages, and forbids us to look within.

Figure 14.3
Ex Post and Ex Ante Approaches for Prejudgment Interest and Present-Value Discounting

(a) Ex post approach



(b) Ex ante approach



The ex ante perspective, in contrast, determines damages based on a particular, earlier measurement date using a set of conditions and information as of that time. This date may be the date of injury. Using this perspective, no knowledge that arose after this date may be used to measure a loss. Thus, a damage expert will measure losses based on conditions and information that existed as of this earlier date and ignore subsequent conditions and information.

Fisher and Romaine[15] compare the ex ante and ex post approaches by creating a hypothetical story. A classmate of Janis Joplin obtained Joplin's signature in his high school yearbook at graduation. Shortly thereafter, someone stole the yearbook. Years later, the thief was found and sued. Fisher and Romaine examine whether the book owner's damages should be based on the yearbook's value at the time of theft (before Joplin became famous) or its value at the time of trial (after Joplin became famous). They are examining the ex ante and ex post perspectives for damage measurement when making an injured party whole. In this case, ex ante and ex post measurements differ greatly. An ex ante approach pays the injured party the value of the yearbook at the time of the theft (say, $5) plus prejudgment interest. The ex post perspective measures damages as the yearbook's value with Joplin's autograph as of the time of trial (say, $1000). At the very least, the story is an interesting thought exercise and shows that arguments for both

[15] Fisher, FM and Romaine, RC, "Janis Joplin's yearbook and the theory of damages," *Journal of Accounting, Auditing & Finance*, 5(1): 145-57 (1990).

ex ante and ex post perspectives could be reasonable in making injured parties whole depending on the particular circumstances.

The choice of ex ante or ex post perspective for damage measurements is a legal matter and not an economic one. Thus, one looks to the law or attorneys to make legal interpretations or assumptions when applying one or the other approach.

Box 14.1 summarizes this discussion. As stated, ex post and ex ante factors can be treated jointly or separately, resulting in a mixed approach. For instance, it might be possible to have the measurement date as of the current time using all information through the present (ex post) and discount all lost profits to the date of injury and then apply prejudgment interest (ex ante). Further, depending on the ex post and ex ante perspective for the last two factors in the table, such damage measurements can be very different, even though the measurement dates are identical. Discount rates and prejudgment interest rates may differ greatly, which can affect calculation results. The further back in time for present-value calculations, the lower the present value for which a (likely) lower prejudgment interest rate is applied. Assuming a discount rate higher than the statutory interest rate, lost profits damages using an ex ante approach will be lower compared to the ex post approach simply because of mathematics.

Box 14.1 Components of Ex Post and Ex Ante Approaches

	Ex post	Ex ante
Conditions and information	As of most recent date	As of date of injury
Measurement date	Most recent date	Date of injury
Discounting	Future lost profits discounted to date of trial	All lost profits discounted to date of injury
Prejudgment interest	On past lost profits to date of trial	On the discounted present value of lost profits to date of trial

Taxes on Business Damages

Taxes have a role in damage measurements for business litigation. In the United States, an injured party's damage award or settlement is taxable by the federal government unless it relates to a personal physical injury or physical sickness.[16] Thus, injured firms generally pay taxes on business damage awards, such as lost profits and extra out-of-pocket costs.

Consequently, lost profits damage measurements need to be based on pretax profits unless taxes are accounted for some other way. Compensatory damages, as previously discussed, intend to make an injured party whole. As we will see, such damage measurements using pretax lost profits will meet this goal unless we introduce changing tax rates.

Conceptually, lost profits damage awards do not reflect a reduction for a firm's income tax expense. Take a simple example. Assume that an injured firm expected pretax profits of $100 but was denied these profits by a wrongdoer. In the hypothetical but-for condition, the firm will earn profits of $100, pay income taxes of, say, 40 percent or $40, and have after-tax profits of $60. Put simply, the firm expected to have $60 after paying taxes. In the litigation, lost profits damages are the pretax profit of $100 rather than the after-tax profit of $60. Why is this so? Upon receiving a damage award of $100, the injured party is taxed on this amount and will pay the government $40, leaving it with $60. Thus, the injured firm needs to be awarded pretax profits to make it whole. If lost profits damages were incorrectly awarded as $60, the injured firm then pays taxes of 40 percent on this amount, leaving it with only $36. This after-tax amount is less than $60 that the firm would have in after-tax profit in the but-for condition. Thus, an injured firm is made less

[16] Tax law has several other exemptions from taxation, mostly related to personal matters.

than whole by incorrectly awarding lost profits damages on an after-tax basis. Generally speaking, the correct measure for lost profits damages is lost profits on a pretax basis.[17,18]

Unestablished Businesses

Newer firms with little or no history of profitability that have been destroyed or otherwise injured by a wrongdoer generally have a more difficult task when proving lost profits. With little or no history of profitability, estimating but-for profits with some degree of certainty is not straightforward on average. Evidentiary standards, as previously noted, require injured parties to prove lost profits damage claims to a reasonable degree of certainty. Moreover, several states have a new business rule in their laws that explicitly prevents a new business from recovering lost profits damages. The justification for these kinds of rules is the speculative nature of unprofitable new businesses. Without proof that a new business has been profitable, how can an injured firm prove lost profits?

Damage analysis can get quite complex by introducing facts other than simply having a new corporation open and later shut down without having any profits. For instance, a certain firm may have a track record. It expands by opening a new location. Assuming an injury at the new location, little history exists for the new operation, but data from the firm's other locations may be relevant.

Loss of Value Damages

Damages measured as a firm's loss of value may take the form of its value shortly before the injury and shortly after the injury, with the difference taken as a diminution of value.[19] Presumably, an injured firm's outlook is less optimistic after the wrongdoing. Similar to lost profits damages, a decrease in value must be proximately caused by the wrongdoer in order to be compensable.

In terms of profitability, damages measured as lost value may be appropriate when a firm's profits are permanently impaired. Such impairment may be total destruction of profits as illustrated in figure 14.1 or a permanent decline in profitability as a firm continues to operate. When impairment is temporary, lost profits may be a better damage measure.

Factors other than profitability (and cash flow) affect asset pricing, and this will be discussed in chapter 15, "Valuation Fundamentals," and chapter 16, "Valuation Applications." An increase in a firm's cost of capital or a decrease in its price multiple will cause firm values to decline, other things being equal. Time horizons for negative changes in cost of capital and price multiples could affect damage approaches. If such changes are temporary, confounding factors may arise, such as investor holding period. With the introduction of more factors, the facts or circumstances of a particular case play a more important role in damage measurement.

Extra Out-of-Pocket Costs

Extra costs an injured firm incurs that it would not otherwise incur but-for an injury are generally recoverable as damages. Care must be taken to avoid double counting when an injured firm claims other forms of damages. For instance, lost profits damages may include such extra costs somewhere in the calculations. When comparing but-for profits to actual profits, costs included in the actual profits cannot be claimed again as separate damages for extra out-of-pocket costs.

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[17] When discounting lost profits to a present value for damage measurements, no adjustment to the required return (discount rate) for taxes is needed because taxes have been accounted for already in the pretax lost profits measure.

[18] An alternative mathematical approach is to start with *after-tax* lost profits for interim calculations and then "gross up" the result for taxes. This perspective essentially calculates an after after-tax damage amount and then adjusts it by adding the related taxes an injured party will pay to derive a higher damage award. If tax rates remain stable over the loss period and for the time a damage award is received, the result of this alternative calculation is identical to what we described earlier. However, if tax rates vary, calculation results likely differ to some degree. Whether any such change in tax rates matters in making an injured party whole depends on the facts and circumstances of a particular case.

[19] We discuss business valuation in the next two chapters.

Mitigation

Mitigation is a legal principle that states that a party who has suffered a loss generally related to a breach of contract or tort has a responsibility to act in a way that minimizes its losses to the extent it is reasonable. For example, assume that a tenant signs an agreement to occupy a house for a year but moves out and stops paying rent after one month. The landlord has a responsibility to make a reasonable attempt to find another tenant for the rest of the year. In a breach of contract lawsuit, the landlord may not collect all the remaining rents under the lease if it could have found a replacement tenant but failed to do so.

In lost profits claims, a party who has suffered an injury (such as a breach of contract or negligence) has a responsibility to mitigate its ongoing damages. If it could have minimized its lost profits damages but did not take reasonable action, it may not be able to recover the full amount of damages it actually suffered. Such action may include finding new customers to replace lost business or reducing ongoing costs.

Legal Principles Related to Lost Profits Damages

In this section, certain legal principles related to lost profits damages are addressed. As previously stated, for an injured party to collect damages in litigation, they must prove another party committed a wrongdoing, and the injured party suffered damages because of the wrongdoing. Damage experts have a role in the second component. Several legal principles apply to lost profits damage measurements and evidentiary admissibility in courts of law.

Proximate Cause

One legal principle is that a party must prove that their lost profits damages were proximately caused by the wrongdoer. Simply put, this principle is a cause-and-effect linkage: Claimed damages (effect) must be linked to the wrongdoing (cause). A common term for this idea is *causation*. If a party has a loss of profits, only the portion linked to the wrongdoing is permitted as compensatory damages. Losses attributed to anything else are not compensable.

Reasonable Certainty

Another legal principle is *reasonable certainty* that says claimants must prove lost profits damages to a reasonable degree of certainty to be awarded damages. One court described the meaning of reasonable certainty as "the standard for degree of certainty requires that the mind of a prudent impartial person be satisfied with the damages."[20] Moreover, reasonable certainty is different than certainty. Another court said[21]

> The second requirement, that damages be reasonably certain, does not require absolute certainty. Damages resulting from the loss of future profits are often an approximation. The law does not require that they be determined with mathematical precision. It requires only that damages be capable of measurement based upon known reliable factors without undue speculation….[citations omitted]

Courts generally apply the reasonable certainty principle to whether a claimant has incurred any damages (the fact of damages), rather than to the amount of damages. Put differently, claimants need to prove with reasonable certainty that they incurred some amount of damages. Damage measurements, however, have a somewhat lower standard because they are estimates. One federal court said[22]

> The requirement that future profits must be proved with reasonable certainty particularly applies to the fact of damages…. It is particularly in the area of quantifying the amount of lost profits that courts impose the risk of uncertainty on the breaching party whose breach gave rise to the uncertainty.

[20] *Brevard County Fair Association, Inc. v. Cocoa Expo, Inc.*, 832 So. 2d 147, 153 (Fla. App. 2002).
[21] *Ashland Management Inc. v. Janien*, 82 N.Y.2d 395 (1993).
[22] *Mid-America Tablewares, Inc. v. Mogi Trading Co.*, 100 F.3d 1353 (7th Cir. 1996).

Foreseeability

In contract claims, the law generally requires that lost profits from a contract breach must have been foreseeable in order to be compensable. This perspective is that of the parties at the time of making the contract. The requirement is that the wrongdoer could have reasonably anticipated the other party's loss of profits in the event of its contract breach. Put simply, an injured party must prove that the loss of profits due to a wrongdoer's actions were actually foreseeable at the time of the agreement. If not, lost profits damages may not be compensable in contract claims. Foreseeability, of course, goes to the facts of a particular case, including the characteristics of the wrongdoer.

Expert Opinion Admissibility

As discussed in chapter 5, "Discovery," federal jurisdictions have rules of evidence that, among other things, provide courts and attorneys with guidelines on the admissibility of expert testimony. FRE 702 specifies several necessary factors needed for a court to admit expert opinion, including that an expert's "testimony is based on sufficient facts or data," and the "testimony is the product of reliable principles and methods." The discussion in this chapter has largely addressed methodology for developing reliable expert opinions on damage measurements. The federal rule, and equivalent rules in many states, and related case law such as *Daubert v. Merrell Dow Pharmaceuticals, Inc.*[23] and *Kumho Tire Co. v. Carmichael*[24] are forces that push experts to collect adequate data and use reliable methodologies in forming opinions. Otherwise, their damage opinions may be excluded from trial.

Damages Related to Intellectual Property

In contrast to firms of several decades ago, who tended to rely on tangible assets like natural resources, factories, and trucks, many contemporary firms own important intellectual property that directly or indirectly produces substantial profits. *Intellectual property* is a special kind of property, such as creative ideas, valuable secrets, technology, and so on that firms or individuals own. In contrast to personal property and real property, intellectual properties are intangible in nature and, perhaps, easier for others to use inappropriately; therefore, special case law has evolved for intellectual property. Much of the related litigation occurs in federal courts and often involves large amounts of money. Litigation over intellectual property often occurs over the claim that one party is using another party's intellectual property without consent (infringement). Remedies include damages and injunction.

Table 14.6 summarizes kinds of damage remedies by type of intellectual property generally allowed. Causes of action for intellectual property claims often relate to infringement. Double counting of these kinds of damages are generally not permitted for compensatory damages when they make an injured party more than whole.

Table 14.6 Kinds of Damage Measures in Intellectual Property Litigation

	Lost profits	Price erosion	Corrective advertising	Unjust enrichment	Reasonable royalty	Decrease in Value	Statutory
Patent, utility	x	x			x		
Patent, plant	x	x			x		
Patent, design	x	x		x	x		
Trademark	x	x	x	x	x	x	x
Copyright	x	x		x	x	x	x
Trade secret	x	x		x	x	x	

[23] *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).
[24] *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999).

Trade secret litigation generally occurs in state, rather than federal, courts. Thus, specific application may depend on laws in a particular state.

Lost profits are an injured party's profits they did not receive due to an infringement. In contrast, unjust enrichment generally means a wrongdoer's profits related to the infringement. In many cases, a wrongdoer's profits may be easier to prove. In certain causes of action for unjust enrichment damages, the burden of proof shifts compared to traditional civil litigation. As discussed, an injured party may need to prove only the wrongdoer's revenues, rather than the wrongdoer's profits. Then, the burden shifts to the wrongdoer to prove its costs related to these revenues and any apportionment of its profits among multiple intellectual properties, including non-infringing ones.

Damages based on reasonable royalties are monies resulting from a hypothetical negotiation between an injured party and wrongdoer based on the wrongdoer's infringing sales. Put simply, this form of damages is the amount of monies a wrongdoer would have paid to the injured party if it had obtained a license to use the intellectual property. This approach establishes a royalty, usually expressed as a percentage, multiplied by a wrongdoer's revenues related to the infringing sales.

Statutory damages for trademarks are available only for counterfeiting and might apply to mismarking in patent litigation.

Individual Litigation

The scope of this section is measuring damages in the context of personal injury, wrongful death, employment discrimination, and wrongful termination of employment. Such litigation tends to involve an individual making a claim for lost earnings and other forms of damages. Loss periods generally begin at the time of the wrongdoing and end when losses stop. For these purposes, some important nuances exist that make such damage measurements different from business damages. Some of these nuances are practical, whereas others are legal and vary across jurisdictions. Because of the legal nature of damages, our discussion of this topic for individual litigation is necessarily general, and particular jurisdictions may differ.

Damages generally fit the categories described earlier in the chapter, either compensatory or punitive damages. In some jurisdictions, damages may include amounts for pain and suffering, emotional distress, and hedonic damages (for the loss of enjoyment of life).

Compensatory damages can take various forms outside of extra out-of-pocket costs. The most obvious is lost wages (or lost earnings). Other losses may include related employee benefits linked to wages. Injured parties have a duty to mitigate ongoing damages by taking reasonable action. In wrongful terminations, for instance, a former employee has the duty to make a reasonable attempt to find a new job.

A feature of this kind of litigation is that some cases require multiple experts. For instance, financial experts might opine on lost wages and benefits and past extra out-of-pocket costs, whereas other experts may be needed for other issues, such as future medical costs, vocational outlook, the value of the loss of a limb, and hedonic damages. The focus of this section is on areas related to financial experts.

Lost Wages

Conceptually, measurements of lost wages are similar to those for lost profits. In this sense, one measures the difference between wages in the hypothetical but-for condition and the actual condition. Put differently, lost wages assess the difference between a person's expected wages but-for the wrongdoing compared to their wages after the wrongdoing. In certain cases, lost wages arise because a person is unable to work because of a wrongdoing. Other kinds of cases arise because the amount of paid wages is lower than what should have been paid.

For personal injuries, lost wages may arise from accidents or intentional harm that leaves a person either temporarily or permanently disabled from working, or they must take a lower paying job because of some sort of physical or emotional impairment. In some cases, a person's work-life expectancy may be shortened.

Measurement of lost wages in wrongful death claims estimates a person's wages that they will no longer earn. Offsets are likely needed for measuring damages because a deceased person will no longer be paying for many ordinary living expenses, such as food, clothing, transportation, and entertainment.

Employment discrimination and wrongful termination generally examine the difference between what a person should have earned compared to what they have and will earn. Cases may involve persons working for the same employer or for different employers. For instance, these kinds of claims may assert that an employer discriminated against an employee, preventing them from earning higher wages. Alternatively, some cases may claim that an employer discharged a person unlawfully, and the employee had to take a lower-paying job with another employer or is out of work.

Certain kinds of these litigation matters sometime present circumstances that make loss measurements challenging. For instance, at the time of a personal injury or wrongful death, neither a child nor an adult may be employed. In another example, a person may be taking courses or training that would likely lead to higher wages in the future. In these examples, historical data about a person's past wages may be limited or irrelevant for estimating **but-for wages**.

Another aspect of this kind litigation is work-life expectancy in ongoing losses. Damage measurements need a specified loss period with a beginning and end. When wage losses are permanent, loss periods may go until the estimated end of someone's work life. One probably cannot opine that 65 years of age is the end of someone's work life based simply on a rule of thumb. One may need to rely on a plaintiff's particular facts and circumstances or on average work-life tables published by governmental units or others.

These kinds of cases sometimes use terminology that appears in case law or judicial proceedings. **Impaired earnings** means a person's earnings (presumably lower) after a wrongdoing. **Unimpaired earnings** often means a person's post-injury earnings in the hypothetical but-for condition. **Earnings capacity** is the potential earnings someone would likely have based on their education, skills, experience, age, and possibly other factors, such as pre-existing medical conditions and wage history, regardless of a person's present employment status. Earnings capacity often arises in circumstances when a person is currently unemployed or underemployed.

Employer Fringe Benefits

In addition to wage losses, injured persons may also lose fringe benefits paid by employers. Benefits may be an important part of damage measurements, making up perhaps 30 percent to 40 percent of wages in some jobs. Such benefits may include employer contributions for various kinds of insurance, retirement benefits, and educational and other forms of assistance. Although paid time off is almost certainly viewed as a benefit, one may need to examine whether to claim related losses separately. These kinds of losses may be implicitly included elsewhere in a damage calculation already.

Documentation to value employee benefits for loss measurements is sometimes challenging. In the United States, the government does not tax an employee on such fringe benefits and, thus, employees do not receive any related tax documentation. Larger employers may provide employees with documents estimating the value of their benefits that may be useful for loss claims. In the absence of such employer documentation, one might consider using published surveys of employee benefits, such as those compiled by the U.S. Bureau of Labor Statistics. Moreover, benefits might be measured in absolute terms or as a percentage of wages.

Extra Out-of-Pocket Costs

Medical and Rehabilitation Costs

Similar to extra out-of-pocket costs for business losses, such extra costs in personal litigation also contribute to an injured person's damages. A common form of extra costs in such matters is medical and rehabilitation expenses. Personal injuries may result in large medical and rehabilitation costs that otherwise would not have been incurred. Such costs may be historical prior to the time of trial and prospective for future medical and rehabilitation costs. Past costs can almost certainly be measured from documents such as invoices. Future costs, however, may be estimates of not only procedure costs but also the number of procedures. Such estimates of future costs for a particular injured person may be made by other experts.

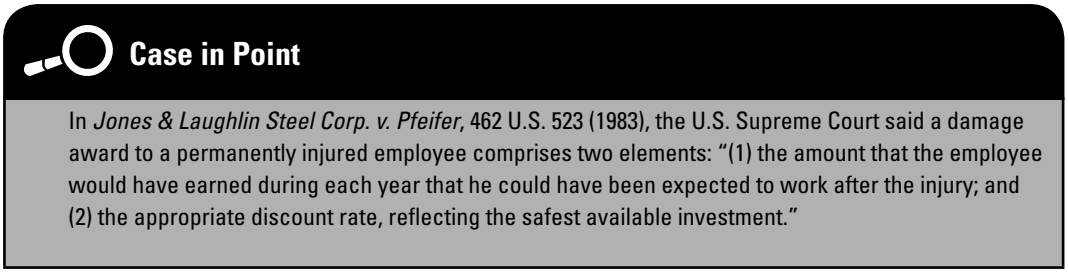
Losses Related to Household Services

In some circumstances, damage measurements related to individuals may include amounts for household services that can no longer be performed by a plaintiff. For instance, a disabled (or deceased) person may no longer be able to perform ordinary activities around the family home. Such activities may include maintenance and upkeep of the residence, routine housekeeping chores, and childcare. In the but-for condition, such activities may have been performed by the plaintiff, but after the wrongdoing, they must be performed by someone else. Out-of-pocket or opportunity costs increase losses.

Time Value of Money in Individual Litigation

Similar to business losses described earlier, losses in personal litigation likely have adjustments for the passage of time. Depending on the particular jurisdiction, prejudgment interest may be added to past losses for determining damages.

For future losses, present-value calculations may be required depending on jurisdiction. Such future losses might be for lost wages, expected extra costs, and other forms of losses. An important difference between business losses and personal losses is the discount rate. In personal injury and wrongful death claims, many jurisdictions require the use of a safe rate of return for discounting future losses to a present value. The implicit justification for such law is public policy, rather than economics. A 1983 seminal U.S. Supreme Court case, *Jones & Laughlin Steel Corp. v. Pfeifer*, recognized that damages for an injured worker should use a discount rate based on the rate of interest that would be earned on "the best and safest investments" and not expose the injured person to a higher discount rate related to investors willing to accept risk.



Using interest rates on safe investments for discount rates requires choosing a particular safe asset. Although it seems easy in the first instance, a single safe asset simply does not exist. Assuming U.S. Treasury securities are used as a risk-free asset, various kinds of treasuries exist, such as bills with shorter terms and bonds with longer terms.

A few jurisdictions require a different kind of treatment. In such jurisdictions, the treatment is often called the *total offset method* or the *Alaskan method*. This legal treatment prescribes that future losses will not be increased for inflation nor discounted using present-value calculations. This legal method effectively treats inflation rates and discount rates as completely offsetting one another.

Taxes in Personal Litigation

Taxes in personal litigation can be extraordinarily technical. In the United States, the federal government does not tax damage awards or settlements related to personal physical injury or physical sickness. These exemptions from taxation are for particular kinds of damage components, rather than all damages for particular legal cause of action. Put differently, a cause of action, such as personal injury, may have various kinds of damages, such as lost wages, medical expenses, pain and suffering, and emotional distress, and tax law determines which particular kinds of damages are taxed and not taxed.

For personal injury claims, compensatory damage awards and settlements received on account of physical injury or physical sickness are not taxed. Lost wages, lost benefits, and extra out-of-pocket costs linked to personal physical injury or physical sickness are exempt. Damages for emotional distress are generally taxed. Punitive damages are also taxed.

In wrongful death claims, the amount of compensatory damages linked to personal physical injury are exempt from taxes, but damages for emotional distress are not exempt. Punitive damages are generally subject to taxation.

Damages for employment matters are taxed unless some component is for personal physical injury or physical sickness. This applies to compensatory damages, but all punitive damages are taxed regardless.

This discussion, thus far, has been on the tax treatment of damage awards. Another aspect of such tax issues is making damage measurements. As stated, damage components related to personal physical injury and sickness, such as lost wages from personal injury, are not taxed by the U.S. government. Thus, such damage measurements should be made from after-tax amounts, rather than pretax amounts. Compensatory damages, as discussed, are intended to make an injured party whole. If an injured party is not taxed on damage awards and settlements, there is no need to measure damages at a higher amount from pretax measurements. For instance, lost wages related to personal physical injuries will be measured from after-tax wages because the government does not tax such damages. In contrast, lost wages related to employment discrimination or wrongful termination (assuming no personal physical injury or sickness) are taxed and, thus, damage measurements will be based on pretax measurements of wage losses. Generally speaking, damage awards and settlements will be lower when linked to personal physical injury or sickness, other things being equal.

Summary

Damage measures may be needed in civil litigation related to businesses and individuals. Injured parties must prove their damage claims and link them to the wrongdoer to be compensable. Expert testimony is a way that injured parties might prove their damages in courts of law. Such damages are generally called compensatory damages and intend to make an injured party whole. When measuring damages using multiple approaches, double counting is not allowed because it makes an injured party more than whole. Although the law provides guidance for making damage measurements, the facts and circumstance of a particular case play a role when choosing and applying a particular methodology and inputs. Moreover, injured parties have a duty to mitigate damages to the extent it is reasonable. If they fail to mitigate when it was reasonable to do so, an injured party may not recover the full amount of damages it suffered. In contrast to compensatory damages, punitive damages intend to punish a wrongdoer and may be awarded to an injured party in addition to compensatory damages.

Several legal principles apply to damage measurements and expert testimony. Injured parties must prove that a wrongdoer is the proximate cause of its damages and that it suffered damages to a certain degree of certainty. In contract claims, foreseeability is another legal principle. In order to recover its losses, an injured party must prove the claimed losses were foreseeable by the parties at the time the contract was made. When parties proffer an expert to provide damage opinions, courts generally have evidentiary standards for experts in civil litigation. Such standards vary across jurisdictions, although federal courts generally have the same standard for admissibility of experts. Such standards generally address the reliability of an expert's opinion to a particular case.

In business litigation, forms of damages include lost profits, loss of value, unjust enrichment, and extra out-of-pocket costs. General models for lost profits damages include before-and-after-methodologies, yardstick (or benchmark) methodologies, market share methodologies, underlying contract methodologies, and wrongdoer's ill-gotten profits methodologies. When calculating lost profits, one may first estimate lost revenues and then subtract avoided costs. Such costs are expenditures a firm did not (or should not) incur by not generating the lost revenues. Avoided costs may differ from the accounting framework of variable and fixed costs. Moreover, when combining lost revenues in the but-for condition with actual revenues, a firm may face practical constraints, such as production and financing capacity that limits the magnitude of lost revenues.

Ex ante and ex post approaches in business litigation will likely result in different damage measurements. The choice of ex ante or ex post perspectives is a legal matter and not economic. The law or local legal practice may suggest using one of these approaches over the other. Factors making up the two approaches include the measurement date for damages, calculations for discounting amounts to a present value, and calculating prejudgment interest.

In litigation involving individuals, damages include lost wages, lost benefits, and extra out-of-pocket costs. Present-value calculations on future losses may differ in such litigation compared to business litigation. Many jurisdictions require discount rates of interest rates on safe investments as a matter of law for damages related to individuals.

Taxes play a role in damage measurements because of the way the U.S. government taxes damage awards and settlements. For business damages, the federal government taxes settlements and awards. Thus, lost profits should not be measured directly or indirectly from after-tax profits. This incorrect treatment makes an injured party less than whole because taxes are effectively applied twice. For damages for individuals, the U.S. government does not tax damages because of personal physical injury or physical illness, but it taxes personal damages for other reasons, such as standard wrongful termination claims. Lost wage measurements in matters exempt from taxation will be measured from after-tax wages but from pretax wages for damages subject to taxation.

Review Questions

1. Evidentiary laws generally require injured parties to prove they suffered lost profits by what standard?
   a. Certainty.
   b. Reasonable certainty.
   c. Beyond a reasonable doubt.
   d. More likely than not.

2. In U.S. federal courts, *Daubert*-type evidentiary rules on the admissibility of expert testimony explicitly address the expert's
   I. Qualifications
   II. Methodology
   III. Application of the case facts
   a. I only.
   b. II only.
   c. I and II.
   d. II and III.

3. General kinds of damages include which of the following?
   a. Causal damages.
   b. Liability damages.
   c. Compensatory damages.
   d. Mitigation damages.

4. Which of the following characteristics about punitive damages is FALSE?
   a. Makes an injured party whole.
   b. Awarded in addition to compensatory damages.
   c. Could be based on a wrongdoer's net worth.
   d. Could be based on a wrongdoer's liquidity.

5. In case law, "profits" in the term *lost profits* generally means
   a. Net income.
   b. Pretax income.
   c. Cash flow.
   d. Whatever measure is appropriate given the facts and circumstances of a particular case.

6. When a mature injured firm has a sudden and permanent impairment of profits, the best compensatory damage measure is most likely
   a. Lost profits.
   b. Diminution of value.
   c. Unjust enrichment.
   d. Punitive.

7. When a mature injured firm has a temporary impairment of profits, the best compensatory damage measure is most likely
   a. Lost profits.
   b. Diminution of value.
   c. Unjust enrichment.
   d. Extra out-of-pocket costs.

8. Damage models using yardstick (or benchmark) methodologies might use all of the following observations EXCEPT
   a. Injured firm's performance at another location.
   b. Industry average performance.
   c. Injured firm's performance before the injury.
   d. Average performance of similar firms.

9. Unjust enrichment is a damage remedy applying which general damage model?
   a. Before-and-after methodologies.
   b. Yardstick (or benchmark) methodologies.
   c. Market share methodologies.
   d. Wrongdoer's ill-gotten profits methodologies.

10. When measuring lost profits damages, avoided costs are best described as
    a. Variable costs.
    b. Fixed costs.
    c. Extra out-of-pocket costs.
    d. Costs not incurred.

11. Practical constraints that may limit an injured firm's lost profits include all of the following EXCEPT
    a. Managerial capacity.
    b. Legal capacity.
    c. Production capacity.
    d. Financing capacity.

12. In terms of calculations of prejudgment interest and present values of lost profits, an ex post approach generally applies
    I. All lost profits—discount to the date of injury
    II. Future lost profits—discount to the date of trial
    III. Prejudgment interest—calculated on the present value of all lost profits as of the date of injury to the date of trial
    IV. Prejudgment interest—calculated on past lost profits to the date of trial
    a. I and III.
    b. I and IV.
    c. II and III.
    d. II and IV.

13. Using an ex ante approach, what is the amount of damages for the theft of a high school yearbook having Janis Joplin's signature using the following information?
    - Date of theft: January 1, 1961
    - Date of thief's trial: January 1, 1971
    - Yearbook's value as of date of theft: $5
    - Yearbook's value as of date of trial: $1000

    a. $5.
    b. $5 plus prejudgment interest to date of trial.
    c. $1000.
    d. Present value of $1000 as of date of theft.

14. Using an ex post approach, what is the amount of damages for the theft of a high school yearbook having Janis Joplin's signature using the following information?
    - Date of theft: January 1, 1961
    - Date of thief's trial: January 1, 1971
    - Yearbook's value as of date of theft: $5
    - Yearbook's value as of date of trial: $1000

    a. $5.
    b. $5 plus prejudgment interest to date of trial.
    c. $1000.
    d. Present value of $1000 as of date of theft.

15. The 1933 U.S. Supreme Court opinion that viewed circumstances using the "book of wisdom" is best explained as
    a. Use all information up to the present time.
    b. Use only information known as of the time of injury.
    c. Use present lost profits discounted back to the date of injury.
    d. Use past lost profits and prejudgment interest up to the present.

16. In civil litigation, mitigation is best explained as
    a. A wrongdoer has the duty to minimize harm.
    b. An injured party has the burden of proving that its damages were caused by the wrongdoer.
    c. A wrongdoer must have violated some law.
    d. An injured party has a responsibility to act in a way that minimizes its losses to the extent it is reasonable.

17. In most jurisdictions, which of the following factors is the most important difference between business litigation and personal injury litigation?
    a. Time horizon for estimating losses.
    b. Prejudgment interest.
    c. Discount rate for present-value calculations.
    d. Preference of ex ante versus ex post approaches.

18. Which of the following statements about damages related to personal physical injuries is FALSE?
    a. Mitigation does not apply to parties with personal physical injuries.
    b. Damages are not taxable.
    c. Lost wages should be measured from after-tax wages, rather than gross wages.
    d. Future lost wages should be discounted using a rate of return on a safe investment.

Short Answer Questions

1. What general causes of action often require damage measurements?
2. What are two possible roles for damage experts?
3. Describe what the law requires injured parties to prove in litigation.
4. Federal Rule of Evidence 702 and the *Daubert* and *Kumho Tire* cases are examples of what aspect of proving damages?
5. Describe the two general kinds of damages.
6. Describe the general methodology to measure lost profits or lost wages.
7. What is the general methodology to measure an injured firm's loss of value?
8. Describe the distinction between the term *profits* as generally used by accountants and the use of the term in the law for lost profits measurements.

9. In terms of an injured firm's profits and length of injury, describe circumstances when its damages are best measured by a lost profits approach compared to a loss of value approach.
10. Describe before-and-after methodologies for lost profits measurements.
11. When would a before-and-after methodology be less appropriate for measuring an injured firm's lost profits?
12. When would a yardstick (or benchmark) methodology be more appropriate for measuring an injured firm's lost profits?
13. Describe when unjust enrichment (wrongdoer's ill-gotten profits) is an appropriate measure for business damages.
14. Contrast avoided costs in lost profits measurements and variable expenses as used by accountants.
15. When might production and financial constraints limit the magnitude of lost revenues?
16. Describe when the ex ante approach of discounting lost profits and calculating prejudgment interest results in substantially lower damages compared to the ex post approach.
17. Describe when a wrongdoer may challenge the magnitude of an injured party's lost profits damages because of mitigation.
18. Describe the proximate cause legal principle in terms of lost profits damages.
19. Describe the role of the reasonable certainty legal principle in lost profits measurements.
20. Describe how taxation of lost wages damages affects how one calculates but-for wages and actual wages.
21. Contrast the discount rates used for present-value calculations of lost profits damages and lost wages damages associated with personal injury and wrongful death.

Brief Cases

1. You have been engaged as a testifying expert in a business damage case involving a breach of contract claim. In addition to measuring damages, the lawyer has asked you to testify on causation that the damages were caused by the breach. How do you consider the lawyer's request?
2. You have been engaged for a U.S. federal court lawsuit as a damage expert for a breach of contract claim. You determine that lost profits damages are appropriate. Because you are in a federal court, your testimony is subject to Federal Rules of Evidence 702 and 703, and the *Daubert* and *Kumho Tire* cases on admissibility of expert testimony. How do these evidential standards affect your work when measuring damages?
3. You have received a telephone call from a lawyer asking you to be an expert on punitive damages for a plaintiff in a commercial case between two businesses. What kind of information will you likely consider in this role?
4. You are a testifying expert in a commercial damages case. What do you consider when deciding whether damages will be measured as lost profits or loss of value?
5. You have been engaged as a testifying expert to measure damages. In a different engagement, the court had ruled that a portion of your damage opinion in that lawsuit was inadmissible in a *Daubert* hearing. How do you handle this past event if you are asked about it in the current case by the opposing attorney?
6. You are a testifying expert in a commercial damages case involving a breach of contract. Had the contract not been breached, the injured party would have constructed a new manufacturing facility to produce the goods related to the contract. Will you likely measure damages as lost income or lost cash flow?
7. You have been engaged as a testifying expert for the injured party in a damages case between two businesses. The injured party's attorney is claiming unjust enrichment by the wrongdoer. What kind of information will you likely collect in an unjust enrichment claim?

8. You are a damages expert and have measured an injured party's lost profits damages as lost revenues minus avoided costs. At your deposition, the opposing attorney asks why you have not allocated overhead as required by standard accounting practices. How do you respond?
9. You have received a call from a new lawyer who has referred to the Janis Joplin yearbook story of ex ante and ex post damages. Using that story, how do you explain ex ante and ex post damage measurements to the lawyer?
10. You are a testifying damage expert giving your deposition. The opposing attorney asks "How certain are you that your lost profits damage measurements are correct?" How would you respond to this question?

Cases

1. You receive a telephone call from an attorney who needs an expert witness for a business damages case. The attorney represents the plaintiff (the injured party). You determine right away that you have no conflicts of interest with any of the parties and carry on with the initial discussion about the case.

   You learn that the lawsuit involves two companies that had a business relationship. Firm P had a contract with Firm D to sell goods, and the attorney tells you that Firm D breached the contract, causing Firm P to suffer economic damages. During the call, you discover that Firm P has never shown any net income on its financial statements. The attorney tells you that is what the financial statements say, but the business is not reporting all its revenues and, if it did, the firm would show a profit.

   Required

   What do you say to the attorney?

2. An attorney is interested in hiring you as a damage expert to testify in a lawsuit. The attorney represents a business and has filed suit against a bank that did not renew the firm's line of credit. The plaintiff and defendant-bank had a prior business relationship (the loan). The lawsuit claims that the bank inappropriately failed to renew the revolving loan as it had in the past, causing the firm to default on other obligations and later go out of business.

   The attorney wants you to testify about the amount of damages. You determine during the call that the firm had not been profitable and showed signs of financial distress before the bank decided not to renew the line of credit. On a preliminary basis, you do not see that the firm had any value given the liability to the bank, and it had low profitability. The attorney tells you the business was in negotiations for a very large customer contract that would have generated over $1 million in revenues.

   Required

   How do you proceed?

3. You have been hired in a commercial lawsuit by the defendant to analyze the plaintiff's lost profits damage claim. The plaintiff is claiming the equipment that it purchased from the defendant was faulty. The lawsuit says the problems with the equipment interfered with the plaintiff's operations, causing it to lose revenues for several months until the equipment problem was identified and fixed.

   You have received the plaintiff's audited financial statements for the past several years and observe its annual revenues have been: $20.0 million (Year 20X1), $21.0 million (Year 20X2), $21.5 million (Year 20X3), $18.5 million (Year 20X4), and $21.0 million (Year 20X5). The alleged injury occurred at the beginning of 20X4. The plaintiff asserts that the financial statements prove that it lost revenues because of the equipment defect.

   Required

   Assuming the equipment actually had a problem, what would you likely do next to analyze whether the plaintiff suffered any economic losses caused by the equipment problem?

4. You have been hired by a defendant who is being sued by a business that is claiming that the defendant interfered with plaintiff's construction of a planned new tourist attraction. The plaintiff had already purchased the land for the attraction using cash, but it was unable to obtain the governmental permit to construct the attraction. The lawsuit claims the defendant's wrongful behavior was the cause for the plaintiff's inability to obtain the permit.

   You have received the report of the plaintiff's damage expert and have been asked to analyze it. The expert calculated plaintiff's lost profits over a five-year horizon (shown in the following table) and went no further, saying any forecasting after five years is speculative.

Plaintiff's calculation of lost profits (in millions)

Year	1	2	3	4	5
Lost revenues	$5	$8	$10	$12	$14
Avoided operating expenses	–4	–6	–7	–8	–9
Lost profits	1	2	3	4	5

   Required

   The attorney has asked you for your initial impressions about the plaintiff's calculation of lost profits. What do you say?

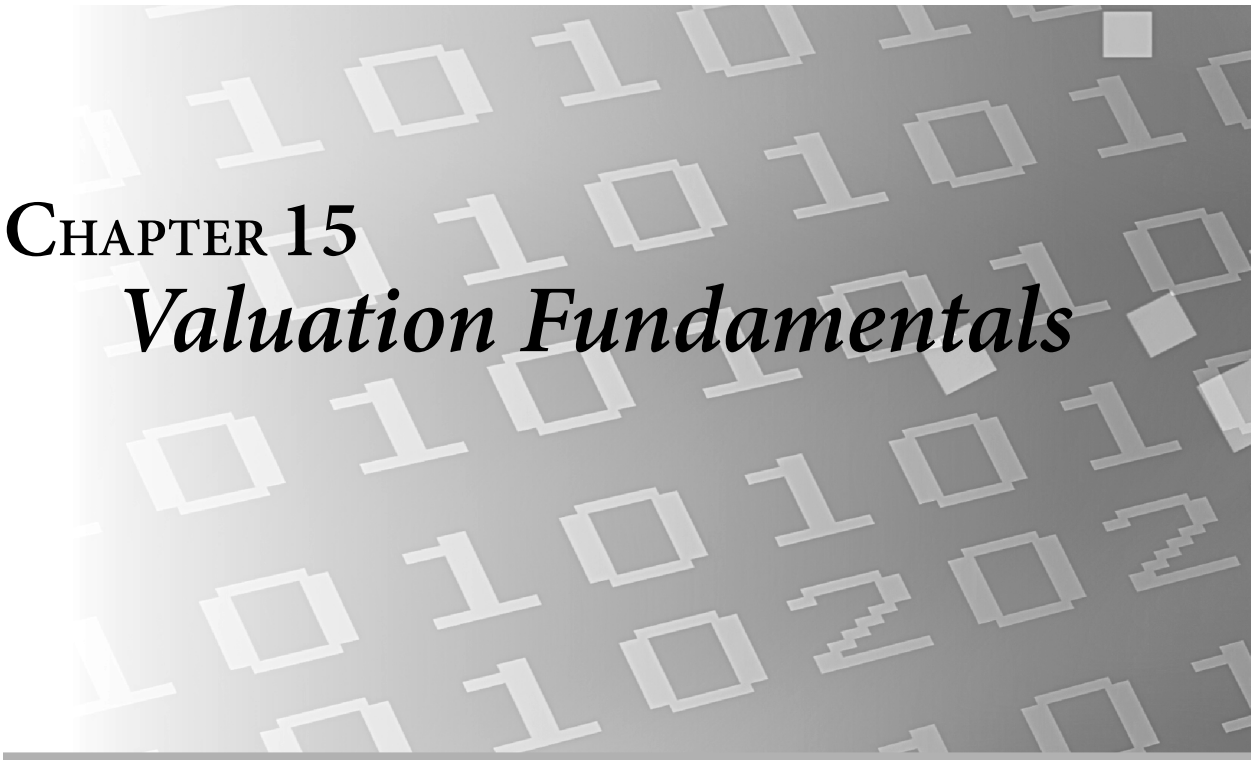
5. Assume the information in the preceding case, and you are now the plaintiff's expert. The trial is taking place at the end of the second year. The statutory interest rate in the jurisdiction is 5 percent, and you believe the appropriate discount rate for discounting future lost profits is 10 percent.

   Required

   Calculate the amount of damages using the ex post approach.

Internet Research Assignments

1. Search the Internet and read about "reasonable certainty" in terms of proving business damages. Write a brief report describing your findings.
2. Search the Internet and read Federal Rules of Evidence 702 and 703 and summaries of the *Daubert* and *Kumho Tire* cases. Write a brief report about how these rules and cases on evidence admissibility affect experts when measuring damages.
3. Search the Internet and read about damages measured as either lost profits or loss of business value. Write a brief report comparing and contrasting the two approaches.
4. Search the Internet and read about when punitive damages are allowed in lawsuits and ways the magnitude might be determined by a jury. Write a brief report describing your findings.
5. Search the Internet and read about damages for unestablished businesses. Write a brief report describing your findings in terms of an injured party proving damages.



Chapter 15
Valuation Fundamentals

Learning Objectives

- Explain the meaning of "value"
- Define and explain the general valuation models
- Define the three valuation approaches
- Describe the general components of income approach models
- Explain the meaning and significance of cost of capital
- Identify components of cost of equity capital models
- Calculate a firm's total cost of capital
- Describe the theory of the market approach and how pricing benchmarks can be used to value assets
- Describe the theory and general methodology of the asset approach
- Explain why discount and premium adjustments may be needed in valuation

Introduction

The notion of "value" is quite old. In *Summa Theologica* (question 77), Thomas Aquinas asks whether it is sinful to sell something for more than it is worth. (Assessing worth is done through a valuation process.) The Ancients, such as Plato[1] and Aristotle,[2] express their views on value in a rational framework in their writings. In 1661, John Locke in *Venditio* asks, "What is the 'just price' of something?" Mathematical forms of valuation that we might recognize today can be traced to England in the 1700s and 1800s, where they were used for life insurance and annuities, and the mid- to late-1800s, when large capital investments were needed for railroad development.

A lot of the theory and practice of business valuation can be traced to the literature of pricing stocks and bonds. The valuation of these kinds of assets was a topic of wide interest in the early 20th century in America as it became common to finance the expansion of commercial enterprises and public utilities by raising capital from investors

[1] For instance, Plato's dialogues Protagoras, 353e; Timaeus, 69d; Republic, 402e; and Philebus, 60e as he writes of value judgments of what is good and bad based on what is pleasurable or painful.

[2] For instance, Aristotle, Nicomachean Ethics 1153b.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

instead of borrowing from banks. The legal instruments to facilitate these exchanges of capital between investors and recipients of the funds were often shares of stock and bonds. Unlike banks in those times, investors who owned stocks or bonds often wanted to sell their securities without necessarily holding them for years at a time. Financial markets like the New York Stock Exchange expanded as a result of the popularity of stock and bond issues. Simultaneously, investors who were buying and selling securities, investment advisers, and sales intermediaries looked for ways to estimate and predict the prices of securities. From such practical needs, asset pricing theory and methods arose.

Business valuation, generally speaking, estimates the value of a business, business ownership interest, security, or **intangible asset**. In common use, the term usually applies to hard-to-value assets requiring specialized knowledge to estimate an asset's value. Demand for business valuation services is high and tends to originate from sales transactions, litigation, tax planning and compliance, and financial reporting. A trade magazine estimates annual revenues from business valuation services in North America as $1.7 billion.[3]

Accountants learning about business valuation will eventually realize that business valuation practice is different from traditional accounting practice, such as financial reporting and tax return preparation. In these kinds of traditional activities, an organization informs accountants about the "rules" they should follow to perform their work, such as generally accepted accounting principles or tax law. In contrast, valuation activity is generally an analyst's assessment of what markets tell us about asset prices at a particular point in time. As markets change, so do asset prices, often in complex ways. No authoritative organization can possibly describe or prescribe how markets and investors function with precision. Speaking simply, valuation analysts try to understand how markets work, rather than using a set of rules for making mathematical calculations. Some persons may believe that business valuation is a form of applied mathematics. They may believe this activity is mainly applying equations by looking up information for equation inputs from tables, financial statements, and so on. Strictly speaking, this is not a valid way to think of business valuation. Valuation has elements of "biology." Investors, entrepreneurs, and managers are living beings, and they adapt or otherwise change over time in response to new information and varying perceptions. Consequently, relationships between variables we observe from historical data are not necessarily fixed. To understand valuation, we should think in both quantitative and qualitative terms, rather than overly simplistic equations. The nature of changing markets and asset prices leads to professional standards of valuation practice, such as the AICPA's Statement on Standards for Valuation Services No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset*, (AICPA, *Professional Standards*, VS sec. 100) that, in essence, are a set of guiding principles, rather than detailed rules for performing valuations.

In this chapter, we mostly describe valuation theory to develop intuition. Such intuition will make technical business valuation topics clearer when you come across them. We then move to applied business valuation practices in chapter 16, "Valuation Applications."

General Knowledge

What is Value?

Although it seems like a simple question, describing the meaning of "value" often leads to inconsistent ideas for what it means among people. As noted in the chapter introduction, philosophers from ancient Greece and medieval times made attempts (usually in normative terms). The Oxford English Dictionary finds the word first published in the English language in 1303 and defines *value* as "that amount of some commodity, medium of exchange, etc., which is considered to be an equivalent for something else; a fair or adequate equivalent or return." This definition is close to the dictionary's definition of *price*: "Money, or the like, paid for something." This term first appeared around the same time as *value*, in 1300.

In economics and finance, the meaning of value is reduced to mathematical forms. In this domain, value and price are often used synonymously, although some may argue for distinctions between them. Here, we use these terms interchangeably. Modern finance theory describes the value or price of an asset as the expected future benefits from owning the asset discounted to the present. This notion leads us to the idea of **present value** and the time value of money (TVM).

[3] "BV firms thriving despite slowdown from heady growth," *Business Valuation Update*, 19(5) 2013.

Present Value

Asset prices can be formulated as discounted expected cash flows shown in equation 15.1, where p is an asset's price, $E(c)$ is the expected future cash flow stream, and k is the current **discount rate**. The idea behind this equation is intuitive: The value or price we put on something now is more than if we receive it in the future. Why? If we are rational, we prefer to have things we like (such as money) now, rather than later, other things being equal.

$$p = \frac{E(c)}{k} \tag{15.1}$$

Expanding this idea, equation 15.2 is a mathematical expression for a set of cash flows. P_0 is the current price (or value) of an asset. CF_1 and CF_2 are expected cash flows at time 1 and 2. CF_n is the cash flow at the last time period n. The parameter r is a **required rate of return**. This formulation is the general discounted cash flow (DCF) model. Equation 15.3 is equivalent to equation 15.2, expressed in the shortened form.[4]

$$P_0 = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \cdots + \frac{CF_n}{1+r^n} \tag{15.2}$$

$$P_0 = \sum_{t=1}^{n} \frac{CF_t}{(1+r)^t} \tag{15.3}$$

General Valuation Models

Two general models are typically used to value firms that are operating profitably by selling goods or services: *relative value models* and *absolute value models*. Put another way, when we think about valuing most commercial enterprises, there are two general ways that they can be valued. One way looks externally, and the other internally. Both kinds of models are inherently forward looking. They take the perspective of investor expectations about the future either explicitly or implicitly. Put differently, rational investors pay a price for something now based on what they expect to receive in the future from owning it. Both kinds of models do this but in different ways.

Relative value models estimate the value of something by observing prices of similar things. In contrast, absolute value models are mathematical and calculate the present value of an asset's expected future cash flows. Neither model is generally superior to the other. Practitioners often use both types of models and compare the results.

A third kind of general valuation model, *option pricing models*, can be used to value enterprises that still require substantial development to achieve their economic potential, such as young biotech firms or firms with largely undeveloped oil and gas reserves. Option models are a complex form of absolute value models. These kinds of models are beyond the scope of this text.

Relative value models are observational in nature. They estimate the value of an asset relative to prices of similar assets. An example is observing stock prices of firms in a particular industry and applying the average price-to-earnings multiple of those firms to the earnings of a particular firm that we want to value.

Absolute value models are mathematical in nature. They estimate an asset's intrinsic value without observing prices of comparable assets. These models estimate the value of an asset as its expected future cash flows discounted to the present. DCF models, such as equation 15.2, are an application of absolute value models.

[4] For readers unfamiliar with present value or needing a review, see appendix B.

Practitioners use these two kinds of models several ways in business valuation. Absolute value models are the basis of the income approach of valuation. Relative value models are used when applying the market approach. The asset approach uses both relative value and absolute value models to value a firm's assets.

Three General Valuation Approaches

Extending the ideas of the general valuation models, the business valuation literature describes three valuation approaches: the **income approach**, the **market approach**, and the **asset approach**. These three approaches almost certainly have their origins in real estate appraisal. The logic of applying three valuation approaches is that each one provides different types of information that may explain market prices and investor behavior. When value indicators from more than one approach are consistent, one has more confidence in the pricing analysis. This logic requires that the valuation approaches are, indeed, independent of each other for the confirmation affect.

In business valuation practice, the income and market approaches are used more than the asset approach when valuing relatively profitable operating enterprises. Based on absolute valuation models, the income approach calculates the present value of a set of expected future cash flows and is mathematical in nature. Present value calculations can be done either directly or indirectly depending on the model. The market approach estimates the unobservable price of Z based on the observable prices of A, B, and C. This conceptual approach is intuitive to most people because it is used in ordinary life. In practice, the degree of intuitiveness is linked to the comparability that Z has to A, B, and C. Lastly, the asset approach values a firm as the sum of the values of each of its assets. This methodology identifies each asset owned by a firm and estimates the value of each one. To value the firm's stock, we subtract the firm's liabilities from the sum of its assets. We discuss each of these valuation approaches in the next three sections.

Income Approach

Introduction

The *income approach* is a mathematical way to value something without observing prices of similar things. It applies absolute value models, described earlier. For most people, making an investment has some expectation of getting returns in the future. Such expected returns could be periodic cash flows or proceeds from selling the asset. When using the income approach, speaking simply, we calculate the present value of an asset's expected cash flows. This calculated present value is taken as the asset's true value.

The DCF model is one application of the income approach. This kind of model has a long history. The earliest DCF applications were for loans and life insurance in England during the 1700s. In the U.K., actuaries were using DCF models to value annuities in the 1800s. Such models were used to value equities in the United States in the 1920s. During that decade, many American companies with expected long lives were reinvesting earnings back into their operations rather than simply paying out earnings as dividends. Such business activity fit DCF models better than classical dividend discount models. In 1938, John Burr Williams was among the first to formally describe the DCF model as a way to value equity securities in his book, *The Theory of Investment Value*. It was not until the 1980s and 1990s that DCF models became popular in finance practice in the United States. During this time, personal computers and spreadsheet software made these models available to the masses.

DCF models adjust multiple cash flows occurring at different points in time. This adjustment is necessary because we cannot directly compare time-variant cash flows because people prefer to receive cash sooner, rather than later, and they are willing to pay something for this preference.

Finance theory describes the *value of an asset* as its expected future benefits discounted for some opportunity cost. DCF models put theory into practice by applying a discount factor to a set of expected future cash flows. The discount factor reflects the TVM and investment risk or, expressed differently, some foregone opportunity cost.

Regardless of the particular model, all income approach models explicitly or implicitly consider investor expectations about the future.[5]

Principles

Before describing valuation practice, let's discuss some theory to develop intuition. Standard asset pricing theory has several premises:

- The value (price) one places on something is the future benefits they expect from owning it, discounted to the present.
- Investors are adverse to risk.
- Investors are rational wealth-seekers.
- Investors consider all possible relevant information.

The first premise is intuitive and is the cornerstone of the income approach to valuation. The concept is straightforward. Let's say you own a bond, and the issuer has promised to pay you $1000 one year from today. What price would someone pay to buy that bond today? It is self-evident that the bond is worth less than $1000 today because the bond's owner must wait a year to receive the $1000.[6] We can estimate the bond's value with present-value math, which we describe in Appendix B of this book. Assuming the market interest rate is 5 percent, this bond's market price should be about $952.[7]

The second premise is that investors are adverse to risk. This proposition is based on observation of (average) human behavior. People tend to make safer choices over risky ones, other things being equal. For instance, assume you are walking from A to B, which is a day's journey, and you have options of traveling on two different paths of equal length to reach B. You know one path is safe, and the other path is risky and beset with dangerous snakes. Which path would you choose? A rational person would select the safer option because there is no logical reason to take the other.

Even though we know that humans are generally risk-adverse, we also know from experience that reasonable people make decisions to take risks by choosing options with some degree of risk instead of accepting safer choices. What explains this behavior? According to theory, decisions to take risks offer a prudent risk-taker some kind of opportunity not found in a safer option. If the risky path with deadly serpents is only half the distance of the safer route, we might decide to take our chances on this route to save valuable time. In economics, incentives are important for explaining how people act because incentives alter human behavior. If someone offers you the prospect of a reward for a successful outcome, you might decide to accept the risky choice. Decisions to accept risk by placing bets are common given a monetary outcome and probability of success. In short, we observe that rational people prefer safety over risk, but they will make risky choices when given adequate incentives. From such experience, the theory of risk-return relations in asset pricing arises.

The third premise in the income approach is that investors are rational wealth-seekers. The first part of this proposition is that investors always reason by analyzing information in a systematic way so they make optimal decisions in the pursuit of a goal. Simply put, it asserts that investors do not make irrational or unwise decisions. As we will see later, this premise is necessary in finance to explain decision making in a risk-return framework. The next part of the premise says people are generally motivated to act in their own best interest. They try to obtain greater pleasure, or things that can give them pleasure, such as profits and wealth. In short, this premise essentially says that investors normally act in a rational way in the pursuit of wealth.

A fourth premise is that investors consider all possible information when making decisions. Put another way, this proposition says that investors know and rationally think about all information prior to making their decisions. This

[5] The discounted cash flow (DCF) model considers growth with explicit cash flow forecasts, illustrated in equation 15.2. In contrast, the constant growth model, discussed in chapter 16, "Valuation Applications," considers expected future growth in cash flows implicitly.

[6] Instead of buying this bond, an investor could put their funds into a bank account and earn interest. For the savings account to have a balance of $1000 one year from now, an investor would deposit some amount *less* than $1000. Given such alternative investment opportunities, we can infer the price of the bond must be less than $1000.

[7] We use equation B.3, shown in Appendix B, for this solution, or we can use Microsoft Excel's present value financial function.

premise is necessary for finance theory because we cannot possibly know whether one investor considers A, B, and C when making a decision but another person considers only B and C.[8]

These premises are assumptions in modern finance theory and the income approach of valuation because, even if we can claim all of them are generally true, we know they are not always true. These assumptions are not trivial. Factors such as strong emotion, social norms, urgency, bias, and overconfidence influence human behavior. We know from ordinary experience that people sometimes make decisions that are irrational, less-than-optimal, and made without understanding all relevant information. For instance, we know from experience that market prices of stocks and other kinds of assets are sometimes overstated from fundamental values due to extreme sentiment and cause market bubbles. For example, in the late 1990s, U.S. technology stocks experienced a price bubble that burst in early 2000. Prior to these events, Alan Greenspan, then chairman of the U.S. Federal Reserve, warned in 1996 about high stock prices and suggested the markets were experiencing "irrational exuberance." In another example, there was widespread fear (a strong emotion) about the financial system in 2008–2009 that caused stock prices to fall dramatically and governments to take historic actions, such as providing billions of dollars to prop up banking systems. One factor commonly attributed as an important cause of these events is a housing price bubble.

Overall, such factors affecting human behavior cannot be easily measured and put into quantitative models. Consequently, academics and practitioners generally make assumptions described in this section so they can explain things in a mathematical framework.

Components

Introduction

When applying the income approach, practitioners consider three main components when estimating the value (price) of financial assets: the amount of expected future cash flows, timing of those cash flows, and an interest rate. The perspective we take here is regarding expectations about the future. Thus, there is risk that the amount and timing of actual cash flows in the future may differ from what one expects. We can express the income approach as a function of these three components:

$$price = f(\text{amount and timing of expected future cash flows, interest rate})$$

The income approach, as stated, has a forward-looking perspective. We know from experience that the future is rarely certain. A task for analysts is understanding key assumptions about future events, rather than merely guessing. Put differently, part of an analysis is to assess what important assumptions have been made about future events and the degree of uncertainty in those premises.

Amounts of Future Cash Flows

Expected amounts of future cash flows are one component in the income approach. One assesses the magnitude of cash flow expectations for this aspect of the income approach. Examples of cash flows from different kinds of assets are as follows:

- *Bond.* Interest of $500 per year for five years plus principle of $10,000 at maturity.
- *Annuity contract.* $1000 per month for 20 years.
- *Preferred stock.* Dividends of $50 per year (stable).
- *Common stock in a public firm.* Dividends of $20 per year (unstable) plus expected future capital gains.
- *Common stock in a private firm.* Expected future cash flows available to shareholders.
- *Real estate.* Rents collected less operating expenses and provision for capital replacements.

[8] This second investor may not be aware of A or does not have the skills or time to analyze A but, nevertheless, makes a decision.

Timing of Cash Flows

In addition to the amounts of future cash flows, another income approach component is the expected timing of those cash flows. The theory of human behavior says that we prefer to possess or consume something we like now, rather than later. Would you rather consume $1000 now or defer your consumption of $1000 for several years. Generally, we would rather consume now rather than later. But if I defer my consumption, I expect some benefit for delaying. This is essentially what happens when we put our funds into a bank savings account rather than spending these funds now. Banks will pay us interest as an incentive to defer our consumption until later.

Similarly, we can observe that people are generally willing to pay more for something that gives them pleasure or other benefit sooner instead of later.[9] Because of these kinds of natural human preferences, we are willing to pay more now for an investment that provides us $100 in one year compared to one that gives us $100 in 10 years. The following equation shows this idea, where PV is the present value:

$$PV\,(\$100)_{t+1} > PV\,(\$100)_{t+10}$$

The difference in price between these two assets both providing $100 is a function of timing. For instance, if the interest rate is 5 percent, the present value of an asset that pays $100 in one year is $95, but it is $61 for one that pays us $100 in 10 years. The difference between these values is relatively large ($34) and attributed to cash flow timing. Timing can have a large effect on value—especially over longer horizons.

Interest Rate

After the amounts and timing of future cash flows, the next component is an interest rate.[10] In financial language, an *interest rate* is a factor that converts an amount in the present to an amount in the future or vice versa, and *interest* is an amount of currency that explains the difference between present and future amounts.

A simple example illustrates these ideas. Assume you buy a $10,000 certificate of deposit, and the bank will pay you $10,500 when the CD matures in one year. You will have received $500 in interest, and the interest rate is 5 percent. We calculate the interest rate by rearranging equation B.1, shown in Appendix B, using simple algebra to solve for the interest rate: ($10,500 ÷ $10,000) – 1.

It is not intuitive how banks set interest rates for money. A bank's rates are strongly linked to interest rates in the capital markets. Interest rates are essentially the price of money in competitive capital markets when the supply and demand of capital exert forces, causing rates to rise or fall. In addition to banks and their customers, capital markets have many other kinds of people and institutions participating as either providers or users of capital.

In another example of interest rates, suppose a Fortune 500 company wants to raise $100 million in capital by selling bonds. In order to attract investors to buy its bonds, rather than some other investment, the firm must promise bondholders that it will pay them interest that is competitive with interest rates on similar investments. If comparable bonds in the market are currently paying a 10-percent interest rate but this company offers bondholders only 8 percent, the firm may not attract any investors to buy its bonds because investors prefer better choices that pay them more income, other things being equal. Thus, this company will be forced to set its interest rate at or near the market interest rate of similar bonds to be successful in attracting capital.

Both of these examples have forward-looking perspectives. The same idea holds when someone offers to pay some amount in the future and the question is how much should we pay now for that future payment. For instance, if a bond issuer promises to pay the bond's owner $10,000 one year from now, what price should you pay to buy the bond today? The basic idea in this example is the same as the previous ones: One would be willing to pay some amount that is less than $10,000. The difference between what you pay now and what you receive in the future is interest. If you pay $9500 today to buy the bond, you will earn $500 in interest. With this information, we can calculate

[9] Conversely, we tend to prefer delaying things that we find unpleasant.

[10] In finance and accounting, different terminology may be used instead of *interest rate*, such as rate of return, discount rate, or cost of capital. In practice, we sometimes see these terms used interchangeably. Here, we use the term *interest rate* to keep things simple.

an effective interest rate of 5.3 percent. A different way to describe this example is to say that the present value of $10,000 using a 5.3-percent interest rate over one year is $9500.

Another aspect of interest rates is factors affecting the magnitude of rates. Interest rates are affected by multiple factors. Some theorists describe interest rates as being made up of

1. expected inflation,
2. a payment the lender requires to temporarily give up the use of their monies, and
3. risk of not receiving the future cash flows as expected.

As each of these factors change, interest rates rise or fall according to theory.

Relations between interest rates and risk can be observed in ordinary activity. For instance, when the risk of loan default is low, banks tend to give borrowers lower interest rates. Conversely, when default risk is high, borrowers pay higher interest rates on average. Put differently, borrowers that are good credit risks typically receive lower interest rates from lenders compared to borrowers that are poor credit risks. Higher rates of interest provide banks with an incentive for accepting more risk. Without extra compensation, it is irrational for banks to take more risks, other things being equal.

The first and second factors describing the composition of interest rates are relevant to explaining changes in their rates because inflation and returns in the capital markets vary over time. First, prices of goods and services tend to change over time. We call such changes *price inflation* or *deflation*. People can spend their money on goods or services now or defer consumption until later. By lending their money out instead of consuming it now, people expect to receive their money back later when prices of goods and services are higher or lower. Lenders take their expectations of future price changes into account when making decisions about interest rates and investing. Second, we make periodic observations of the capital markets to assess current interest rates. For instance, when the demand for capital is high or the supply is low, interest rates tend to go up, other things being equal. Although we usually do not directly observe supply and demand of capital, we can observe the effects of these forces from changing interest rates.

The third factor regarding interest rates is the investor's risk of not receiving monies as expected. For bank loans, this is generally called *default risk*. As this risk rises for a particular asset, interest rates increase, other things being equal.[11]

The terminology for describing the interest rate component of present-value calculations varies across domains. Multiple terms can be a bit confusing. The finance literature uses several terms, one being *required rate of return* (or **required return**). For instance, the interest rate that lenders require for loaning funds is their required rate of return. This term is from the perspective of suppliers of some kind of capital—debt or equity. An alternative and equivalent term is *cost of capital* or *opportunity cost of capital*, which is from the perspective of users of capital. The supplier of funds has a required rate of return, and the user incurs a cost of capital. If a lender provides funds to a borrower at a 5-percent interest rate, this rate is the lender's required return and the borrower's cost of capital. Simply put, required rate of return and cost of capital generally mean the same thing, as illustrated in equation 15.4.[12, 13]

$$\textit{Required rate of return} = \textit{Cost of capital} \tag{15.4}$$

Figure 15.1 shows a simplified firm owning operating assets and financing them with debt and equity capital.[14] Firms need capital to acquire assets and grow. Managers can access capital from lenders (debt) or equity investors (equity) or a mix of both. A firm's mix of capital is its capital structure.

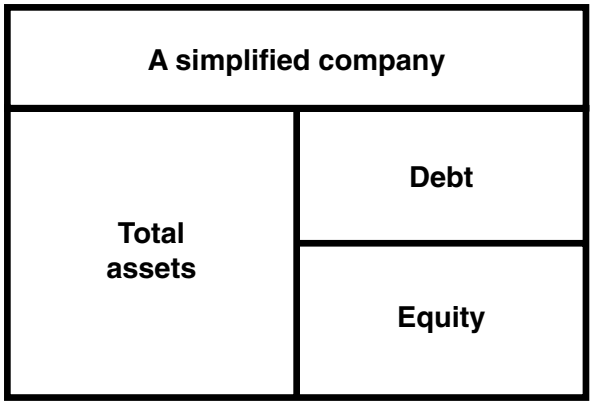
[11] Banks can have other kinds of risk on the loans they hold, such as the risk of prepayment, especially when interest rates are falling.

[12] This discussion on a firm's cost of capital is on a pretax basis. Debt has a tax shield benefit that we discuss later in this chapter.

[13] This discussion is in the context of firm valuation. Corporate finance for particular projects may have some nuances.

[14] This is a simple make-up of a firm from a finance perspective, which differs somewhat from an accounting presentation.

Figure 15.1
Financing a Firm With Debt and Equity Capital



Broadly speaking, when valuing businesses, we are interested in interest rates that firms pay to these two kinds of capital providers. The first group is lenders of capital, such as banks and bondholders. The second source of capital comes from equity investors, who buy a firm's stock and, thus, have a claim on the firm's profits and assets.

Next, we discuss what firms pay for the capital that others provide. Firms pay something to obtain capital for their needs because of market forces. This is a firm's cost of capital. The cost of capital generally consists of the blended cost of debt capital and cost of equity capital. A firm's cost of debt differs in magnitude from its cost of equity because of the relative rights of lenders and equity investors and difference in tax treatment between interest and dividends. Generally, a firm pays lenders before its stockholders, and lenders are in a superior position to stockholders if a firm goes bankrupt. Thus, lenders have lower risk than stockholders on average. Logically, lenders have lower required returns compared to shareholders because they have lower risk. Put differently, interest rates on loans and bonds are lower than required returns expected by shareholders. Not only is it logical to understand this difference between these two kinds of capital providers, empirical data from the capital markets shows this difference over the long term. Stocks have higher historical returns than bonds on average. In addition to differences in risk, tax treatment also explains differences in the costs of debt and equity. Firms pay interest to lenders and dividends to stockholders. In most developed countries, if not all, governments permit firms to deduct interest paid in computing taxable income—which lowers taxes—but cannot deduct dividends paid. Conceptually, governments subsidize borrowing costs of firms, lowering the cost of debt capital. In short, the cost of debt is lower than the cost of equity.

Income Approach in Business Valuation

Overview

As discussed, the income approach is essentially a present-value calculation consisting of three general parts: the amount of expected future cash flows, the anticipated timing of these future cash flows, and an interest rate. When applying the income approach in business valuation, practitioners work with estimates of the three variables because they cannot be directly observed.[15]

For operating businesses, the amount and timing of future cash flows are not certain. A firm's future profitability depends on many factors, such as the price and quantity of labor and materials that go into its goods and services and the timing and prices that customers pay to a firm. These kinds of factors vary over time and cannot be fully controlled on average.

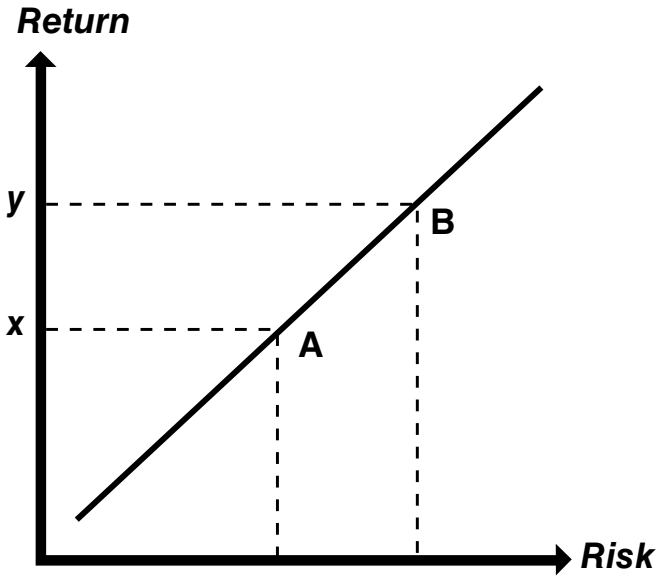
Forecasting the amount and timing of an operating firm's future cash flows is not a simple task. In doing so, analysts often collect data about a firm, its industry, and the economy and then analyze the data. In practice, analysts sometimes estimate future cash flows by first observing historical information. In these cases, they may believe that

[15] Although interest rates on debt are often observable, expected returns on equity investments are not.

the future will resemble the past to some degree. If, for instance, a firm's historical revenues grew at an average rate of 10 percent per quarter, analysts may believe sales will continue to grow at a similar pace in the near future. Alternatively, they might use more complex forecasting methods to make their estimates. In some cases, however, analysts may not believe the past offers much insight into a firm's future. Young businesses, for instance, tend to have little history to provide a basis for forecasting future earnings. In such cases, forecasting tends to be less certain compared to mature firms.

The last component in the income approach—the interest rate—is often developed in business valuation practice by first observing historical rates of returns of other kinds of assets.[16] Next, practitioners might make an upward or downward adjustment to these historical returns for the relative risk of a particular asset being valued and other factors. Based on theory and observation, we know that riskier assets have higher returns (interest rates) on average. Figure 15.2 illustrates this relation. Asset B is riskier than asset A and, according to theory, investors require a higher expected return of *y* if they are to invest their capital with B, rather than A. In business valuation practice, the task of quantifying how much of a higher return (*y* minus *x*) investors expect for buying a riskier asset may be one of the more challenging activities because much of the work involves qualitative risk assessment. We discuss theory and process next.

Figure 15.2
Relation Between Risk and Expected Return of Two Assets



Introduction to Cost of Capital

As previously discussed, firms need capital to acquire assets and grow.[17] Just as tenants pay rent to landlords for using land, economic pressures force firms to pay "rent" for using someone else's capital. This form of rent is an incentive that lenders and equity investors require that encourages them to provide their capital to others.

In finance, such rent is usually called the required return or cost of capital, each term from the perspective of suppliers and users of capital, respectively. We can think of two main sources of capital, debt, and equity. Firms have a cost of debt capital and cost of equity capital. As discussed, debt has a lower capital cost than equity.

Analysts can estimate a firm's cost of debt relatively easy on average because interest rates can be observed in the United States. In contrast, a firm's cost of equity cannot be observed and, thus, analysts perform tedious work

[16] One cannot directly observe *expected* rates of return. In practice, analysts often rely on historical returns as proxies for expectations. We will discuss this further later.

[17] Even smaller entrepreneurial firms need capital, often supplied initially by entrepreneurs and their friends and family.

to estimate it. It represents the expected return that equity investors have for supplying their capital for a particular asset. A firm's cost of equity is generally important in business valuation because much effort is needed to estimate it, particularly for unlisted firms.

Capital Asset Pricing Model

To understand the cost of equity for private firms, we begin with the Sharpe-Lintner Capital Asset Pricing Model (CAPM) described in the finance literature. In the 1960s, Bill Sharpe and John Lintner developed this model for predicting returns of particular assets, and it continues to be taught in business schools. Equation 15.5 is a formulation of the CAPM, where R_i is the expected equity return of asset *i*; R_f is the return of a **risk-free asset**; R_m is the return of a market portfolio; and β_i is often interpreted as the relative risk of asset *i* compared to the market portfolio. If asset *i* is riskier than the benchmark stock portfolio, its CAPM beta (β_i) will be greater than 1.0; thus, investors have a higher required return for the asset. A feature of the CAPM is that it explains asset returns with one risk factor, market risk ($R_m - R_f$), the extra return for investing in risky assets, rather than a risk-free asset.

$$R_i = R_f + \beta_i (R_m - R_f) \tag{15.5}$$

Assume that Microsoft's stock has a CAPM beta of 0.7, the return on a risk-free asset is 2 percent, and the return on the market portfolio is 8 percent. Using the CAPM, Microsoft's cost of equity capital for the entire firm is 2% + 0.7(8% – 2%) or 6.2 percent.

Case in Point

As published on www.nobelprize.org, Bill Sharpe said the following in his 1990 lecture for the awarding of the Nobel Prize in Economics:

> The initial version of the CAPM, developed over 25 years ago, was extremely parsimonious. It dealt with the central aspects of equilibrium in capital markets and assumed away many important aspects of such markets as they existed at the time. In the last 25 years, theorists have extended and adapted the approach to incorporate some of these real-world phenomena.

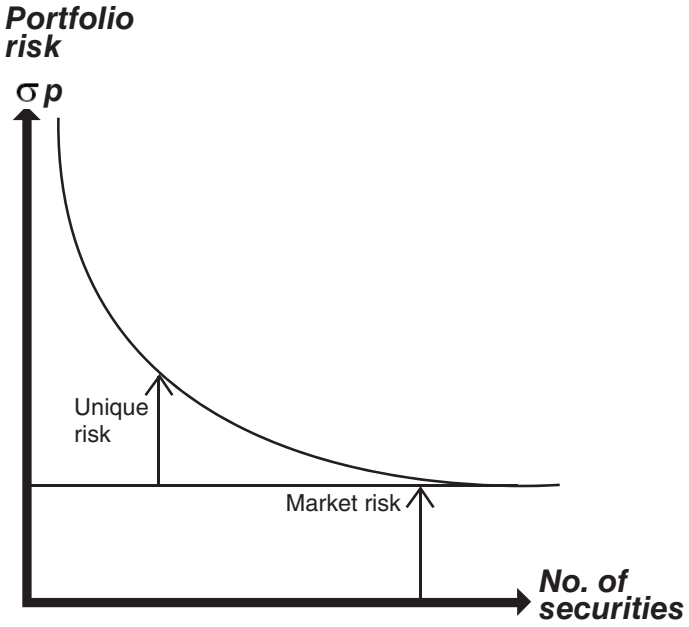
Diversification

Implicit in standard asset pricing of the finance literature are ideas in modern portfolio theory. The CAPM incorporates such ideas. One assumption in portfolio theory is that investors can form asset portfolios (that is, they hold multiple investments) that will lower their overall risk.[18] The main idea is not putting all your eggs in one basket. Figure 15.3 illustrates the benefits of diversification. With more assets, portfolio risk[19] falls but cannot be eliminated entirely because a portfolio of risky investments is still exposed to market risk. When a portfolio has fewer holdings, it will have extra risk above market risk. The figure shows this extra risk as unique risk, which is also known by other terms, such as *unsystematic risk, idiosyncratic risk*, and *firm-specific risk*. The CAPM assumes that rational investors diversify their portfolios to reduce their overall risk, and asset prices do not reflect any risk other than market risk, as shown in equation 15.5. Put differently, the CAPM does not account for the unique risks of particular assets.

[18] The technical reason behind the lowering of overall risk by accumulating a portfolio of assets is that the asset returns are almost certainly not perfectly correlated.

[19] The standard deviation of portfolio returns is the standard measure of portfolio risk in the finance literature.

Figure 15.3
Diversification Benefits of Portfolios



Case in Point

John Campbell, Martin Lettau, Burton Malkiel, and Yexiao Xu show an effective diversification effect with a portfolio of approximately 40–50 stocks in their study.[20]

Unique Risk

Empirical data show that owners of small and medium-sized enterprises (SMEs) tend to have personal holdings that are not fully diversified. Much of their investable wealth tends to be concentrated in their SME asset(s). On average, portfolios of SME owners are on the left-hand side of figure 15.3. Thus, they are exposed to unique risk in addition to market risk. In business valuation practice, cost of equity models for private firms generally include a parameter for unique risk that tends to increase the magnitude of the required return. The assumption in such models is that unique risk is priced in these kinds of firms when market participants generally do not or cannot diversify away this kind of risk with a diversified portfolio.

Size Premium

Academic studies show that the CAPM may be missing a risk factor in explaining asset returns. In 1981, Rolf Banz documented that smaller firms have had higher returns after controlling for market risk. He shows that asset returns can be better explained with two model parameters, market risk and firm size, compared to CAPM's single factor. Banz finds that firm size, which he measures as market capitalization, predicts stock returns on average over long horizons in addition to market risk.[21] The theory explaining such empirical observations is that firm size proxies for risk factors not completely captured by CAPM beta. In practice, the CAPM might be modified to include firm size as

[20] Campbell, JY et al., "Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk." *Journal of Finance*, 56(1): 1-43 (2001).

[21] However, data since the early 1980s show that superior returns of smaller listed firms relative to larger listed firms has diminished or disappeared. See Crain, M A, "A literature review of the size effect," http://ssrn.com/abstract=1710076 (October 29, 2011).

a risk factor that may not be accounted for in the CAPM. Equation 15.6 shows a formulation expanding the CAPM where RP_{size_i} is a risk premium associated with the size of firm i.[22]

$$R_i = R_f + \beta_i (R_m - R_f) + RP_{size_i} \tag{15.6}$$

Modified CAPM in Business Valuation Practice

When valuing private firms, a parameter for unique risk might be added to equation 15.6, resulting in equation 15.7. RP_{unique_i} is a risk premium for the unique risk of i not accounted for by the CAPM beta and size premium. One practical challenge with using this model to value private firms is estimating β_i. For traded assets, β_i in the CAPM can be measured by observing the asset's historical prices relative to a market portfolio. For private firms, however, their stock prices are not observable. Practitioners might use a proxy to estimate β_i by observing stocks of traded firms in i's industry and using some statistical measure of the observed CAPM betas, such as the median industry beta.[23]

$$R_i = R_f + \beta_i (R_m - R_f) + RP_{size_i} + RP_{unique_i} \tag{15.7}$$

Build-Up Model

In addition to the modified CAPM, business valuation practitioners might use an additive model to estimate the cost of equity of private firms. A term for such models is the *build-up method* or *build-up model*. Equation 15.8 is the general form of such models, where R_i is the required equity return of firm i, R_f is the return of a risk-free asset, and RP_n is a risk premium for risk not already accounted for in the model.

$$\mathrm{R}_i = R_f + RP_1 + RP_2 + \bullet\bullet\bullet + RP_N \tag{15.8}$$

Figure 15.4 illustrates how business valuation practitioners might estimate the cost of equity of small- and medium-sized firms with a build-up model. This methodology divides the cost of equity into theoretical pieces and estimates a measurement for each part. The sum of the parts is an estimate of a particular firm's cost of equity. The figures show how one might break down the cost of equity into theoretical pieces.

Risk-Free Rate

Using the build-up method and CAPM, analysts observe the market yield of risk-free securities. This yield is the **risk-free rate** or risk-free interest rate. In the United States and many parts of the world, practitioners generally consider U.S. Treasury securities to be the most risk-free kind of asset, which means they are perceived as free from default risk. Put differently, the market yield on treasuries proxies for the required return of investors in a risk-free asset. Yields on treasuries can be obtained from various sources, such as the Federal Reserve Statistical Release H.15 publication and *The Wall Street Journal*.

Equity Risk Premium

The **equity risk premium** (ERP) is the extra return that investors require for holding risky assets, rather than a risk-free asset.[24] Equation 15.9 illustrates this idea, where ERP is the equity risk premium, R_m is the return of a market

[22] Firm size measures include market value, total assets, annual sales, and headcount.

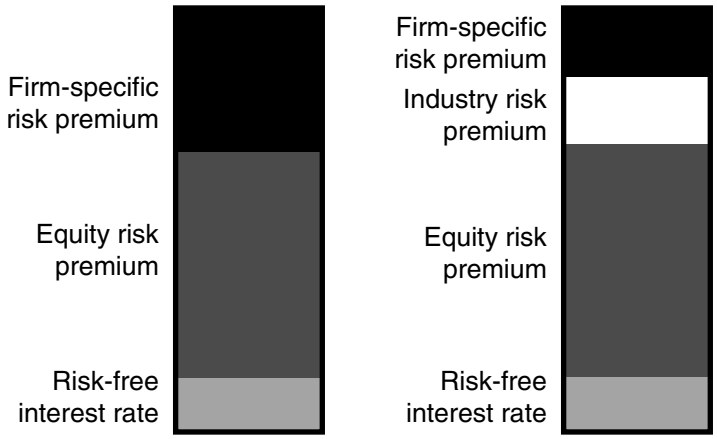
[23] This practice assumes the proxy measurement is relevant for pricing the particular private firm.

[24] An alternative term is *market risk premium* that appears in some finance literature.

portfolio, and R_f is the return of a risk-free asset. Each of these parameters is expectational in nature. The CAPM uses the *ERP*, $R_m - R_f$ in equation 15.5, and practitioners generally use the ERP as a risk premium in the build-up model.

$$ERP = R_m - R_f \tag{15.9}$$

Figure 15.4
Examples of Cost of Equity Models With the Build-Up Methodology



Case in Point

Professor Aswath Damodaran of New York University, a prolific researcher on valuation, describes the ERP as a key component in every valuation. In the current version of his paper, "Equity Risk Premium (ERP): Determinants, Estimation and Implications," he says, "The equity risk premium reflects fundamental judgments we make about how much risk we see in an economy/market and what price we attach to that risk. In the process, it affects the expected return on every risky investment and the value that we estimate for that investment."[25]

Conceptually, the ERP is straightforward. Measuring the expected ERP, however, is challenging because it is not directly observable. One way of estimating it is by analyzing historical data.[26] Past returns of listed stocks and U.S. Treasuries can be observed. From such observations, one can calculate historical differences between returns of a stock portfolio and returns from treasuries. Many academics and practitioners believe such return differences provide

[25] Damodaran, A, "Equity risk premium (ERP): Determinants, estimation and implications—the 2013 edition," http://ssrn.com/abstract=2238064 (March 23, 2013).

[26] In this introduction to cost of capital, we focus on estimating the expected equity risk premium (ERP) from historical data. Another way is by measuring the *implied* ERP. This is done by a combination of observing current asset prices and modeling. Simply put, this measure estimates the expected ERP implied from current asset prices. Damodaran, who is mentioned in the boxed text, describes the methodology, and he provides measurements on his website (http://pages.stern.nyu.edu/~adamodar/). Further, surveys of experts might provide some insight into the expected ERP. Pablo Fernandez has conducted such surveys and published results on *SSRN.com*.

insight into the premium that investors require for investing in risky stocks instead of a safe asset. Analysts often use an average of these historical differences to proxy for the expected ERP in cost of capital models. In this practice, they make some assumptions that we discuss next.

When computing long-term average return differences, one observes asset returns over some chosen time horizon in the past. By using the average historical $R_m - R_f$ to proxy for the expected ERP as of the present, one is assuming that future return differences will be like past differences; but, which version of the past? Morningstar, one popular source for return data, calculates an average historical ERP from information going back to the 1920s. Another source, Duff & Phelps, starts in the 1960s. Because the samples differ, these published historical ERP measurements are not the same. Further, practitioners must decide which portfolio of risky assets to observe for the R_m parameter in equation 15.9. Because one can easily observe prices of listed stocks, a portfolio of traded stocks seems reasonable. In practice, the S&P 500 stock portfolio is often used as the market portfolio.

To determine historical return differences, we can observe each year's market returns and Treasury returns and then calculate the difference. If using an arithmetic average of historical return differences to proxy for the expected ERP, we can use the specification in equation 15.10, where ERP_h is the average historical return difference; t is the year observed, starting with the first year in the sample and concluding with the last year N; R_{m_t} is the annual market return for time t; and R_{f_t} is the annual return of a risk-free asset for time t. Further, equation 15.11 represents the proposition that the average historical equity risk premium ERP_h proxies for the true expected equity risk premium $E(ERP)$.

$$ERP_h = \frac{1}{N} \sum_{t=1}^{n} R_{m_t} - R_{f_t} \tag{15.10}$$

$$ERP_h \longrightarrow E(ERP) \tag{15.11}$$

Estimating the historical ERP is more complex than it seems. First, measuring historical returns of a stock portfolio and treasuries can be computed more than one way, producing different measurements. For instance, arithmetic average returns are different than geometric average returns. Speaking simply, geometric returns are compounded measures, and arithmetic returns are not. Academics argue among each other about which type is a better measure. A second area is which kind of U.S. Treasury security to use for the R_f parameter in equation 15.9. Recall that the ERP represents the extra return that investors require for investing in risky assets, rather than a risk-free asset. We can group treasuries as having short-term (T-bills) and long-term (T-bonds) maturities and observe that the returns of these two groups differ. On average, Treasury bills have lower returns compared to Treasury bonds. Using T-bills for R_f in equation 15.9 produces a different ERP than using T-bonds.

To illustrate some practical aspects of measuring historical return differences to proxy for the expected ERP, table 15.1 on the following page shows such measurements

- over three time horizons,
- using arithmetic and geometric average returns, and
- using T-bills and T-bonds as risk-free assets.

Standard errors appear in parentheses.[27] The table shows that measurements differ depending on selection of historical time period, averaging method for returns, and maturity of the risk-free asset.

In summary, the theoretical meaning of ERP is straightforward. Measurement is not. Because it is expectational in perspective, the ERP cannot be directly observed. Estimating the expected ERP has some complexities, and practitioners necessarily make some assumptions when deciding how to estimate it. In chapter 16, "Valuation Applications," we will discuss ERP applications in business valuation practice.

[27] Damodaran provides these measurements. Stock returns are the S&P 500 stock index, T-bills have three-month maturities, and T-bonds have maturities of 10 years. See Damodaran, A, "Equity risk premium (ERP): Determinants, estimation and implications—the 2013 edition," http://ssrn.com/abstract=2238064 (March 23, 2013).

Table 15.1 Historical Equity Risk Premium—Return Averaging and Risk-Free Rate Methodology

	Stocks minus T-bills		Stocks minus T-bonds	
	Arithmetic	Geometric	Arithmetic	Geometric
1928–2012	7.65%	5.74%	5.88%	4.20%
	(2.20%)		(2.33%)	
1963–2012	5.93%	4.60%	3.91%	2.93%
	(2.38%)		(2.66%)	
2003–2012	7.06%	5.39%	3.90%	1.72%
	(5.82%)		(8.11%)	

Other Return Premiums

As suggested by figures 15.4a and 15.4b, business valuation practitioners have further work to perform after determining a risk-free rate and ERP. They need to assess the risk of an investment in a particular private firm relative to risk of the selected market portfolio, which may be the S&P 500 stock index, as stated earlier. One will probably add one or more further risk premiums to estimate a particular firm's cost of equity capital because investments in private firms are riskier than the S&P 500 stock portfolio on average. This higher risk increases a particular firm's cost of capital, according to theory (see the illustration in figure 15.2). In this figure, think of asset A as the S&P 500 stock portfolio with an expected return of *x* and a particular private firm as asset B, with higher risk and a higher expected return of *y*. Conceptually, the task is to determine the extra return required for an investment in asset B, rather than asset A. This extra return is measured as y minus *x* in the figure.

After determining a risk-free rate and ERP, practitioners diverge in technique for the remaining elements of a private firm's cost of equity. As illustrated in figure 15.4a, analysts might use only one more cost of equity component for firm-specific risk. This single additional element is for risk of a particular firm relative to the risk of the selected market portfolio. Alternatively, practitioners may use multiple elements after ERP, as illustrated in figure 15.4b and equation 15.7. A technique of multiple extra risk premiums might first apply a size premium using historical return data for smaller listed firms compared to the S&P 500 stock index. One practical advantage of using an explicit size premium in cost of equity models is that it comes from empirical data. This approach relies on observation, rather than pure judgment. Size premiums, however, have the same kinds of measurement problems discussed earlier for the historical ERP, such as changes over time horizons and differing estimation methods.

The remaining element in figure 15.4b and equation 15.7 is a premium for firm-specific risk or unique risk. This parameter is for firm risk that has not already been included in the particular cost of equity model. Thus, the magnitude of the firm-specific risk premium using the approach in figure 15.4b differs from the risk premium in figure 15.4a. The two figures illustrate the difference by the sizes of the top portion of the vertical bars.

Build-up models other than those illustrated in figures 15.4a and 15.4b are possible. For instance, one might add another risk premium for industry risk. Conceptually, the required return for a particular firm is the same, regardless of the particular cost of capital model.

Total Cost of Capital

Earlier we discussed that firms have costs of capital arising from debt and equity, and each source has a different cost. In addition to debt and common equity, firms might obtain capital from other sources, such as selling preferred stock and convertible securities. Each source has its own capital cost. A firm's overall cost of capital is a weighted average of the various capital costs having a general formulation, shown in equation 15.12, where k_{firm} is a firm's total cost of capital, k_i is the firm's cost of capital for source *i*, and ωi is the proportion of capital source *i* to the firm's total financing. k_{firm} is often called a firm's *weighted average cost of capital* (WACC).

$$k_{firm} = \sum_{i=1}^{n} k_1 \omega_1 + k_2 \omega_2 + \cdots + k_n \omega_n \tag{15.12}$$

Assuming a firm's capital is supplied by a mix of debt and common equity, we can estimate the firm's overall cost of capital with equation 15.13, where *WACC* is a firm's overall cost of capital, $k_{D(pretax)}$ is the cost of debt before the related tax benefit, k_E is the cost of equity, t is the firm's tax rate, D is the market value of the firm's debt, E is the market value of the firm's equity, and V is the market value of the firm consisting of $D + E$. The debt ratio D/V plus the equity ratio E/V equals 100 percent.

$$WACC = k_{D(pretax)} \ (1 - t) \ \frac{D}{V} + k_E \ \frac{E}{V} \tag{15.13}$$

A firm's capital costs k are the same as the returns required by investors r, shown in equation 15.14. Thus, we can also formulate the WACC as shown in equation 15.14.

$$WACC = r_{D(pretax)} \ (1 - t) \ \frac{D}{V} + r_E \ \frac{E}{V} \tag{15.14}$$

In equation 15.13, we can see the parameter 1-t shows a tax shield having an effect of lowering a firm's true (after tax) cost of debt capital and its overall cost of capital. In the United States and many developed countries, interest costs reduce a firm's taxable income, resulting in a benefit of lower taxes.

The weighting of each kind of capital in equations 15.12 and 15.13 is the market value of the capital, rather than its **book value**. Capital providers determine their required returns based on the market value of their capital, rather than a firm's book value.

Assume that a firm has a cost of debt of 7 percent, cost of equity of 15 percent, tax rate of 35 percent, and the market values of its debt and equity are $40 million and $60 million, respectively. Using equation 13.13, we can calculate the firm's overall cost of capital as 10.8 percent.

$$WACC = .07(1-.35) \ \frac{\$40}{\$100} + .15 \ \frac{\$60}{\$100}$$

$$WACC = .108 \text{ or } 10.8\%$$

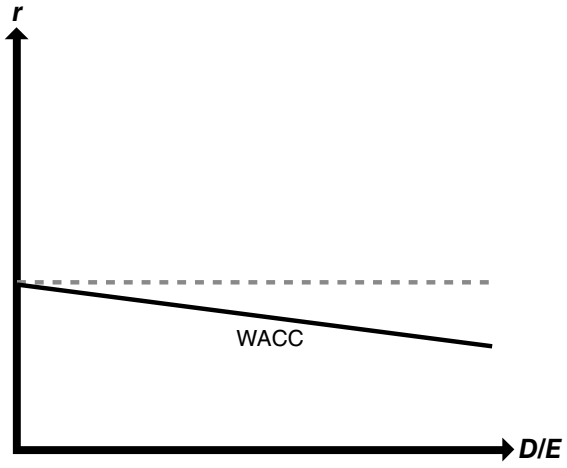
We can observe in equation 15.13 that changing the firm's capital structure—that is, the mix of debt and equity of D/V and E/V—alters a firm's overall cost of capital. As discussed, the required return for debt capital is less than the required return for equity capital. Thus, the more a firm borrows, the lower its overall cost of capital, other things being equal.[28] Equation 15.15 shows the relation between the various capital costs. Because k_{firm} is the weighted average of k_{equity} and k_{debt}, it must be between the cost of equity and cost of debt.

$$k_{equity} > k_{firm} > k_{debt} \tag{15.15}$$

[28] As equation 15.2 suggests, a firm with a lower cost of capital (or required return) has a higher enterprise value, where cash flows are those from operations. In corporate finance, firm managers have an incentive to lower their overall cost of capital to increase share price.

Figure 15.5 illustrates this discussion. The horizontal axis shows the degree that a firm is leveraged, where *D* is the amount of debt financing, and E is the amount of equity financing. As a firm levers, it moves toward the right-hand side of the axis. The vertical axis is the WACC. The dashed line is a firm's WACC as if 100 percent financed by equity. Other things being equal, as a firm borrows more, its total cost of capital falls. In chapter 16, "Valuation Applications," we describe further the role of capital structure on a firm's enterprise value and introduce financial distress risk by borrowing excessively.

Figure 15.5
Total Cost of Capital With Leveraging



Summary and Conclusion

Let's pause and summarize what we have learned in this section. First, "present value" is a core idea in valuation. The income approach estimates the value of an asset based on the present value of its expected future cash flows. This general approach is mathematical in nature.

Second, we know that rational people are averse to risk, and they need incentives to take risks. This behavior is the foundation of the risk-return relationship in finance theory. In short, this theory says that investors and managers require the expectation of receiving higher returns to motivate them to put capital into risky investments. Market forces adjust prices of risky assets downward as a way of providing investors with higher rates of returns in the future, according to theory, and other things being equal.[29,30]

Third, the main components of present-value calculations are expected future cash flows, anticipated timing of these cash flows, and an interest rate. From these factors, we can derive the present value of an asset.

Fourth, the interest rate in present-value calculations is called the required return or cost of capital in finance literature. Required return and cost of capital mean the same thing, coming from the perspectives of capital providers and users, respectively. Required returns are a function of conditions in the capital markets and the relative risk of a particular asset. Capital markets are dynamic, varying over time depending on multiple factors, such as the supply of, and demand for, capital. Risky assets have higher expected returns compared to safer investments. Firms typically obtain capital from lenders and equity investors. Thus, a firm's cost of capital is often made up of two parts: its cost of debt capital and cost of equity capital. These two kinds of costs differ in magnitude because the legal rights of lenders and equity investors are not the same, and interest costs lower taxes, whereas shareholder dividends do not.

[29] If two firms each have expected earnings of $1.00 per share, theory predicts that the market sets the share price of the riskier firm lower than the share price of the less risky firm, other things being equal. Thus, a new investor in the riskier firm has a higher expected return on investment than one in the less risky firm. Each investor expects to receive $1.00 per share, but the investor in the riskier firm pays less to acquire the stock.

[30] Referring to equation B.3 in Appendix B, a higher interest rate linked to higher risks causes the present value to decrease.

In order to understand valuation, one needs to understand the theory and math of present value calculations. Business valuation relies heavily on the income approach because it is often challenging to find relevant information needed for the market approach, which we discuss in the next section.

Market Approach

Introduction

For the market approach, we will again spend some time describing theory to develop intuition. The basic idea of the market approach is straightforward. It is familiar to most of us because we use its principles in ordinary life, such as shopping for an automobile or home. Conceptually, the market approach estimates the unobservable price of Z based on the observable prices of A, B, and C. In valuation language, A, B, and C are known as *comparables* or *comps*. If these comparable things are homogeneous with Z, and we can observe prices simultaneously as of the present time, we have a higher degree of confidence that the observed prices of A, B, and C are good indications of Z's true market price. Commodities, for instance, are homogeneous and often trade in active markets. We can easily price a commodity in one market by observing their prices in other markets.

In contrast to commodities, some goods and services are not homogeneous, and only some characteristics are similar. In these cases, we are not as confident that the observed prices of A, B, and C inform us of Z's true market price. An example is homes in a particular neighborhood. Such homes will typically differ in characteristics such as condition, improvements, precise location, and so on. Because of such differences, real estate appraisers make judgments about the degree of similarity among these properties and whether the prices of A, B, and C need to be adjusted up or down in estimating Z's market price.

We can lose some confidence in the meaning of A, B, and C's prices when not observed close in time in relation to Z's pricing. Confidence is not as strong as time becomes more distant because market conditions may have changed, altering prices. In the case of neighborhood homes with sales occurring months apart, market conditions may have changed that caused prices to vary up or down. Thus, the meaning of the observed prices of A, B, and C to our pricing of Z is not as strong compared to when we can observe their prices nearly simultaneously or otherwise close in time to Z's pricing. Another aspect of the market approach is whether the observed prices of A, B, and C are, indeed, reliable indicators of A, B, and C's true values. When comparables sell in active markets having many buyers and sellers, it is self-evident that the observed prices are representative of their true value. In inactive markets having few buyers and sellers, we are less confident that the observed prices represent A, B, and C's true values.[31]

A non-intuitive aspect of the market approach is that prices contain much information. Prices are a composite of multiple factors, such as investor expectations, capital market conditions, industry and economic forecasts, anticipated cash flows and returns, actual and expected actions of a firm's competitors, and so on. Even though we may not explicitly understand each of these kinds of factors very well, by observing market prices of assets, we take such factors into account because, according to standard finance theory, investors consider all available information when they make their decisions.[32] When we observe the price of an asset as of a particular time, the price contains information known at the time. For instance, suppose a particular stock trades at $50 as of 10:00 AM. This price reflects all available information affecting the stock at the time. Assume at 10:01 AM, the government releases unexpected positive economic data, and the stock price jumps. What mechanism explains the price increase? We might interpret these events as investors receiving new information that caused them to change their expectations about the asset's future returns.

In summary, the market approach estimates the unobservable price of an asset based on observable prices of comparable assets. The degree of confidence in the results of this approach depends mainly on, first, the similarity of the items and, second, the timing of the observed prices relative to the time we price the particular asset.

[31] During the financial crisis in 2008 and 2009, for instance, markets for some kinds of securities froze, and few market participants were trading. Examples include auction rate securities, commercial paper, and mortgage-backed securities. Of the trades one could observe, prices had declined substantially from historical levels. With such few exchanges, analysts, managers, and regulators could not be certain the observed asset sales were at true values.

[32] This is a main idea of the efficient-market hypothesis.

Theory

The market approach is observational in nature, using empirical evidence to determine pricing benchmarks of comparable assets. In business valuation, market-derived price multiples are applied to a particular firm to estimate its value. This approach estimates the non-observable value of a firm by making inferences from observed prices of similar firms. We use these other firms as pricing benchmarks. In contrast, the income approach uses indirect empirical evidence and a priori theory (reasoned judgment) to estimate a required return and applies this return to a firm's expected cash flows in mathematical calculations. Generally speaking, estimating expected cash flows and a required return for the income approach require more judgment compared to the market approach, but the income approach is more aligned with asset pricing theory.

The market approach relies more on direct empirical data than the income approach. In business valuation, the market approach observes prices of comparable firms and transforms them into price multiples. The general methodology is simpler to understand and apply compared to the income approach, which is more technical. Moreover, observation is generally more persuasive than a priori theory when making consequential decisions. Simply speaking, the market approach tends to be more persuasive, but the degree of persuasiveness decreases with the dissimilarity among the assets and elapsed time of the price observations. Although the market approach seems more sound than the income approach because of its emphasis on empirical observation of market participants, in business valuation practice, it might not be as reliable because such dissimilarities and elapsed times often exist. Nevertheless, both approaches can provide reliable information for asset pricing.

Scaling Prices With Price Multiples

When observing prices of assets of different sizes, the prices may be scaled to put them in equivalent terms. This idea is intuitive because we use it in ordinary life. When we shop for a product at the grocery store and want to compare prices of similar products to determine the best value but the products are packaged differently, we scale their prices to make price comparisons. For instance, suppose you are trying to decide whether a five-pound bag of sugar is a better value than a two-pound bag. One factor that you consider is price. But what can we tell about price by simply observing that a five-pound bag costs $2.50 and a two-pound bag costs $1.15? The two prices are not directly comparable because the packages differ in size. A solution is to transform the price of each item into a per-pound price of sugar. This process standardizes the prices. Now, we can more easily compare the prices.

Equity analysts often work with scaled prices. Ford and General Motors, for instance, are firms of different sizes and a share of stock carves up their equity into different proportions. For instance, 100 shares of Ford stock is a different proportion of its total shares than 100 shares of General Motors because the two firms have different numbers of total equity shares outstanding. Thus, the share price of Ford stock is not directly comparable to GM's share price. Further, Ford and GM are not the same size in terms of total assets, headcount, and so on. Similarly, the sales prices of entire enterprises cannot be easily compared because the firms are almost certainly different sizes.

Scaled prices can take different forms. Price-to-earnings (P/E) ratios are the most recognizable kind of scaled price. Financial analysts might use price multiples, such as P/E, to compare prices of traded stocks. In contrast, real estate appraisers might compare prices of several parcels of raw land of different sizes by transforming their sales prices into a price-per-acre ratio.

To scale prices, first observe prices of similar things—the comparables. Then, calculate scaled prices by dividing the observed prices by some common characteristic. This idea is shown in equation 15.16, where A is a comparable asset with characteristic *i*. We could, for instance, observe prices of several parcels of raw land that sold and divide each parcel's price into its acreage to derive several price-per-acre ratios. In another example, we can observe a firm's share price and divide it by the firm's earnings per share to derive its P/E multiple.

$$\frac{\textit{Observed price of A}}{\textit{A's characteristic}_i} = \textit{A's price multiple}_i \tag{15.16}$$

For illustration, we apply the scaled price of a comparable asset to an asset that we are pricing, shown in equation 15.17, where A is the comparable asset, Z is the asset being priced, and *i* is the common characteristic. In practice, analysts tend to use a measurement from a sample of comparable assets of, for example, A, B, and C, rather than a multiple from a single comparable asset. The general methodology is collect a sample of comparables assets; calculate a price multiple for each comparable asset; determine a statistical measurement of the sample multiples, such as the median multiple; and apply the statistical measurement to the characteristic of the asset being valued. For instance, P/E multiples of a sample of comparable firms might range from 8–13, and the median multiple is 10. We might apply this median to the particular firm's earnings to price the asset. Equation 15.18 is a generalized formulation:

$$A\text{'s price multiple}_i \times Z\text{'s characteristic}_i = \text{Value of } Z \quad (15.17)$$

$$\text{Sample measurement}_i \times Z\text{'s characteristic}_i = \text{Value of } Z \quad (15.18)$$

When valuing firms, various kinds of price multiples might be used. Multiples could be based on financial or operating characteristics, as illustrated in the following list.

- Price/earnings
- Price/earnings before interest, taxes, depreciation and amortization (EBITDA)
- Price/earnings before interest and taxes (EBIT)
- Price/revenues
- Price/book value
- Industry multiples, such as price/subscriber, price/hospital bed, price/website visitor

Observing Prices in Business Valuation

In business valuation practice, the kinds of prices that might be observed to derive price multiples include the following:

- Prices of private firms or operating units of public companies that sold
- Prices of listed firm stocks
- Prices from earlier sales of equity interests for the particular firm being valued

When observing prices of comparable private firms, it may not be easy to assess the degree of similarity to the firm being valued because most private firms reveal little information about themselves compared to listed firms. Judgments about similarity may be limited to characteristics such as industry, firm size, and financial ratios.

Sample sizes of comparable private firms tend to be relatively small. Samples may be small for several reasons. First, U.S. private firms generally have no obligation to publicly disclose information about sales of their equity or operations, thereby limiting our knowledge about the population of sales transactions. Second, when observing prices of private firms or operating units of public companies, only one price per firm is likely available because these kinds of businesses tend to sell infrequently. Time-series prices are rare in contrast to stocks of listed firms.

In business valuation practice, it may be necessary to make trade-offs between sample size and distant prices. To collect a reasonable sample of comparable private firms or operating units of public companies that sold, it may be necessary to observe sales transactions that occurred months or longer prior to the time of pricing an asset. Logically, the risk of observing distant prices is that macro- or micro-environmental changes may have occurred after such transactions that might affect their prices and price multiples. Data on private firms, however, suggest that price multiples are not highly volatile compared to prices of listed stocks on average.

In contrast to private firms, prices and information about U.S.-listed firms are abundant. Regulators require such firms to disclose information about themselves, and these data are in the public records. Moreover, prices of shares traded on a regulated U.S. stock exchange are also public information. Because frequent prices of listed firms can be observed and such firms disclose much data, analysts can easily collect information on average. But using listed firms as pricing benchmarks for private firms is not a panacea. Listed firms are larger and more diverse than most private firms, which affects the degree of similarity.

Prices of earlier sales of equity interests in a private firm being valued might inform us about the firm's current value; but, some understanding of a particular sale may be needed to assess the degree of confidence in this price for providing information about the firm's true market value. Such sales prices tend to be more aligned with true market values when negotiated at arm's length, the buyer has nonstrategic motives, and no duress is present. In private firms, personal dynamics may occur that alter a sales price from the true market value. For instance, personal relations between a controlling shareholder(s) and minority shareholder might push the sales price up or down from its true market value. Further, because prices may change over time, another consideration is whether macro- or micro-environmental changes may have occurred after an earlier equity sale that alters the current value.

Finding and Choosing Comparable Firms

Data on sales of private firms tend to come from proprietary databases, generally available by subscription or pay-per-use. Data on U.S.-listed firms and stock prices are publicly available on the Internet and in company filings with the SEC and from proprietary data sources.

How do practitioners choose particular comparable firms? In valuation practice, industry is likely the first criteria for identifying potential comparable firms. Experience suggests that firms in the same industry tend to be exposed to common risk factors and other characteristics. Secondary criteria include firm size[33] and financial ratios, such as profitability and growth rate.

Summary and Conclusion

Let's reflect on and summarize what we have covered in this section. The market approach estimates the unobservable price (or value) of a thing by observing prices of similar things. Whereas the income approach is mathematical in nature, the market approach is observational. Moreover, prices give us information even if we do not understand particular factors affecting such prices. Thus, prices give us important information that we may not be able to collect or measure—or when it is too costly to collect.[34] For instance, there is evidence that asset prices maybe be affected by investor sentiment and market liquidity. Prices tend to capture such information.

In business valuation practice, prices of comparable firms come from several kinds of sales transactions. Such comparables include prices of entire private firms or units of public companies, prices of stocks traded on an exchange, and prices of earlier equity sales of the particular private firm being valued.

The degree of confidence in particular comparable assets is mainly a function of, first, similarity of the comparables that we observe relative to the thing we are pricing and, second, the elapsed time between the prices of the comparable assets and when we price the asset of interest. Further, prices we observe in active markets give us more confidence that those prices reflect the true value of the comparable assets. In contrast, in markets with few buyers and sellers, assets trade less frequently, and we are not as confident the exchanges are at their true values.

In business valuation practice, trade-offs are often necessary when collecting pricing evidence. Unlike traded stocks in which data are abundant, clean, and easily collected, sales of private firms occur less frequently, and their data are private on average. Consequently, practical trade-offs occur when collecting samples of comparable firms in practice.

Standardizing prices of comparable firms is generally needed because firms differ in size. Scaled prices are prices transformed into a ratio in the form of a price multiple—the ratio of price-to-something. In finance, the most common scaled price is the price-to-earnings ratio or P/E. Practitioners also use other kinds of price multiples, including some that are industry-specific.

[33] Measures of firm size include annual revenues and total assets. Although market value is often used to measure firm size of listed firms, this measure usually is not practical for unlisted firms.

[34] In traded stocks, price multiples continue to be a common way to assess stock prices because it is costly to construct DCF models.

Asset Approach

Introduction

Another valuation approach is the asset approach. The theory of the asset approach in business valuation is that the value of a firm is based on the sum of the values of its individual assets. Simply put, the pieces of a firm make up its whole in terms of value.

The premise of this approach is that a firm is a collection of assets that can be identified and valued separately. The general methodology is straightforward. First, identify all assets a firm owns, which includes both tangible and intangible assets. Intangible assets are especially important to relatively profitable nonindustrial firms. On average, American firm managers do not invest as heavily in **tangible assets**, like factories and trucks, as they did several decades ago. Instead, they now tend to invest more in intangible assets, such as technology, customer relationships, know-how, and workforce.

A firm's balance sheet is a starting place for the task of identifying its assets, but it is not the end. Some people are surprised to learn that U.S. accounting rules do not require firms to report all their assets on their balance sheets. Firms that develop certain kinds of assets internally rather than buying them, such as technology, software, and customer goodwill, generally expense the related development costs on their income statements rather than showing the costs on their balance sheets as assets. Consequently, someone simply reading a firm's balance sheet may not learn whether a firm owns other valuable assets.[35] Thus, analysts applying this approach may need to further investigate the existence of other assets by asking the firm's managers or reading about the firm on its website, in press releases, public filings, footnotes to their financial statements, and so forth. An interesting exercise is to compare a listed firm's market capitalization to its book value. In many cases, the two amounts differ significantly. A positive difference may signal that a firm has valuable intangible assets that do not appear on its balance sheet, at least at their true values.

Second, after identifying a firm's assets, value each kind of asset. Some kinds of assets are relatively easy to value, such as cash, accounts receivable, and marketable securities. In contrast, some assets are difficult to value, like patents, trademarks, software, goodwill, and so on. Further, specialists may be needed to value some kinds of assets, such as real estate and equipment.

Third, after determining asset values, calculate the total of the asset values. To value a firm's equity, such as all shares of stock, subtract the firm's liabilities.

Table 15.2 is a simple illustration of the asset approach. The first column reports a firm's assets at their book value, observed from its balance sheet. The second column reports the fair market values of the firm's assets. Asset 1 has a market value the same as its book value. Asset 2 has a market value that is higher than its book value. The third asset does not appear on the firm's balance sheet, but the firm owns the asset, and it has a value.[36]

Table 15.2 Asset Approach Methodology

	Book	Market
Asset 1	$10	$10
Asset 2	75	100
Asset 3	n/a	50
Total	85	160

When the Asset Approach Is Used

When valuing profitable[37] operating businesses, practitioners generally rely on the market approach or income approach, or both. In alternative cases, analysts may use the asset approach. These other cases might include when an operating firm has little or no expected profitability, a firm is a holding company rather than an operating enterprise selling goods or services, or a firm expects to liquidate.

[35] According to theory, these unrecorded intangible assets have value when they help a firm create higher profits that it otherwise would not earn.

[36] For illustration, the second asset might be real property that appreciated in value, and the third asset could be a firm's self-developed software where the firm recorded the costs on the income statement rather than the balance sheet.

[37] In this section on the asset approach, we are using the term *profitable* in an economic sense in that a firm is generating income exceeding an adequate return on assets.

Practical Considerations

Applying the asset approach can be much more costly than the market or income approaches because the effort is often greater, and specialists may be needed. Thus, the asset approach may not be a practical choice whenever one or both of the other two valuation approaches can be used. As stated, the asset approach values a firm's assets separately. In contrast, the market and income approaches value a firm's operating assets collectively as a single business unit, which generally requires less effort and cost for profitable operating firms.

Methodologies

When applying the asset approach, we can value particular assets using one of three methodologies. The first two are already familiar to us. They follow the theory of the income and market approaches discussed earlier. First, we might value a particular asset by estimating its present value. We could, for instance, value a firm's loans receivable by calculating their present values based on the amount and timing of future loan payments a firm expects to receive from borrowers and a required rate of return.

Second, we can value a particular asset by observing prices of comparable assets. A financial firm might value its investment portfolio by observing market prices of the securities it owns. In another example, the value of a firm's office furniture and equipment might be derived from the current prices, if one were to buy those items, minus depreciation or, alternatively, the price the firm might get by selling these items.

A third methodology is the **cost approach**. This method estimates a particular asset's value based on the costs of replacing or reproducing it. For instance, customer relationships might be valued using the cost approach by estimating a firm's advertising and marketing costs if it had to replace these customers. We discuss the cost approach next.

Cost Approach

The *cost approach* is a view that the amount of money needed to reproduce or replace a particular asset is an indication of the asset's current value or "spot" price. Whereas the asset approach applies to valuing business entities holding a collection of assets, the cost approach applies to pricing an individual asset. In business valuation, the particular asset is often an intangible asset.[38] The cost approach does not have a single methodology in the valuation literature and, thus, the approach's name tends to cause some confusion. A simple form of the cost approach posits that the value of an asset is the costs to create the asset.[39] We discuss this version of the cost approach next.

The cost theory of (exchange) value is not without some controversy in modern economics literature. The main objection to the theory is it does not actually explain current market prices. Moreover, the focus on costs does not account for market information and investor preferences, factors known in economics to influence prices.

One can link the cost theory of value to classical economists, including Adam Smith in his book *Wealth of Nations, Book I*, published in 1776. Smith, however, is describing the costs of bringing competitive commodities to market, and he makes no such claim about other kinds of things. Moreover, he is describing the long-run *natural* price of things, rather than the day-to-day *market* price.[40] A market price, according to Smith, can differ from its natural price, either higher or lower, but it will gravitate toward its natural price in the long run. As an example, one kind of market information missing from the cost theory of value is demand conditions, which, in modern terms, we know as the *economic law of demand* that can push market prices up or down.[41]

The theory cannot, for instance, explain the market value of the *Mona Lisa* painting. The costs to reproduce or replace it do not capture its market value. For someone buying the painting, costs do not matter to them. Similarly,

[38] Although the focus of this discussion is using the cost approach to value one of multiple assets using the asset approach for firm valuation in aggregate, the cost approach might also be used to value a particular asset without valuing an entire firm. Such single pricing analysis might be used for the sale of a particular asset or to allocate the purchase price for a firm among its assets for accounting or tax purposes.

[39] The theory explaining the value is that a firm has avoided the costs of reproducing the asset because it already owns the asset. This theory fits within the meaning of *value to the holder*, rather than *exchange value*, which we discuss in chapter 16, "Valuation Applications."

[40] For those who are interested, Smith describes the distinction between natural prices and market prices in Book I, chapter VII.

[41] First developed in the mid-1800s, the economic law of demand as we know it today links prices and demand. It was pioneered by Antoine Augustine Cournot.

someone who wants to buy an automobile will not pay twice the price simply because the manufacturer put twice the costs into it. The cost theory of value is logical for explaining *long run* natural prices for *reproducible* goods, but it does not seem adequate for explaining current market prices established by forward-looking human actors, especially for non-reproducible assets.

One criticism of the cost approach in its simple form is that it does not consider an asset's returns. Asset prices, as discussed, are a function of its expected cash flows, at least in the abstract. Some assets, especially intangible assets, either do not create cash flows, or it is difficult to measure cash flows attributed to the asset.[42]

Another criticism of simple versions of the cost approach is it does not account for market conditions. Empirical evidence of a relation between market price and cost is weak at best. Further, one example suggesting no relation is the sharp decline of U.S. home prices starting in 2006. It is certainly plausible that input costs of building many homes were higher than their market prices during this time.[43] Evidence of a weak correlation between market price and cost can be explained by supply and demand forces that push prices up or down.

An argument criticizing simple versions of the cost approach in firms is that its logic assumes that if a firm develops something, it is valuable. We, however, know from experience that firm managers use trial and error in their operations. Some things managers try work, and some do not. In its simple form, the cost approach that links price to cost is unable to distinguish between costs of successful and unsuccessful activity.

Another cost approach methodology in the business valuation literature describes an asset's value as the current costs to create the asset minus allowances for forms of depreciation and obsolescence. Such downward adjustments include physical deterioration, functional obsolescence, and economic obsolescence, which theoretically include market conditions. Quantifying such downward adjustments for intangible assets tends to be particularly challenging in practice due to the subjective nature and may be subject to circular reasoning.[44] Factors that may indicate the existence of economic obsolescence in a firm's intangible assets in relation to its costs include the following:[45]

- The entity income approach value indication is less than the entity asset-based approach value indication.
- The entity market approach value indication is less than the entity asset-based approach value indication.
- Owner/operator revenue has been decreasing in recent years.
- Owner/operator profitability has been decreasing in recent years.
- Owner/operator cash flow has been decreasing in recent years.
- Owner/operator product pricing has been decreasing in recent years.
- Industry or profession revenue has been decreasing in recent years.
- Industry or profession profitability has been decreasing in recent years.
- Industry or profession cash flow has been decreasing in recent years.
- Industry or profession product pricing has been decreasing in recent years.
- Owner/operator profit margins have been decreasing in recent years.
- Owner/operator returns on investment have been decreasing in recent years.
- Industry or profession profit margins have been decreasing in recent years.
- Industry or profession returns on investment have been decreasing in recent years.
- Industry or profession competition has been increasing in recent years.

[42] Without cash flow measurements to apply absolute value models, one should then look to relative value models using comparable assets. Finding prices of comparable assets, however, is a difficult task for intangible assets on average.

[43] In Cleveland, Ohio, for instance, county officials demolished over 1000 abandoned homes in 2011 and had plans to tear down 20,000 more because they were dragging down the market values of nearby occupied homes. The implication is these homes had little market value but obviously had costs to build.

[44] Circular reasoning may creep into this process causing the cost approach to be dependent rather than independent of other valuation approaches. As discussed, independence among valuation approaches is needed for the confirmation effect. For instance, two factors that may show economic obsolescence require that a business be valued using the income approach or market approach. At least in some cases, it seems that the economic obsolescence problem cannot be solved on its own without relying on important information used for the income or market approaches in some degree.

[45] Reilly, R., *Intangible Asset Valuation: Cost Approach Methods and Procedures*, Durham, NC: American Institute of Certified Public Accountants, 47 (2014).

Practically speaking, there is no other way to estimate the value of some kinds of assets owned by firms other than by using the cost approach. For instance, internally-developed software created for a firm's operations may intuitively add value to the firm. But data for estimating the software's market value may be limited to the costs that the firm would incur to replace or reproduce it. One cannot conclusively prove an asset's market price from only cost data. Other kinds of data are almost certainly needed to strengthen the claim.

Unrecorded Liabilities

Just as some assets that a firm owns may not appear on its balance sheet, financial statements may not reflect all its liabilities.[46] The values of any unrecorded obligations are needed to derive a firm's value using the asset approach.

One kind of liability that is not very intuitive but strongly linked to asset-approach theory is unrecorded and unrecognized taxes on assets that have increased in value. Suppose a firm owns only raw land that it bought years ago for $1 million that is worth $10 million as of the valuation date. When valuing the firm by applying the asset approach, the $10 million market value of the land is used, rather than its lower book value, which increases the firm's value. The firm, however, cannot sell this land without facing a substantial tax liability. This firm will recognize a capital gain of $9 million on a sale of the land, and taxes on this gain will be substantial. But future taxes on unsold appreciated assets will not normally appear on a firm's balance sheet. Thus, when using the asset approach in business valuation, future taxes on appreciated asset values may be relevant.

Such taxes apply to firms that are tax-paying entities. In contrast, some private firms in the United States are organized as "pass-through" tax entities whereby a firm's taxable income and gains are reported by its owners on their personal tax returns. These owners pay the taxes on a firm's income and gains, rather than the firm itself. These kinds of tax issues on appreciated property are complicated. Consequently, a tax specialist may be needed to determine possible tax obligations on appreciated assets. Such tax aspects are another reason why the asset approach is often costly to apply in valuation practice.

Summary and Conclusion

Let's pause again to review the main ideas that we have covered in this section. In practice, the asset approach is used when valuing certain kinds of firms. Generally, this approach is not practical to value profitable operating businesses because the income and market approaches are more efficient. The asset approach is typically used when valuing holding companies, operating firms with little or no expected profitability, or firms that will be liquidating. In this sense, profitability means economic profitability in which a firm has income exceeding its return on assets.

The asset approach is theoretically simple but is often costly in practice. Valuation costs may be so high that it becomes impractical to use this approach. The theory behind the asset approach is to identify the assets owned by a firm and estimate the value of each one whereby the sum of the pieces is the value of the whole. These assets can be tangible or intangible. One typically begins identifying assets by reading a firm's balance sheet; however, some assets may not appear on a firm's balance sheet, especially its intangible assets, and, consequently, one may need to investigate whether any other valuable assets exist.

After a firm's assets are identified, they value each kind of asset separately. This task can be costly in terms of time and, possibly, out-of-pocket expenses, if specialists are needed to value some kinds of assets. When valuing a firm's equity, one deducts its liabilities from the value of all the assets.

Lastly, a firm may have liabilities not recorded on its balance sheet, such as unrecognized capital gains taxes on its appreciated capital assets. If such built-in gains taxes indeed exist, they may be a liability for valuation purposes that reduces a firm's value if the corresponding asset is adjusted from its book value to market value. But potential taxes on a firm's appreciated assets are complicated because actual tax treatment depends on factors that are unique to a particular firm. Thus, when faced with the possibility of built-in capital gains taxes on appreciated assets, a tax specialist may be needed.

[46] For the asset approach, we speak of a firm's assets and liabilities in an economic sense, rather than an accounting sense.

Valuation Adjustments

Introduction

Up to this point, we have generally taken the perspective of valuing entire business enterprises. We have not yet considered valuing fractional equity interests in such entities having multiple owners. The practitioner literature generally describes these kinds of adjustments valuation as discounts or premiums. In this section, we introduce such adjustments.

Consider this example. The famous Hope Diamond is almost 50 carats in size. Assume it was cut into five smaller, 10-carat diamonds and sold. Would the prices of the five smaller diamonds be equal to the price of the Hope Diamond? We know intuitively the combined prices would be less than the Hope Diamond's price—probably much less. By cutting this rare, large diamond into pieces, the value has been altered.[47]

This example is a simple illustration of differences between the value of an entire entity and the values of pieces making up the entity. When valuing businesses, we often encounter firms having multiple owners, and a fractional ownership interest needs to be valued.

Adjustments When Valuing Fractional Equity Interests

Assume that you and a business partner are buying a business, and you must choose to own either 51 percent or 49 percent of the common stock, and your partner will own the other portion. Would you rather own 51 percent or 49 percent of the shares of stock? Why?

People tend to prefer owning the 51 percent portion because it gives them power to control the firm. The 49-percent owner can be voted down by the other person when they have disagreements. We tend to prefer more control rather than less.

Assume the value of this business's equity is $1 million. Using your intuition, try to answer these questions. First, is the price of a 51-percent equity interest equal to 51 percent of $1 million? If not, is it more or less?

$$Price(51\% \text{ of stock}) \stackrel{?}{=} \$1{,}000{,}000 \times 0.51$$

Second, is the price of a 49-percent equity interest equal to 49 percent of $1 million? If not, is the price more or less?

$$Price(49\% \text{ of stock}) \stackrel{?}{=} \$1{,}000{,}000 \times 0.49$$

Third, are the combined prices of 51 percent and 49 percent interests equal to $1 million? If not, is it more or less?

$$Price(49\% \text{ of stock}) + Price(51\% \text{ of stock}) \stackrel{?}{=} \$1{,}000{,}000$$

[47] We cannot generalize that cutting things into smaller pieces always diminishes value. We can find examples when the opposite effect occurs. Subdividing farmland into small home plots may cause the land price to rise. The price direction depends on the relative demand or supply of the larger and smaller units.

We intuitively know that people will pay more for things they prefer. When preferences are stronger, these people are more willing to pay higher prices. Conversely, people pay less for things for which they have weaker preferences. We can link this knowledge to the economic theory of supply and demand when explaining prices.[48]

Because people tend to have a stronger preference for owning 51 percent of a business enterprise compared to a 49-percent portion, market forces exert upward pressure on the price of the larger equity interest, causing its price to rise relative to the smaller equity interest. We can also take the opposite perspective. Market forces cause the price of the 49-percent interest to fall relative to the larger interest because it is less desirable.

Business valuation practitioners tend to analyze fractional equity interests by first considering a shareholder's ability to exert control over a particular business and, second, how easily a shareholder can sell his or her equity interest. For instance, a 49-percent equity owner in the example has little or no control over the business.[49] Further, this investor will likely have some difficulty selling his or her asset because no organized markets exist for fractional interests in private firms, unlike shares of publicly-registered firms. How would an owner of the 49-percent interest sell it? Logically, market forces exert downward pressure on the price of the 49-percent interest because of such characteristics.

Practitioners may make valuation adjustments for fractional equity interests by applying valuation discounts. Two kinds of discounts common in business valuation practice for fractional interests are **discount for lack of marketability** (or liquidity) and **discount for lack of control**. The quantification of discounts and premiums is beyond the scope of this text.[50]

Summary

In this chapter, we have described fundamental aspects of valuation theory. Conceptually, prices of financial assets are a function of the amount and timing of future cash flows expected from an asset. Current prices represent these future cash flows, discounted for opportunity costs. Absolute valuation models, relative valuation models, and option pricing models are general ways to price financial assets. Absolute valuation models are mathematical in nature and applied with present value models. Relative valuation models are observational in nature, observing the prices of comparable assets. From such price observations, one can infer knowledge about the unobservable price of a particular asset. Option pricing models apply to certain kinds of assets.

The business valuation literature places valuation methodologies into three general approaches: income approach, market approach, and asset approach. The income approach uses absolute valuation models; the market approach uses relative valuation models; and the asset approach uses both absolute and relative valuation models.

The main parameters of the income approach are the amount and timing of estimated future cash flows created by an asset and a discount factor called the required return. The required return represents what investors need to put their capital into a particular asset, rather than other assets, considering risk and return trade-offs. This idea, from the perspective of capital suppliers such as lenders and equity investors, is their required return. From the perspective of capital users such as firms, this idea is their cost of capital.

The market approach identifies comparable assets that have sold and observes their prices. These prices provide information for pricing a particular asset of interest. When valuing private firms, the task of finding comparable assets tends to be more difficult than valuing stocks of listed firms. Data on unlisted firms are generally private and difficult to collect. Because comparable firms almost certainly differ in size compared to a firm of interest, the prices of the comparable firms are scaled into price multiples. Such multiples are applied to one or more characteristics of the firm of interest to value it.

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[48] We can also link this idea to many business activities, such as corporate marketing, that attempts to increase customer preferences for whatever is being sold (for example, iPhones and luxury automobiles).

[49] Even if the particular current owner of this smaller interest gets along well with the current 51-percent owner, the perspective normally taken in valuation is of market participants, rather than a particular person. Put differently, fair market value presumes hypothetical buyers and sellers, rather than particular buyers and sellers, as discussed in chapter 16, "Valuation Applications."

[50] Here are some short and simplified answers to the three questions asked earlier in this section. First, the value of the 51-percent interest might be 51 percent of the firm's $1 million value or somewhat less. Second, the 49-percent interest would probably sell for less than 49 percent of the business's value. Third, the combined values of the two equity interests are unlikely to equal $1 million. Recall the example of the Hope Diamond. Cutting things into smaller pieces alters values.

The asset approach is a view that the value of a business enterprise is based on the total of its asset values. The general methodology for applying this approach is to identify a firm's assets, value each kind of asset, and calculate the total of the values. To determine a firm's equity value, subtract the value of the liabilities.

In some circumstances, it may be necessary to make adjustments in the valuation process. Such adjustments often arise when valuing fractional equity interests in firms. Characteristics of fractional equity interests, such as the degrees of liquidity and control of firm operations, have a role in pricing these kinds of equity interests.

The valuation fundamentals described in this chapter lead into applications in business valuation practice, which we discuss in chapter 16, "Valuation Applications." These fundamentals provide the intuition for understanding asset pricing, in general. As we will see chapter 16, "Valuation Applications," asset pricing and the valuation of private firms in particular have many nuances.

Review Questions

1. An asset's value is best described as
   a. An exchange between buyers and sellers.
   b. The discounted expected future cash flows.
   c. The amount a person offers to pay.
   d. The trade-off between risk and return.

2. Which of the following is NOT a general valuation model?
   a. Relative value.
   b. Option pricing.
   c. Absolute value.
   d. Restrictive value.

3. The standard three valuation approaches are all of the following EXCEPT
   a. Asset.
   b. Income.
   c. Revenue.
   d. Market.

4. One principle underlying the income approach is that investors
   a. Are adverse to risk.
   b. Minimize their risk.
   c. Seek to maximize their returns.
   d. Are subject to investor sentiment.

5. The standard discounted cash flows model includes all of the following components EXCEPT
   a. Amount of cash flows.
   b. Timing of cash flows.
   c. Return on assets.
   d. Required return.

6. Firm capital structures consist of
   a. Debt and equity.
   b. Assets and liabilities.
   c. Current and noncurrent assets.
   d. Current and noncurrent liabilities.

7. All of the following items describe a firm's cost of capital EXCEPT
   a. Risk-free rate plus equity risk premium.
   b. Equal to the required return of investors.
   c. Consists of costs for debt and equity capital.
   d. Influenced by changes in the capital markets.

8. Which of the following items about the equity risk premium (ERP) is FALSE?
   a. The ERP in cost of capital estimates is expectational in nature.
   b. A proxy for the ERP is the average historical differences between stocks and risk-free assets.
   c. An ERP measurement depends on which risk-free asset is selected.
   d. Risk-free assets for ERP estimates are commonly AAA-rated corporate bonds.

9. The market approach
   a. Is mathematical in nature.
   b. Is observational in nature.
   c. Is not forward looking.
   d. Observes market returns.

10. Using the market approach, all of the following might be a comparable to something being priced EXCEPT
    a. Municipal bond.
    b. Benchmark rates of return.
    c. Tomatoes.
    d. Piece of furniture.

11. In observing the prices of comparable firms having different sizes, we will likely
    a. Use only comparable firms having the same size of what we are valuing.
    b. Adjust the prices by the Consumer Price Index to make the prices comparable over time.
    c. Use the observed prices as is.
    d. Scale the prices using some common characteristic.

12. When valuing a privately-owned business, all of the following might be a comparable EXCEPT
    a. The S&P 500 stock portfolio.
    b. Earlier sale of some of the business's stock.
    c. Stock of a publicly-registered company.
    d. Business unit sold by a publicly-registered company.

13. When valuing a privately-owned business, we might assess all of the following firm characteristics to identify comparable firms EXCEPT
    a. Total assets.
    b. Market capitalization.
    c. Financial ratios.
    d. Industry.

14. All of the following statements about the asset approach are generally true EXCEPT
    a. For a large operating business that is highly profitable, the asset approach is more costly than the income or market approaches on average.
    b. For a successful operating business with $10 million in sales, all assets that the firm owns are likely to be appear in its audited financial statements.
    c. The asset approach shares general valuation models with the income and market approaches.
    d. A holding company's unrecognized taxes on capital assets that have appreciated in value may be a liability for valuation purposes.

15. What is the present value of a bond paying annual interest payments of $80, having a face amount of $1000, and five years remaining to maturity when the market interest return is 8 percent
    a. $945.
    b. $1000.
    c. $1053.
    d. $1107.

16. The Capital Asset Pricing Model specifies how many risk factors
    a. None.
    b. One.
    c. Two.
    d. Three.

17. The beta parameter in the Capital Asset Pricing Model is best described as
    a. A measure of a market portfolio, such as the S&P 500 stock index.
    b. The relationship between a risk-free asset and the market portfolio.
    c. The absolute riskiness of a particular asset.
    d. The sensitivity of an asset's returns relative to the returns of a market portfolio.

18. For valuation purposes, discount cash flow models discount future cash flows using the
    a. Actual return.
    b. Average return.
    c. Expected return.
    d. Historical return.
19. When an investor holds relatively few assets in their portfolio, they are exposed to all of these kinds of risks EXCEPT
    a. Gamma risk.
    b. Idiosyncratic risk.
    c. Market risk.
    d. Unique risk.

Short Answer Questions

1. What is the fundamental theory of asset pricing? An asset's price is...
2. What are elements of the business valuation process?
3. What are the three general valuation models in asset pricing?
4. What are the three general valuation approaches in business valuation?
5. What are the main premises in standard asset pricing theory?
6. What are the main components of the standard discounted cash flow model?
7. What are the two general sources from which firms obtain capital to finance their assets?
8. Describe the risk-return theory in finance.
9. Identify at least four components of the build-up model for estimating the cost of equity.
10. What is the equity risk premium?
11. In cost of capital models, risk-free assets are free from what kind of risk (provide the name of the risk and what it means)?
12. What are three factors that may cause measurements of the historical equity risk premium to differ from each other at a particular point in time?
13. What is the meaning of *comparable as used* in the market approach?
14. Identify three common price multiples using a firm's financial characteristics derived from its income statement.
15. What are four kinds of comparable sales transactions that might be observed in business valuation practice?
16. What is the general methodology of the asset approach to value a business enterprise?
17. Why might the asset approach be more costly than the income or market approaches for profitable operating firms?
18. What are two factors that practitioners tend to particularly consider when valuing fractional equity interests?
19. For the two factors in the preceding question, what are the names of the two related valuation adjustments?

Brief Cases

1. You work for a firm providing business valuation services. If you accidentally met someone important in an elevator and had to tell them about these services, how would you describe business valuation in a short, casual encounter with someone (that is, what is your "elevator speech")?

2. You are a business valuation analyst meeting with a prospective client about a new project. This person asks how you go about performing your analytical work. How do you explain the income, market, and asset approaches to the prospective client in a straightforward way?

3. You are performing a business valuation of a private business and considering applying the income approach. What general kinds of documents and other information will you likely collect for the cash flow portion of the income approach?

4. You are testifying as an expert witness before a jury about the valuation of a private firm that you performed. Assuming the average juror has graduated high school and has some college education, how do you explain the risk-return relation to the jury in a way they can understand?

5. You are explaining cost of equity models for private firms to someone and have discussed the modified CAPM. The person has an MBA and understands the Capital Asset Pricing Model. She asks you why "unique risk" is in the modified CAPM but not the standard CAPM when all firms, public and private, have unique risks. How do you respond?

6. You are valuing a firm using the income approach and need to determine the firm's cost of equity. The equity risk premium parameter in cost of capital models is the *expected* equity risk premium, according to theory. How can you estimate the ERP on an expectational basis? Justify your methodology as reasonable.

7. Your business valuation client does not understand the tax parameter in your weighted average cost of capital calculation. How do you explain it in terms that an average person can understand?

8. You are writing a report for a business valuation project drafting the market approach section. What would you write in your report to introduce average persons to what the market approach is about?

9. You are performing a business valuation project of a highly profitable manufacturer. Business valuation standards require you to consider the income, market, and asset approaches and apply the ones that are relevant to a particular project. What do you consider when deciding whether to use the asset approach for this project?

10. Your business valuation client owns 5 percent of the equity shares in a private firm and wants to sell the shares to the firm. The client does not understand why you are using valuation discounts that lower the fair market value of the shares. How do you respond?

Cases

1. You are a financial analyst, and your boss has asked you to determine the cost of equity (required rate of return) of Apple and Ford. Assume the Capital Asset Pricing Model (CAPM) betas for Apple and Ford are .80 and 1.40, respectively. Also assume a risk-free rate of 2 percent and expected market return of 8 percent.

   Required

   Estimate the cost of equity of Apple and Ford using the CAPM.

2. You are valuing a private firm and need to estimate its cost of equity. Assume a risk-free rate of 4 percent, expected market return of 9 percent, the firm's CAPM beta is 1.4, a risk premium to account for the firm's size is 2 percent, and a risk premium for specific-firm factors is 3 percent.

   Required

   Estimate the firm's cost of equity using the modified CAPM and build-up methodologies using only this information.

3. You are valuing a private firm and need to estimate its total cost of capital. Assume the firm's cost of borrowing is 7 percent, its cost of equity is 13 percent, its tax rate is 35 percent, and the proportions of debt and equity financing are 40 percent and 60 percent, respectively.

   Required

   Calculate the firm's total cost of capital. Next, calculate the firm's total cost of capital assuming the proportions of debt and equity financing are 70 percent and 30 percent, respectively.

4. You have been asked to value an asset that has expected future cash flows of $100 (Year 20X1), $200 (Year 20X2), $300 (Year 20X3), $400 (Year 20X4), and $500 (Year 20X5). These cash flows occur on December 31 of each year, and no other cash flows are expected. The required rate of return for this asset is 10 percent.

   Required

   Estimate the value of the asset as of January 1, 20X0 and January 1, 20X1.

5. You are estimating the value of a private firm using the market approach. You have collected information about five comparable firms and determined their price-to-earnings ratios (P/E) are 10.5, 7.2, 12.5, 8.3, and 15.1. The net income of the private firm that you are valuing is $1 million.

   Required

   Estimate the value of the private firm's equity using the median P/E multiple of the five comparable firms. Next, estimate the value using the mean P/E multiple.

Internet Research Assignments

1. Visit www.aicpa.org and find the AICPA's resources for business valuation practitioners. Write a brief report on your findings.
2. Visit www.bvresources.com and observe the kinds of business valuation information this company offers. Write a brief report on your findings.
3. Find and visit the website of Professor Aswath Damodaran. Review his data sets related to business valuation and write a brief report on your findings.
4. Search the Internet and read about the Capital Asset Pricing Model as developed in the 1960s. Write a brief report on the history and initial development of the CAPM.
5. Search the Internet and find information that describes the study of corporate finance. Write a brief report comparing and contrasting business valuation and corporate finance.

Chapter 16
Valuation Applications

Learning Objectives

- Describe the process of business valuation
- Explain common income-approach valuation models used in practice
- Calculate present values using the mid-year discounting convention
- Explain how to measure net cash flow to the firm
- Describe why cash flow and required rates of return measures must be logically consistent for income approach models
- Explain why valuing fractional equity shares in firms often differs from firm valuations
- Explain how to measure net cash flow to equity
- Identify common practices for cost of capital measurements in terms of risk-free rates and the equity risk premium
- Describe how to construct price multiples of comparable firms
- Explain why historical financial information may need adjusting for valuation purposes
- Explain how a firm's non-operating assets can affect the firm's value
- Describe ways that intangible assets tend to be valued
- Outline the main issues comparing values of pass-through tax entities with standard tax-paying entities
- Compare the valuation models, approaches, and methods
- Identify and define common standards of value and premises of value
- Describe the effects on values of industry, economy, and shareholder agreements
- Explain the importance of the valuation date in business valuation practice
- Describe the interaction between valuation and the law
- Outline the main features of the AICPA's valuation standard, Statement on Standards for Valuation Services, No. 1
- Identify provisions in engagement letters unique to business valuation practice
- Explain the meaning of assumptions and limiting conditions and hypothetical conditions

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

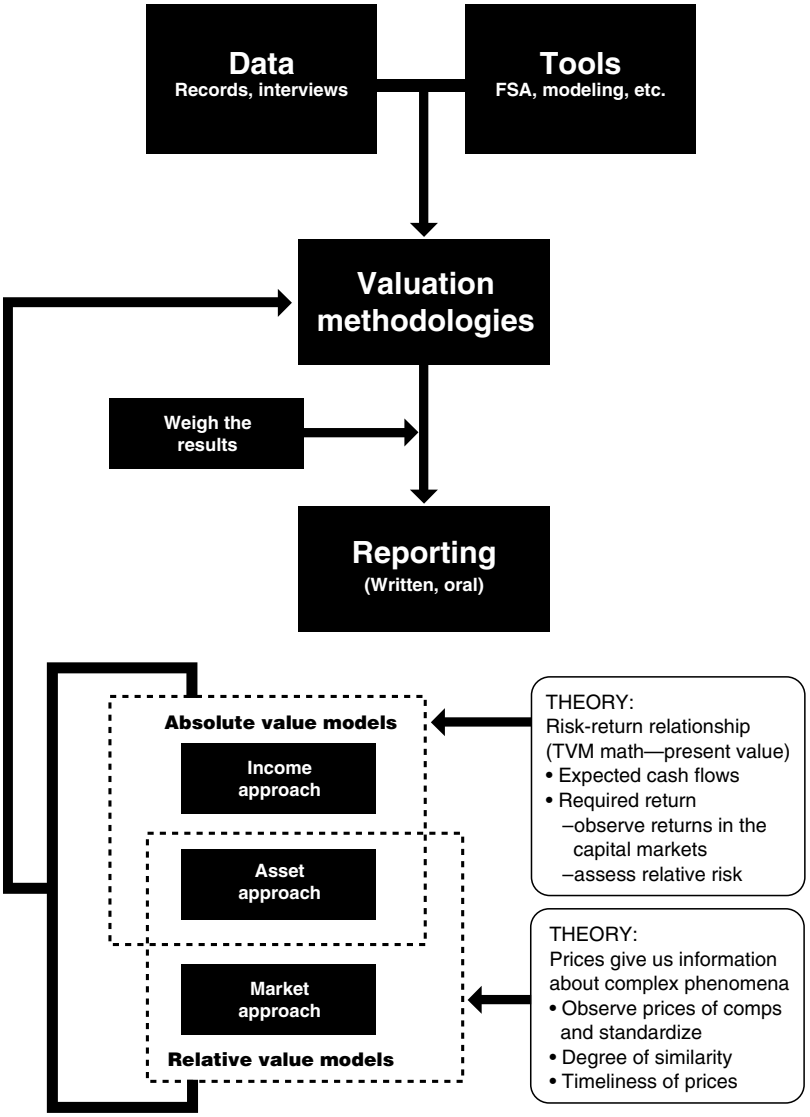
Introduction

This chapter expands on valuation theory from chapter 15, "Valuation Fundamentals" and also describes some practical applications in business valuation. As we continue to show, business valuation is technical in nature. This chapter and the preceding one are introductory discussions of the topic. Neither chapter is intended to describe every valuation theory, methodology, and nuance. Readers wanting to provide valuation services will likely need to refer to other literature describing business valuation in greater depth.

The Business Valuation Process

In this section, we describe a general process for business valuation, illustrated in figure 16.1. Overall, practitioners collect data, analyze it, apply valuation theory and practices to estimate the value of an asset, and then communicate their findings to decision makers. From this activity, decision makers, such as courts of law, investors, tax advisers, and so forth, can make better informed decisions.

Figure 16.1
The Business Valuation Process



The first task in this process is collecting data. When valuing profitable operating businesses, this data may include information about a particular firm, its industry, economic conditions, capital markets, and sales prices of similar assets. Each of these areas tends to influence a particular asset's assessed value. Broadly speaking, the first three areas affect expectations of an asset's future cash flows. Capital market conditions affect required returns of investors and, thus, a firm's cost of capital. Lastly, by observing sales prices of similar assets, we might find market benchmarks that predict what price a particular asset would sell for if an actual transaction occurred.

Once data are collected, analysts apply a variety of procedures to the information to obtain deeper understandings. For instance, after collecting a firm's financial statements, practitioners may dissect these records using financial statement analysis techniques. With this kind of analysis, one can compare a firm to other firms (cross-sectional analysis) and to itself over time (time-series analysis). Another procedure is analysis of the industry related to a particular firm. Industry factors influence expected cash flows and risk of firms within a particular industry on average.

The next task after collecting and analyzing data is applying valuation methodologies. These methods are practical ways of applying valuation theory to estimate an asset's value. Each method might produce a value estimate that is different from other methods. When this occurs, practitioners weigh the evidence surrounding the various methodological results and then make a final judgment about an asset's value or determine a range of values. Weighing the results may be done qualitatively or quantitatively after considering the strengths and weaknesses of the relevant data and methodologies for each model.

Lastly, one communicates the analysis and estimated value to others. These communications might be written or oral or both. After receiving this information, others make their decisions.

Overall, a portion of the business valuation process is quantitative in nature. For instance, we observe numerical data and transform them into other numbers (for example, \$500 earnings × 10 P/E multiple = \$5000 price). Another portion of the valuation process is qualitative and involves reasoned judgment. If the process was entirely quantitative, we might get computers to do all the work after we input the raw data. In reality, asset prices cannot be explained by a single mathematical model and, thus, computers cannot do all the work. Trained practitioners are integral to the valuation process by making professional judgments when assessing information that computers cannot perform. Moreover, the latter activity of valuation analysis is numeric in nature and, thus, we tend to explain the topic in numeric terms.

Applications of the General Valuation Approaches

The Income Approach in Practice

Common Valuation Models

When valuing firms using the income approach, business valuation practice generally uses two kinds of models. First, discounted cash flow (DCF) models, shown in general form in equation 15.2 from the previous chapter, tend to be used when one does not expect steady growth rates for future cash flows. Applying this model to value firms requires financial forecasting in some detail. One can use DCF models to price many kinds of assets having either longer or shorter cash-flow horizons.

Second, constant growth models[1] are generally used when expected cash flow growth rates are relatively steady—when a firm is in a steady state.[2] These kinds of models are generally used to price assets having cash flows over longer horizons, such as business enterprises or dividend-paying stocks. Equation 16.1 specifies the constant growth model in general form, where P_0 is the current price of an asset at time 0, CF_1 is the expected cash flow for time 1, r is a required rate of return, and g is the expected cash-flow growth rate in a steady state. The denominator of equation 16.1 of r – g is called the **capitalization rate**.

[1] Constant growth models are sometimes known as *Gordon growth models*, named after Myron Gordon, who published a version of it in the 1950s. Other names include *dividend discount model* and *capitalized cash flow model*.

[2] The mathematics of constant growth models imply a steady state into perpetuity. Although the time horizon may not be literally true, analysts use the model for practical reasons, citing the weaker effects of distant cash flows on price.

$$P_0 = \frac{CF_1}{r - g} \tag{16.1}$$

Case in Point

The genesis of constant growth models is John Burr Williams in his 1938 text *The Theory of Investment Value*, which described the value of a stock as the present worth of all future dividends. Myron Gordon is generally credited with adapting William's theory into a formal model called the *dividend discount model* in the 1950s, specified as $\frac{DIV_1}{r - g}$.

Assume that MatureCo's expected cash flow for next year is $100, the required return is 12 percent, and the expected steady-state growth rate is 3 percent. Using equation 16.1, we can estimate MatureCo's value as

$$P_0 = \frac{\$100}{(.12 - .03)} = \$1111$$

We can show through simulation and formal math proof that equations 15.2 and 16.1 are equivalent to each other when expected cash flows grow at a constant rate over long horizons. One can use the longer equation 15.2 to value MatureCo at $1111 by forecasting cash flows as $100 for CF_1 and increasing them by 3 percent per year into perpetuity.[3] Alternatively, one can use the shorter equation 16.1. When firms are in a steady state, constant growth models are simpler to apply compared to DCF models because they require fewer calculations and less detailed forecasting. Put simply, P_0 in equation 16.1 is the present value of expected cash flows into perpetuity when cash flows are expected to grow at a relatively constant rate. Thus, constant growth models are forward-looking, as are DCF models.

In business valuation practice, models may use hybrids of the DCF and constant growth models. Assume that we expect RapidTech Corp to have high cash-flow growth for the next five years and then slow to a steady-state growth rate. We might use a two-stage model that uses the standard DCF model for the first stage, when high growth occurs, and the constant growth model for the steady state in the second stage. Conceptually, a two-stage model is the present value of the firm's first stage plus the present value of its second stage, illustrated as follows:

$$P_0 = PV(stage\ 1) + PV(stage\ 2)$$

Equation 16.2 is a general specification of a common two-stage model. The S1 and S2 labels are the first and second stages, respectively. Note the numerator for the second stage is the constant growth model specified in equation 16.1.[4] In business valuation practice, five years is a common forecast horizon for stage 1 ($n = 5$). For less developed firms that require more time to reach a steady state, this horizon may be longer, such as 10 years ($n = 10$).

[3] On a technical note, the constant growth model specified in equation 16.1 implies end-of-period discounting. Replicating the result using a discounted cash flow (DCF) model requires end-of-period discounting, rather than mid-year discounting, discussed later in this chapter.

[4] Some practitioners determine the terminal value using a price-multiple methodology by observing sales prices of similar assets, rather than applying a constant growth model.

$$P_0 = \underbrace{\frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \cdots + \frac{CF_n}{(1+r)^n}}_{\text{S1}} + \underbrace{\frac{\frac{CF_{(n+1)}}{(r-g)}}{(1+r)^n}}_{\text{S2}} \tag{16.2}$$

In two-stage models, the second stage is often called the *terminal period* or *terminal year*. The measurement for the terminal period—that is, the numerator of the second stage in equation 16.2—is called the *terminal value* or *terminal price*. The terminal value is the asset's estimated value *at that time*—that is, at time n.[5] Then, one discounts the terminal value to its present value as of time 0. The denominator of the second stage in equation 16.2 is the discounting function.

Mid-Year Discounting Convention

Up to this point, we have implicitly assumed that cash flows are received at the *end* of each period. Operating businesses, however, generally have cash flows throughout each year. When valuing such firms, a convention is to perform present-valuation calculations using mid-year discounting. This convention is a mathematical way to apply a simplifying assumption that a firm has cash flows throughout the period, more or less evenly.

The standard DCF model, specified in equation 15.2 and repeated as follows, uses end-of-period discounting. Assuming P_0 is the price as of December 31, 20X0, and CF_1 is the expected cash flow for year ended December 31, 20X1 the discounting function $(1+r)^1$ implies that CF_1 is received on December 31, 20X1.

$$P_0 = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \cdots + \frac{CF_n}{(1+r)^n}$$

In contrast to end-of-period discounting, equation 16.3 uses mid-year discounting. The discounting function $(1+r)^{1-0.5}$ assumes a firm receives CF_1 regularly throughout the first year, mathematically equivalent to receiving a single payment of cash flow in the middle of the year on June 30, 20X1, one-half year before the December 31, 20X1, end-of-period discounting assumption.[6]

$$P_0 = \frac{CF_1}{(1+r)^{1-0.5}} + \frac{CF_2}{(1+r)^{2-0.5}} + \cdots + \frac{CF_n}{(1+r)^{n-0.5}} \tag{16.3}$$

The effect of mid-year discounting compared to end-of-year is stronger when discount rates are higher. To compare the effect, assume CF_t is \$100. Using end-of-year and mid-year discounting, the present value of CF_1 is \$95.24 and \$97.59, and CF_5 is \$78.35 and \$80.29, respectively, with a 5-percent required return. With a 15-percent return, the present value of CF_1 is \$86.96 and \$93.25, and CF_5 is \$49.72 and \$53.32, respectively, using the two discounting assumptions. Mid-year discounting increases the present value of \$100 by 2.5 percent when r is 5 percent and 7.2 percent when r is 15 percent.

Mid-year discounting applied to a two-stage model with five years for the first stage appears in equation 16.4, shown as follows. Mid-year discounting occurs in stage one. For the second stage, discounting is done for five years.

[5] Conceptually, the constant growth model in the numerator of the second stage is the present value of estimated cash flows after time n into perpetuity.

[6] On another technical note, these DCF models imply no interim compounding.

Assuming P_0 is the firm's price as of December 31, 20X0, the terminal value is an estimate of the asset's value on December 31, 20X5, five years later.

$$P_0 = \frac{CF_1}{(1+r)^{0.5}} + \frac{CF_2}{(1+r)^{1.5}} + \frac{CF_3}{(1+r)^{2.5}} + \frac{CF_4}{(1+r)^{3.5}} + \frac{CF_5}{(1+r)^{4.5}} + \frac{\frac{CF_6}{(r-g)}}{(1+r)^5} \quad (16.4)$$

Table 16.1 is an example of a two-stage model valuing RapidTech Corp. The firm's expected cash flows have high growth during the first five years and then moderate in a steady state to 3 percent annual growth starting in the sixth year. Assuming a required return of 12 percent and mid-year discounting using equation 16.4, the firm's value is $3579.

Table 16.1 **RapidTech Corp—Two-Stage Model 12% Required Return, Mid-Year Discounting**

Year	Growth	CF_t	PV
1		$100	$94
2	100%	200	169
3	50%	300	226
4	25%	375	252
5	7%	400	240
6	3%	412	
Terminal period			
$CF_{YEAR\ 6}$	$412		
r	12%		
g	3%		
Terminal value		$4,578	
PV(Terminal value)			2,598
P_0 (sum of present values)			$3,579

Firm Valuation

In valuation analysis, cash-flow estimates generally follow future net income estimates. For DCF models, forecasting a firm's net income likely requires forecasting its revenues and expenses, perhaps annually. Next, one adjusts net income to estimate the firm's cash flows. These forecasted cash flows are DCF model inputs.

When estimating a firm's net cash flow, table 16.2 shows a general form starting with net income. *Net cash flow to the firm* (CF_{FIRM}) is a measure of cash flows a firm creates that is available to both debt and equity holders.[7] CF_{FIRM} is the cash-flow input in DCF models for estimating a firm's enterprise value.[8]

[7] An alternative term for net cash flow to the firm is *net cash flow to invested capital*. Debt and equity make up a firm's total invested capital.

[8] The common meaning of enterprise value is the value of a firm without a reduction for its debt. An analogy comes from real estate appraisal. Enterprise value is like the value of your home, rather than the equity that you have in your home. In figure 15.1, from the previous chapter, enterprise value is the left-hand side. This measure equals the value of the figure's right-hand side: the value of the firm's debt plus equity, known as *total invested capital*. Practitioners sometimes make technical variations of this notion of enterprise value for particular purposes, such as removing a firm's cash from the left-hand side of the figure.

Table 16.2 Net Cash Flow to the Firm

	After-Tax Net Income
+	Depreciation and amortization and other noncash expenses
–	Capital expenditures
–	Increases (or + decreases) in working capital requirements
+	Interest expense × (1 minus tax rate)
=	Net cash flow to the firm

When applying DCF and constant growth models to estimate a firm's enterprise value, CF_t is net cash flow to the firm, and r is the firm's weighted average cost of capital (WACC), discussed in chapter 15, "Valuation Fundamentals." Equation 16.5 shows this formulation for the standard DCF model with mid-year discounting, where P_{EV_0} is enterprise value, CF_{FIRM} is net cash flow to the firm for time t, and r_{WACC} is WACC. Equation 16.6 shows the formulation for enterprise value using the constant growth model, where P_{EV_0} is enterprise value, CF_{FIRM_1} is net cash flow to the firm for time 1, r_{WACC} is weighted average cost of capital, and g is the expected cash flow growth rate in a steady state.

$$P_{EV_0} = \sum_{t=1}^{n} \frac{CF_{FIRM_t}}{(1 + r_{WACC})^{t-0.5}} \tag{16.5}$$

$$P_{EV_0} = \frac{CF_{FIRM_1}}{r_{WACC} - g} \tag{16.6}$$

To value a firm's total equity from these models, one deducts the value of the firm's debt from its enterprise value. Conceptually, if we want to know the value of the equity portion of figure 15.1, we can derive it from enterprise value on the left-hand side minus debt. An important technical point in present-value models is properly matching the cash flow measure in the numerator to the required return in the denominator. For instance, applying the firm's cost of equity as the measure of r to CF_{FIRM} results in an incorrect calculation of P_{EV_0} because CF_{FIRM} goes to both debt and equity holders. Later in this chapter, we discuss matching cash flows to equity to the cost of equity.

Valuing Fractional Interests in Firms

Valuing fractional equity interests in firms often differs from firm valuations. Fractional valuations tend to have more technical points because of the way small and medium-sized entities (SMEs) and larger private firms operate on average compared to listed firms. Fundamental distinctions between listed and unlisted firms likely lead to differences in valuation inputs, such as cash flow estimates, required returns, and growth rates. Diversity in operations and investor perception can arise for multiple reasons. First, managers of listed firms are generally accountable to multiple investors, securities regulators, financial analysts, and possibly others, such as labor unions. In contrast, managers of SMEs often own large portions of the equity interests. Such SME owner-managers have relatively little accountability on average and, thus, they may be free to operate a firm as they wish.

Case in Point

In real estate appraisal, valuing fractional interests differs from valuing full ownership interests. The Appraisal Institute, a large member organization of real estate appraisers, publishes an entire text on valuing fractional real property interests titled, *Appraising Partial Interests*.

Second, regulators require listed firms to regularly disclose detailed information, accounting and non-accounting in nature, to investors and the public. Private firms, however, generally have no such disclosure requirements. Information from such firms is often held private and, thus, unlisted firms have more information asymmetry compared to listed firms. Put differently, managers of private firms have a much larger information advantage over outside investors compared to listed firms.

Third, listed firms generally hire managers who have professional managerial skills. Intuitively, we expect that such managers will do a better job for a firm on average than managers with lesser skills. Most SMEs, however, tend not to hire such skilled managers in senior positions.

Finally, because listed firm stocks trade on public exchange, investors in such firms can observe how the market prices a firm, giving them confidence about a firm's value. In contrast, private firm investors rarely have direct market-based evidence about a firm's true value.

A premise in the finance literature is that firms operate efficiently on average. This premise is almost certainly applicable to most listed firms in developed countries. The practical basis for this premise includes oversight, competition, and efficient capital markets. Moreover, the standard finance literature presumes managers make decisions that maximize a firm's value.[9] Fractional equity owners of listed firms can safely assume, in most cases, that such firms run efficiently on average. In contrast, fractional owners of private firms cannot necessarily make this assumption. Because minority owners generally have little or no influence on a firm's operations, they depend on the behavior of controlling owners to manage the firm. As we will discuss, such SME owner-managers may not operate a firm optimally.

The finance literature often expresses efficiency as maximizing firm or shareholder value. Speaking simply, maximizing value can be done by increasing cash flows and lowering cost of capital. First, we know intuitively that higher cash flows are a common goal for firm managers, at least in larger firms; but SMEs owner-managers tend to operate firms in ways that benefit them personally, along with the firm. Such personal benefits may include above-market wages, perquisites, employing family members, and so on. Thus, SMEs may not operate in a way that maximizes cash flow to benefit all equity owners evenly.

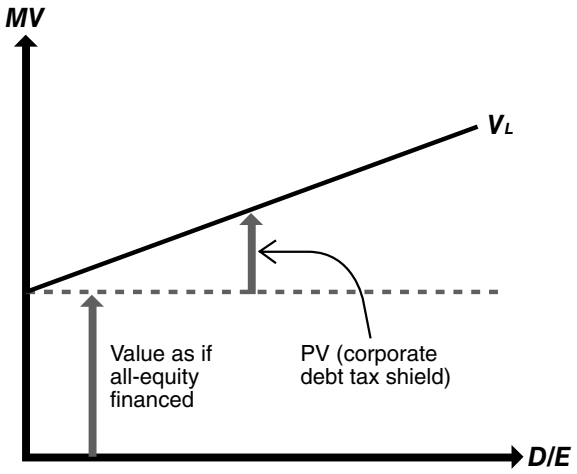
Next, differences in cost of capital linked to capital structure may occur in SMEs compared to listed firms. Standard finance literature describes the trade-off theory of capital structure. It predicts that firm managers seek an optional capital structure that maximizes firm value. Figure 16.2 illustrates the trade-off theory. It shows the trade-off between the benefits and costs of borrowing. As we discussed in chapter 15, "Valuation Fundamentals," required returns of debt providers are lower than the required returns of providers of equity capital. Further, in most, if not all, developed countries, including the United States, governments effectively subsidize borrowing by permitting interest expense to lower taxable income, resulting in lower taxes. This tax benefit, called the *tax shield*, lowers a firm's cost of borrowing. For instance, if a firm borrows at a 7-percent interest rate from a lender and its tax rate is 35 percent, the firm's after-tax cost of debt is 4.6 percent.[10] Consequently, a firm can lower its total cost of capital (WACC) by borrowing more, other things being equal, as illustrated in figure 15.5 in the previous chapter. Figure 16.2a shows the effect on a firm's enterprise value. As a firm borrows more, its total cost of capital falls, resulting in a higher enterprise value.[11] In this figure, MV is the firm's market value, D/E is the debt ratio measured as debt-to-equity, and V_L is the market value of the levered firm. The incremental value above the all-equity value is the total future tax benefits from borrowing, discounted to the present value. As a firm borrows more, the magnitude of the aggregate tax benefits increases. In a world without financial distress costs, a firm would be financed 100 percent with debt to maximize its value.

[9] This presumption is Fisher's separation theorem.

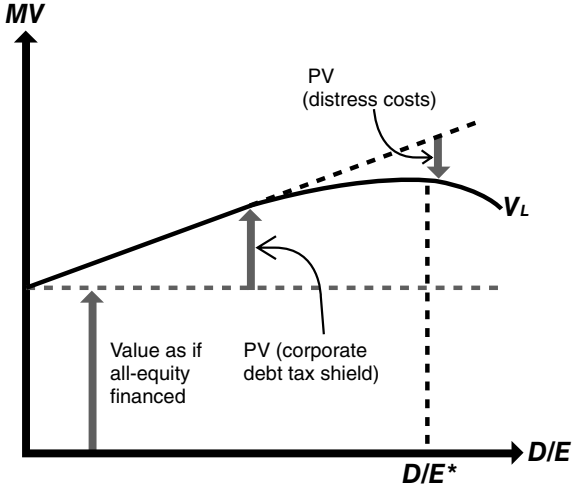
[10] The after-tax cost of debt is 7 percent multiplied by 1 minus the 35-percent tax rate.

[11] Readers may want to refer to equation 15-2 to get the intuition. As r falls, P_0 increases.

Figure 16.2
Trade-Off Theory of Capital Structure
(a) Tax-Shield From Borrowing



(b) Costs of Financial Distress From Borrowing

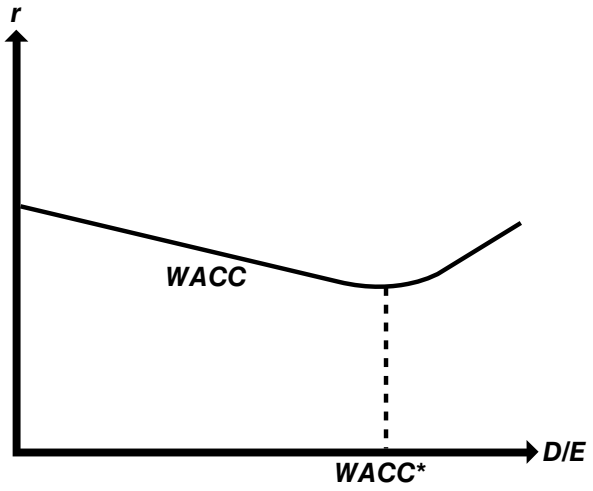


Other things are not all equal. When firms borrow excessively, the risk of financial distress rises. With rising distress risk, capital providers require higher returns, illustrated in figure 16.3 on the following page.[12] Figure 16.2b shows the interaction of the cost of financial distress and the benefits of the corporate debt tax shield. When a firm's marginal cost of capital increases faster than its marginal tax shield benefit, the firm's enterprise value falls. The trade-off theory predicts that firm managers use debt for finance until the marginal cost of debt equals the marginal cost of equity. This point is a firm's optimal capital structure, shown as D/E^*. A firm's market value is at its maximum at this point.

Do SME owner-managers seek out optimal capital structures predicted by the trade-off theory? In the SME finance literature, the pecking-order theory of capital structure is common. It predicts that managers have a hierarchy of preferences for capital sources that, among other things, attempts to preserve their independence from any further outside influence. Optimal capital structure has no role in the pecking-order theory. By seeking out less-than-optimal capital structures, SME managers may not be maximizing their firm's value. Such differences in capital structures between listed firms and private firms, assuming they indeed exist, suggest that fractional owners of listed and private firms have different positions. Owners of minority, non-controlling equity interests in SMEs cannot necessarily assume that a firm operates optimally.

[12] In this figure, $WACC^*$ is the debt ratio when a firm's total cost of capital is at its lowest.

Figure 16.3
Total Cost of Capital With Leveraging and Financial Distress Risk



The valuation implications for valuing fractional, non-controlling interests in private firms include that firm cash flows may be lower than optimal and capital structure may not be optimal. When valuing entire private firms, a common presumption is that managers will make optimal choices. The **fair market value** standard, discussed later, assumes a firm trading in a marketplace of willing buyers and sellers. Such marketplaces, if they are indeed liquid, are competitive and reward efficient operations and punish inefficient ones. In contrast, when valuing fractional interests of private firms, the usual presumption is that the minority interest is trading in a marketplace, and the managers and other equity owners stay in place. If a controlling owner-manager has operated the firm sub-optimally, a new owner of a fractional interest will likely expect the same behavior from the manager. Thus, values of fractional equity interests are likely lower when cash flows and capital structure are not optimal compared to interests for efficient operations and financing. When valuing an SME fractional interest, assume the firm's controlling owner-manager takes an above-market wage, causing lower profits. Unless an investor in the fractional interest expects this wage to fall to a market level, they will likely price the interest with the lower profits. Lower profits lead to lower cash flows and a lower price.[13]

A way to value fractional equity interests when controlling owner-managers are not operating a firm optimally is measuring cash flows to equity holders. Table 16.3 shows a framework.[14] In such circumstances, net income in the table reflects a firm's income as it is actually operated. For instance, if a controlling owner is taking above-market wages, perquisites, and so on, the firm's net income will be lower. As a result, cash flows to equity holders will be lower. Equations 16.7 and 16.8 are DCF and constant growth models for this framework, where P_{EQUITY_0} is the value of all the equity as the firm is being operated, CF_{EQUITY} is net cash flow to equity, r_E is cost of equity capital, and g is the cash-flow growth rate in a steady state.

[13] If we were valuing an entire firm and, historically, an owner-manager took above-market wages, a buyer of the entire firm will likely price it with expected cash flows, assuming market wages because they have the power to set wages.

[14] Note that this table for net cash flow to equity differs from table 16.2 for net cash flow to the firm in the fifth row. When measuring net cash flow to the firm, one measures cash flow before payments to debt holders, adjusted for tax effects. In terms of accounting net income, interest expense reduces net income and, consequently, tax expense.

Table 16.3 Net Cash Flow to Equity

	After-Tax Net Income
+	Depreciation and amortization and other noncash expenses
–	Capital expenditures
–	Increases (or + decreases) in working capital requirements
+	Increases (or – decreases) in debt
=	Net cash flow to equity

$$P_{EQUITY_0} = \sum_{t=1}^{n} \frac{CF_{EQUITY_t}}{(1+r_E)^{t-0.5}} \tag{16.7}$$

$$P_{EQUITY_0} = \frac{CF_{EQUITY_1}}{r_E - g} \tag{16.8}$$

Valuations of fractional equity interests may require explicit downward adjustments to account for an interest's illiquidity (lack of marketability) and inability to control cash flows (lack of control). We described such adjustments in chapter 15, "Valuation Fundamentals."

Applications of this framework are remarkably technical. One must be careful not to double-count aspects related to suboptimal operations and financing. For instance, if one accounts for less-than-optimal profitability in lower cash flows, then they should not account for it again in the cost of equity or discount for lack of control. Similarly, if capital structure is not optimal—that is, debt ratios are higher or lower than optimal levels—and one accounts for it in the cash flows, they should not account for it again elsewhere, such as the cost of equity. For instance, if a firm has a debt ratio that is higher than optimal and it is accounted for in cash flows, then the required return for equity should not account for it again. Alternatively, if the cash flows do not account for higher levels of debt, then one might account for it in the cost of equity, if default risk is higher.

Cost of Capital Practices

Practitioners must make methodological choices to perform this work. In chapter 15, "Valuation Fundamentals," we discussed estimating a firm's cost of capital or required return. In business valuation practice, analysts make cost-of-capital decisions so they apply to investments in private firms rather than in listed firms. One difference between these two kinds of investments is the usual time horizon for holding such investments. Holding periods for investments in private firms tend to be much longer than for those in listed firm stocks.

Risk-Free Rate

With a longer holding period in mind, business valuation practitioners generally select U.S. Treasury bonds, rather than shorter-term Treasury bills,[15] for observing market yields of risk-free assets. These practitioners tend to use such bonds with 20 years remaining until maturity.[16] A common methodology for determining a risk-free rate is observing the spot market yield of such treasuries as of a particular date, usually the as-of valuation date.

[15] Analysts pricing stocks of listed firms when using absolute valuation models tend to observe Treasury bills, rather than Treasury bonds because holding periods for such stocks are relatively short.

[16] The U.S. Treasury security with the longest term is 30 years.

Equity Risk Premium

Another component in cost of capital estimates is the equity risk premium (ERP). As discussed in chapter 15, "Valuation Fundamentals," one cannot observe the *expected* ERP, and it can only be estimated. One way of estimating it is by using the average historical ERP to proxy for the expected equity risk premium.

As shown in table 15.1, choices of methodologies and sample time horizons for measuring average historical return differences between stocks and treasuries affect the magnitude of such differences. Given the choice of time horizon for a risk-free asset, the methodology for calculating historical ERPs could be measuring return differences between returns of the S&P 500 stock index and Treasury bonds with 20 years until maturity. In addition to choosing a particular risk-free asset for historical ERP measurements, a choice of averaging method must be decided. DeFusco et al. argue that arithmetic averages are appropriate for forward-looking investment calculations, and they show through simulation that using arithmetic returns better predicts average future values than geometric returns.[17]

The Market Approach in Practice

The market approach, described in chapter 15, "Valuation Fundamentals," is conceptually straightforward, but practitioners face technical matters when applying it. An important task when applying this approach is finding information about similar assets that have sold. The task is relatively easy for many kinds of assets, such as listed stocks, government bonds, and real properties. In contrast, private firms are more difficult because they trade infrequently and, when they do, information is difficult to collect, on average. Pricing information for private firm valuations tends to come from three general sources.

First, pricing information may come from acquisitions of entire business operations. Such sales tend to be private firms or units of public firms. Information on private firm sales may come from proprietary databases. Because these kinds of sales are rarely in the public record, such databases contain a subset of all private firm sales. In the United States, databases include Pratt's Stats, Done Deals, Bizcomps, and SDC Platinum. Across such databases, they have no uniform method for recording information, but they generally provide documentation describing how they record it.

Another source of data is implied price multiples of traded stocks. Although private firms often differ from listed firms in terms of size, diversity, and so on, such pricing data is abundant and easily collected. Using this kind of information generally requires some practical trade-offs between quantity of pricing data and degree of asset similarity.

A third source of pricing data is any equity sales of the firm being valued. These kinds of observations may provide useful pricing information because a sale relates to the same firm. Such transactions include sales between shareholders and new rounds of firm financing. When valuing an equity interest, it is ideal that the observed sales are the same class of stock.

Valuations using the market approach can estimate a firm's enterprise value or its equity value. The distinction is generally linked to the application of a particular price multiple. Price multiples of comparables often measure the ratio of price to an earnings measure, such as net income or earnings before interest, taxes, depreciation, and amortization (EBITDA). Depending on the particular earnings and price measures that one uses to calculate price multiples, the result may determine either enterprise value or equity value. Equations 16.9 and 16.10 illustrate this point. In equation 16.9, P_{EV} is the observed enterprise value (or price of total invested capital) and $E_{PRE\text{-}DEBT}$ is an earnings measurement before deducting expenses related to debt for comparable firm i. To estimate a particular firm's enterprise value using price multiples of comparable assets, one applies this kind of multiple to the $E_{PRE\text{-}DEBT}$ measurement for the firm being valued. In equation 16.10, P_{EQUITY} is the observed equity price, and $E_{AFTER\text{-}DEBT}$ is the earnings measurement after deducting expenses related to debt for comparable firm *i*. To estimate a firm's equity value, apply this kind of multiple to the $E_{AFTER\text{-}DEBT}$ measurement for the firm being valued.

[17] DeFusco, RA, et al., *Quantitative Methods for Investment Analysis*, 2nd ed. Charlottesville, VA: CFA Institute, ch. 3 (2004).

$$\frac{P_{EV_i}}{E_{PRE\text{-}DEBT_i}} \rightarrow \textit{Enterprise value} \tag{16.9}$$

$$\frac{P_{EQUITY_i}}{E_{AFTER\text{-}DEBT_i}} \rightarrow \textit{Equity value} \tag{16.10}$$

The earnings measures for the denominator in the two equations are relatively straightforward. To estimate a particular firm's enterprise value, the earnings measure in equation 16.9 might be EBITDA or earnings before interest and taxes (EBIT). These measures of earnings are before interest expense related to debt. For measuring a firm's equity value, the earnings measure in equation 16.10 may be pretax income or net income, measuring earnings after interest expense.

Other Topics in Business Valuation

Economic Cash Flow and Earnings

Valuation theory and methodologies, as discussed, implicitly use economic measures of cash flows or earnings[18] to price assets. Such measures are the economic returns that an asset creates. An asset's price is a function of its expected cash flows, shown in equation 15.2. Such cash flows are economic measures, which may differ from accounting measurements.

In estimating a firm's future cash flows, one might begin with historical accounting information and then make adjustments to measure the asset's economic returns. Such adjustments may be needed for two general reasons. First, historical accounting information may not accurately measure the true return that a firm's assets have created. As discussed, managers of private firms tend to have relatively little accountability because they may be owners as well. Such individuals may take wages, benefits, perquisites, and so on out of a firm's profits that are not in the same magnitude as if transacted with unrelated persons. For instance, an owner-manager of a private firm may take wages that are greater than what would be paid to a manager that was not also an owner. Such transactions may cause accounting income to differ from the true economic income the firm's assets actually create.

A second reason for making adjustments to accounting information is for transforming historical data into expectational information. Some events that occurred in the past that affected a firm's earnings may not be expected to occur in the future. In such cases, a firm's expected returns may not resemble the past. One can make historical accounting information more relevant for forecasting future returns by removing the effects of important past events not expected to recur. For instance, if a firm received a windfall in a legal settlement causing profits to spike and similar events are not expected in the future, the effect of the event can be removed. The lower adjusted profits are likely a better measure for estimating the firm's future cash flows.

In summary, accounting information, especially for private firms, may not be complete for estimating an asset's future returns. Such information may need adjusting to transform accounting measurements into information for estimating expected economic returns. Identifying all important events leading to such adjustments is not in the ordinary scope of valuation projects. Such information might arise from forensic accounting engagements.

Non-Operating Assets

It is not uncommon for private firms to own non-operating assets (that is, assets that do not contribute to the production or sale of a firm's goods or services). Such firm assets can vary widely, such as undeveloped land or a personal holiday residence. Income and market approaches derive the value of a firm's operations without considering any non-operating assets owned by a firm. If the owner of an asset being valued expects to derive any benefit from a firm's non-operating assets, then an upward adjustment from the value of the operations may be needed.

[18] For instance, an earnings measure might be used in applying price multiples such as the price-to-earnings ratio.

Valuing Intangible Assets

Valuing particular intangible assets requires a different kind of analysis, compared to valuing firms. Considering the three general valuation models that we discussed in chapter 15, "Valuation Fundamentals," relative value models and option pricing models do not likely work for intangible assets on average. For relative value models, one may not find prices of sold assets that are similar to a firm's particular intangible asset because of uniqueness or lack of information.[19] Of these three models, absolute value models tend to work more often. However, isolating cash flows created by a particular intangible asset is usually challenging. The valuation literature shows some methodologies to estimate such cash flows and the intangible asset's value. An alternative methodology for valuing intangible assets is the cost approach, discussed in chapter 15, "Valuation Fundamentals."

Valuing Pass-Through Tax Entities

Private firms in the United States may be organized as pass-through tax entities, such as partnerships and S corporations. These kinds of entities pay no income taxes. Instead, owners report their pro rata share of a firm's income on their personal income tax returns and pay the related taxes. Compared to standard tax-paying corporations, pass-through entities avoid some double taxation.[20]

A valuation question is whether such pass-through tax entities have higher prices than standard corporations. No clear empirical evidence exists that resolves the question because of data limitations. No data exist to compare otherwise identical firms or securities to examine the effect of tax status on prices. Some, including the IRS, argue that entities not directly paying taxes are worth more for logical reasons.[21] A counter-argument is that all firms eligible for pass-through tax status would elect it, perhaps when the entity is organized, to increase their value, but many do not.

Case in Point

The effect of taxes on values of business interests is a topic of wide interest for the U.S. Tax Court and, thus, business valuation practitioners. Judge David Laro of the Tax Court co-authored a text with Shannon Pratt titled, *Business Valuation and Taxes: Procedure, Law, and Perspective*.

The particular kind of asset being valued may have an effect on tax treatment, such as assets that are entire businesses, larger equity interests, or smaller equity interests. The kind of asset may have an effect on the nature of likely buyers. For instance, market participants buying entire business enterprises tend to differ from buyers of smaller equity interests in private businesses. If likely buyers of an asset being valued are taxable entities, such as C corporations in the United States, then the target firm would probably lose its pass-through tax status if acquired by this kind of buyer. Logically, we need to add tax expense for estimating future cash flows that likely buyers expect from this asset. In contrast, if the probability that the entity remains a pass-through entity after a sale of the asset is high, there is little reason to impute tax expense in such circumstances. For instance, when valuing smaller equity interests, likely buyers may be individuals, and the firm being valued will remain a pass-through tax entity for the foreseeable future in many circumstances.

[19] Examples of a relative value model to price intangible assets are liquor licenses and Federal Communications Commission station licenses bought and sold in a market.

[20] The standard corporation pays income taxes. If such firms distribute part of their profits to shareholders as dividends, shareholders report dividend income and pay taxes on it. Such corporations cannot reduce their taxable income for paid dividends. Thus, profits of these kinds of entities are effectively taxed twice in some degree.

[21] Such arguments are generally accompanied with present-value calculations. For instance, removing income tax expense obviously increases after-tax cash flows in such calculations.

Models, Approaches, and Methods

In this chapter and the preceding one, we have discussed business valuation while trying to keep technical jargon minimal. In this section, we explicitly link models, approaches, methodologies, and methods. Box 16.1 shows what we have described associated to some terminology in AICPA's Statement on Standards for Valuation Services, No. 1, (SSVS) *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*, VS sec.100) for firm valuations. Unfortunately, across the literature, valuation methods and models use a variety of terminology that is not consistent. Such assorted terminology is even wider for intangible asset valuation.

Box 16.1 Common Valuation Methodologies and SSVS Terminology for Firm Valuations

Valuation Approaches	General Valuation Models	Common Methodologies	AICPA's SSVS terminology
Income	Absolute	DCF models	Discounted future benefits method
		Constant growth models	Capitalization of benefits method
		Hybrid models	N/A
Market	Relative	Price multiples	Guideline public company method
			Guideline company transaction method
Asset	Absolute, relative	Value each asset*	Adjusted net asset method

N/A = not applicable

* In addition to absolute and relative valuation models, a cost methodology might be used to value intangible assets, discussed in chapter 15, "Valuation Fundamentals."

Standards of Value and Premises of Value

Standards of Value

The term *value* does not have a single or scientific definition because it is something that humans attribute to an object that can vary among people. Consequently, valuation practitioners work with various forms of value. In chapter 15, "Valuation Fundamentals," we mainly describe valuation in the context of active markets having many buyers and sellers. The interaction of these market participants results in an exchange of an asset in which a price is established. Put differently, much of our discussion has been set in a marketplace of willing buyers and sellers. This perspective is sometimes called **value in exchange** or **exchange value**. An alternative perspective, called **value to the holder** or **use value**, establishes the worth of an asset to its present owner in its current form, rather than its worth to others in a market. These different perspectives may cause an assessment of value to diverge from the other perspective, either up or down.

Different conditions or legal requirements may exist in valuation projects. To accommodate such differences, several types of value have been established in the valuation literature and elsewhere. The term for a particular "type" of value for a valuation analysis is the **standard of value**. In this section, we describe several standards of value: fair market value, investment value, and fair value. Value in exchange encompasses fair market value and fair value, whereas investment value is a form of value to the holder.

Fair Market Value

The most common type of value in business valuation practice is *fair market value*.[22] This standard of value is used for taxation in the United States and many other legal matters, and it captures the ideas that imply a marketplace of buyers and sellers, as described in chapter 15, "Valuation Fundamentals." A common definition of fair market value is as follows:[23]

> The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arms length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.

U.S. Treasury tax regulations have similar definitions for fair market value that can be found in Section 1.170A-1(c)(2) for charitable contributions, Section 20.2031-1(b) for estate taxation, and Section 25.2512-1 for gift taxation.

Investment Value

A standard of value that might be used for merger and acquisition transactions is *investment value*. The main feature of this type of value is the perspective of a particular investor. A particular buyer may place a different (often higher) value on a target investment because of the buyer's characteristics or specific circumstances. For instance, Google may view the value of another company that owns technology complementing Google's products as higher than other market participants. Thus, Google may be willing to offer a price that is higher than the price other potential buyers might offer to buy that company. A theoretical basis for this kind of behavior is that these kinds of buyers expect higher cash flows or perceive lower risks compared to other buyers. A common definition of *investment value* is as follows:[24]

> The value to a particular investor based on individual investment requirements and expectations.

The main difference between investment value and fair market value is, speaking simply, the buyers. Investment value assumes a particular buyer of the asset—that is, the asset's value to *that* buyer. In contrast, fair market value assumes hypothetical willing buyers in the marketplace, rather than a particular investor. The characteristics of a particular buyer may differ from those of a group of marketplace buyers that may lead to a higher (or lower) value to this buyer. Consequently, this buyer may offer a higher (or lower) price.

Fair Value in Financial Reporting

Valuation analysis for financial reporting has its own standard of value under generally accepted accounting standards. Financial reporting usually follows guidelines prescribed by a recognized accounting standard setter. In the United States, the standard setter for private companies is FASB and the SEC is the standard setter for publicly-registered companies.

Such accounting standards require that certain assets and liabilities appearing on balance sheets to be reported at their "fair value." The general fair value guidelines for financial reporting appear in FASB's *Accounting Standards Codification* 820, *Fair Value Measurement*. Although FASB's definition for *fair value* is straightforward, the accounting guidelines for implementation are not.

Fair Value in Shareholder Litigation

Most of the individual states in the US generally have laws protecting the rights of minority shareholders. Controlling shareholders or firm managers may take corporate actions that intentionally or unintentionally harm minority owners. Shareholders owning relatively few shares have little or no power to defend themselves. State laws protecting minority shareholders in corporate actions may require a company to buy a minority owner's shares as a legal remedy.

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[22] Outside of business valuation practice, some may use the term *market value* instead.

[23] This definition is from the *International Glossary of Business Valuation Terms*, developed jointly by the AICPA, American Society of Appraisers, Canadian Institute of Chartered Business Valuators, National Association of Certified Valuators and Analysts, and The Institute of Business Appraisers. The glossary appears in multiple places, including Appendix B in the AICPA's Statement on Standards for Valuation Services No. 1.

[24] See footnote 23.

Such laws may specify the company pay the shares' "fair value," which is generally defined by statute or case law. A common definition of *fair value* in such matters is the value of the particular shares immediately before the relevant corporate action. In many states, fair value also means the value of the shares without discounting for lack of marketability or minority status.

Premises of Value

In the preceding section, we described assumptions for a valuation analysis in terms of the type of value. We next discuss assumptions about whether or not the firm will continue as a going concern. Although most firms operate profitably and are likely to continue as going concerns, some firms are not as profitable and could shut down.

Three common **premises of value** are going concern (**going concern value**), orderly liquidation (**orderly liquidation value**), and forced liquidation (**forced liquidation value**). The meanings of these terms are straightforward. *Going concern* assumes a firm will continue to operate as a business enterprise. *Liquidation* assumes a firm will no longer operate and will sell off its assets, usually piecemeal. Liquidations can be (i) *orderly*, where the goal is to maximize net proceeds from selling off the assets or (ii) *forced*, where assets are sold quickly, even if net proceeds are not maximized.

Effect of Industry and Economy on Value

Comprehensive valuation analyses often collect and analyze data on the industry in which a firm operates and economic conditions affecting the firm. Conceptually, present and expected industry characteristics and economic conditions may affect a firm's expected cash flow or cost of capital. Empirical evidence shows that industry characteristics affect stock returns. For instance, firms operating in industries expecting high growth will likely have higher prices compared to industries with slower growth. On average, firms in fast-growing industries will have rising stock prices. We might explain such phenomena using equation 15.2 from the previous chapter with higher expected cash flows in the future. Economic conditions may also affect expected cash flows. Shifts from contraction to expansion or from expansion to contraction will likely affect a firm's expected cash flows. Such economic conditions may be local, regional, national, and so on.

In addition to effects on future cash flows, industry and economy may also affect a firm's cost of capital. Rising or falling threats, for instance, affecting an industry may lead to higher or lower capital costs. For instance, industries with growing or threatened government regulation may face higher risk from uncertainty and, thus, investors may require higher returns. In terms of economic conditions affecting cost of capital, multiple factors may have influence, such as changing inflation and market risk.

Effect of Shareholder Agreements on Value

In private firms, it is not unusual for equity owners to have legal agreements relating to their shares. Such agreements may give shareholders certain rights or restrict what they can do with their shares. For instance, these legal agreements might grant rights to shareholders that a private firm will redeem the person's shares if the owner wants to sell them. Obviously, private firm investors cannot sell their shares on public stock exchanges, leaving a smaller market of potential buyers compared to traded shares. These kinds of legal provisions may specify the basis for the purchase price, such as fair market value or a formula. Another kind of provision imposes limitations on an equity owner for what he or she can do with his or her shares if he or she wants to sell them. Such restrictions may require an owner to sell his or her shares to either the firm or other shareholders. The usual motive for such restrictions is to prevent unknown or unwanted investors from becoming involved in the firm.

Legal agreements may have effects on the value of fractional equity interests owned by persons with such agreements. For instance, shares that require an owner to sell his or her shares to the firm at a formula-based price may be valued using the formula. The results of these kinds of formulas could differ significantly from fair market value. Another example is a legal agreement requiring an equity owner wanting to sell his or her shares to first obtain a written offer from an outsider and then allow the firm to buy the shares at that price. This kind of legal restriction may affect the share value because it imposes a difficult process on the selling owner. Potential buyers may show little interest if

they know they may be wasting their time making an offer knowing the seller is using their price to offer the shares to the firm.

Valuation Date

Asset values change over time; thus, asset pricing is done as of a particular point in time. On a different date, an asset's price may be higher or lower. The precise date for a valuation may be important to decision makers because asset values change. The term **valuation date** captures this idea and means a specific point in time that an asset is priced. Clients or legal requirements often establish the particular valuation date for projects.

In business valuation practice, analysts often value assets as of some specified historical date rather than the present time. Earlier valuation dates may be needed for tax compliance, financial reporting, and litigation. Valuations as of the present time may be needed for sales transactions and tax planning. Valuing assets as of a specified historical point in time is called a **retrospective valuation**. To assess the value as of an earlier date, an analysis will usually consider only information that was known or knowable as of the specified date.[25] In contrast, it should be obvious that if all information known through the present is part of an analysis, we are valuing the asset as of now, rather than some earlier date.

Valuation and the Law

Valuation and the law are often intertwined. Many valuation projects are done for purposes linked to law, such as legal disputes and taxation. Sometimes, the law, especially case law, implicitly puts restrictions on valuation analysis or makes interpretations that may not clearly occur naturally in markets. Practitioners performing valuations for such purposes may want to be familiar with any such restrictions and interpretations. In some circumstances, one may need to consult with an attorney.

Business Valuation Standards of Practice

The AICPA has published a business valuation standard for its members when providing valuation services. The standard provides guidelines for professional practice in this area. This standard is documented in AICPA's *Professional Standards* at VS section 100, and is called Statement on Standards for Valuation Services No. 1 (SSVS), available on the AICPA's website. In addition to AICPA members, nonmembers who are licensed CPAs may also be obligated to follow this guidance if their state board of accountancy rules and regulations require it. In addition to this, AICPA members performing valuation services are also obligated to follow the applicable portions of the AICPA's Code of Professional Conduct and Statement on Standards for Consulting Services No. 1, which is in AICPA's *Professional Standards* at CS Section 100.

Several organizations in North America other than the AICPA have published business valuation standards. These organizations include The Appraisal Foundation, American Society of Appraisers, and National Association of Certified Valuators and Analysts. In general, the standards of these other organizations are substantively the same for valuing businesses compared to the AICPA's standard. They may differ in terminology and detail.[26]

Next, we summarize some provisions of SSVS. Parenthetical information contains references to paragraphs in VS section 100.

Scope of SSVS (VS Section 100)

As described in chapter 7, "Engagement and Practice Management," the SSVS standard applies when one is specifically engaged or as part of another engagement to value a business, business interest, security, or intangible asset (par. 1). The valuation process applies valuation approaches and methods described in SSVS *and* uses professional

[25] We need to distinguish between information arising after a particular valuation date that *changes* an asset's value from a sales transaction occurring after a valuation date that provides evidence of the asset's value as of the earlier date. Such later pricing information can be considered as evidence if an asset's price has had relatively little or no change.

[26] Compared to SSVS, the standards of some other organizations may differ in some reporting preferences that are almost certainly form over substance. SSVS's reporting guidelines come from CPA tradition and practices, whereas such guidelines of some other organizations come from a real estate appraisal tradition.

judgment (par. 4). Thus, mechanical calculations not requiring professional judgment and applying valuation approaches and methods are not covered by the standard (par. 9*a*). For instance, a shareholders agreement stipulating a buy-out price is a shareholder's ownership percentage multiplied by the firm's book value reported on the financial statements is not covered by SSVS because this activity is a mechanical calculation. Further, the standard specifies some exceptions in paragraphs 5–10 when SSVS does not apply.

Types of Valuation Services

SSVS defines two types of services: a valuation engagement and a calculation engagement (par. 21). A valuation engagement almost certainly uses more procedures compared to a calculation engagement. Put differently, a valuation engagement is a more comprehensive analysis. The type of service performed is determined by the agreement between a client and the analyst. In a valuation engagement, an analyst is free to apply the valuation methodologies he or she deems appropriate in the circumstances. In contrast, a calculation engagement has a more limited scope. The analyst and client agree on the valuation approaches and methods the analyst will use and the extent of procedures the analyst will perform. Clients may prefer calculation engagements when a more comprehensive analysis is not needed or wanted because of circumstances, costs, and so on.[27] Paragraphs 23–45 of VS section 100 describe common elements of valuation engagements. For calculation engagements, paragraph 46 lists some things that analysts commonly consider.

Reporting

The standard describes written and oral reporting on the results of valuation services starting at paragraph 47. It contains guidelines for what is commonly included in written and oral reports. SSVS recognizes that certain kinds of controversy proceedings, such as litigation, have their own requirements and practices for reports of experts. SSVS has an exemption from its reporting requirements for such controversy proceedings (par. 50).[28] The standard describes two kinds of written reports: detailed reports and summary reports. Detailed written reports provide readers with more information compared to the shorter summary report. Paragraphs 51–70 describe what might be included in a detailed report, and paragraphs 71–72 describe summary reports. Written reports for calculation engagements are described in paragraphs 73–77. The standard describes oral reporting in paragraph 78.

Jurisdictional Exception

In certain kinds of valuation projects, differences arise between valuation practice and practices in other domains. For instance, legal requirements can affect valuation methodology, which differs from the valuation literature, as discussed earlier. To accommodate differences between valuation practice and practices in other domains, SSVS contains a jurisdictional exception provision (par. 10). It provides that for any conflict between the valuation standard and differing published provisions by a governmental, judicial, or accounting authority, the authority trumps VS section 100. Non-conflicting SSVS provisions continue in effect for other parts of a valuation project.

Authoritative Interpretations

SSVS has an authoritative interpretation of the standard at VS section 9100 of AICPA's *Professional Standards* titled *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset: Valuation Services Interpretations of Section 100*. This interpretation contains practical illustrations about how VS section 100 applies in particular circumstances. In addition to a general interpretation, it includes illustrations for particular practice areas, including litigation and tax engagements. In the area of forensic accounting, the document includes these illustrations:

6. Illustration 1. Do lost profits damage computations fall within the scope of the Statement?

[27] In judicial matters, an analyst might consult with the client or client's attorney about whether a calculation engagement is adequate for the court.

[28] This exemption applies only to reporting requirements. Other portions of SSVS generally apply in such proceedings, including the development standards (par. 21–46) for what one considers for a valuation analysis.

7. Conclusion. No, unless the computations are undertaken as part of an engagement to estimate value (SSVS No. 1 paragraphs 1, 2, and 8).

8. Illustration 2. Is an economic damages computation that incorporates a terminal value within the scope of the Statement?

9. Conclusion. The use of a terminal value exclusively for the determination of lost profits is not within the scope of this statement unless that determination will be used as part of an engagement to estimate value (Illustration 1).

10. Illustration 3. If a start-up business is destroyed, is the economic damages computation within the scope of the Statement?

11. Conclusion. There are two common measures of damages: lost profits and loss of value. If a valuation analyst performs an engagement to estimate value to determine the loss of value of a business or intangible asset, the Statement applies. Otherwise, the Statement does not apply (Illustration 1). In order to determine whether the Statement applies, a member acting as an expert witness should evaluate whether the particular damages calculation constitutes an engagement to estimate value with respect to the business, business interest, security, or intangible asset or whether it constitutes a lost-profits computation.

12. Illustration 4. Does the Statement include any exceptions relating to litigation or controversy proceedings?

13. Conclusion. Yes, the Statement includes a reporting exemption for certain controversy proceedings (SSVS paragraph 50); however, there is no litigation or controversy proceeding exemption from the developmental provisions of the Statement (SSVS No. 1, paragraphs 21–46) in circumstances in which an engagement to estimate value is performed (Illustration 1).

14. Illustration 5. Is the Statement's reporting exemption for litigation or controversy proceedings (see SSVS No. 1, paragraph 50) the same as the "litigation exemption" in the AICPA attestation standards?

15. Conclusion. No, the so-called "litigation exemption" is provided for in the AICPA attestation standards and is further discussed in the attestation interpretations. The attestation standards do not apply to engagements in which a practitioner is engaged to testify as an expert witness in accounting, auditing, taxation, or other matters, given certain stipulated facts. This is clarified in the attestation interpretation, which states, in part, that the attestation standards do not apply to litigation services engagements when (among other requirements) the practitioner "has not been engaged to issue and does not issue an examination, a review, or an agreed-upon procedures report on the subject matter, or an assertion about the subject matter that is the responsibility of another party." (Interpretation No. 3, "Applicability of Attestation Standards to Litigation Services," of Chapter 1, "Attest Engagements," of Statement on Standards for Attestation Engagements No. 10, *Attestation Standards: Revision and Recodification* , as revised [AICPA, *Professional Standards*, vol. 1, AT sec. 9101.34–.42].) However, unlike the AICPA attestation standards, which do not apply in any capacity to litigation or controversy proceeding situations, as discussed above, the Statement's exemption for litigation or certain controversy proceedings is an exemption from the reporting provisions of the Statement (SSVS No. 1, paragraphs 47–78).

Business Valuation Reports

After the analyst completes the valuation analysis, he or she generally communicates his or her findings to others. Such communications may be oral or written. SSVS provides guidance for the content of valuation reports. For valuation engagements, the standard describes two kinds of written reports: detailed and summary. The distinction between the two reports is the degree of detail. The standard suggests that summary reports have the following information listed at a minimum:

- Identity of the client
- Purpose and intended use of the valuation
- Intended users of the valuation
- Identity of the subject entity
- Description of the subject interest
- The business interest's ownership control characteristics, if any, and its degree of marketability
- Valuation date
- Valuation report date
- Type of report issued (summary report)

- Applicable premise of value
- Applicable standard of value
- Sources of information used in the valuation engagement
- Assumptions and limiting conditions of the valuation engagement
- The scope of work or data available for analysis, including any restrictions or limitations
- Any hypothetical conditions used in the valuation engagement, including the basis for their use
- If the work of a specialist was used in the valuation, a description of how the specialist's work was used and the level of responsibility, if any, the valuation analyst is assuming for the specialist's work
- The valuation approaches and methods used
- Disclosure of subsequent events in certain circumstances
- Any application of the jurisdictional exception
- Representation of the valuation analyst
- The report is signed in the name of the valuation analyst or the valuation analyst's firm
- A section summarizing the reconciliation of the estimates and the conclusion of value
- A statement that the valuation analyst has no obligation to update the report or the calculation of value for information that comes to his or her attention after the date of the valuation report

For oral reports, SSVS suggests disclosure of information that the analyst believes is necessary to limit misunderstandings about the work. Such information may relate to scope, assumptions, limitations, and results. In litigation, oral reports might take the form of testimony.

Engagement Letter Terms in Valuation Projects

In chapter 7, "Engagement and Practice Management," we discuss engagement letters in general. Such agreements for valuation projects may include some unique features. In addition to common provisions, engagement letters for such projects may specify

- the asset being valued,
- valuation date,
- standard of value,
- premise of value,
- intended purpose of the valuation,
- intended use of the valuation,
- party responsible for costs of any specialists, such as real estate appraisers,
- any responsibility the business valuation practitioner takes for the work of specialists,
- parties responsible for providing certain information,
- important assumptions and limiting conditions, and
- any hypothetical condition assumed.

Assumptions and Limiting Conditions

Valuation projects normally have assumptions and limiting conditions that may affect the scope of work and analysis. SSVS defines **assumptions and limiting conditions** as

> Parameters and boundaries under which a valuation is performed, as agreed upon by the valuation analyst and the client or as acknowledged or understood by the valuation analyst and the client as being due to existing circumstances. An example is the acceptance, without further verification, by the valuation analyst from the client of the client's financial statements and related information.

Important assumptions and limiting conditions may be described in a project's engagement letter and written report. SSVS provides the following sample listing of such items for illustration purposes.

- The conclusion of value arrived at herein is valid only for the stated purpose as of the date of the valuation.
- Financial statements and other related information provided by (ABC Company) or its representatives, in the course of this engagement, have been accepted without any verification as fully and correctly reflecting the enterprise's business conditions and operating results for the respective periods, except as specifically noted herein.

(Valuation Firm) has not audited, reviewed, or compiled the financial information provided to us and, accordingly, we express no audit opinion or any other form of assurance on this information.

- Public information and industry and statistical information have been obtained from sources we believe to be reliable. However, we make no representation as to the accuracy or completeness of such information and have performed no procedures to corroborate the information.
- We do not provide assurance on the achievability of the results forecasted by (ABC Company) because events and circumstances frequently do not occur as expected; differences between actual and expected results may be material; and achievement of the forecasted results is dependent on actions, plans, and assumptions of management.
- The conclusion of value arrived at herein is based on the assumption that the current level of management expertise and effectiveness would continue to be maintained, and that the character and integrity of the enterprise through any sale, reorganization, exchange, or diminution of the owners' participation would not be materially or significantly changed.
- This report and the conclusion of value arrived at herein are for the exclusive use of our client for the sole and specific purposes as noted herein. They may not be used for any other purpose or by any other party for any purpose. Furthermore the report and conclusion of value are not intended by the author and should not be construed by the reader to be investment advice in any manner whatsoever. The conclusion of value represents the considered opinion of (Valuation Firm), based on information furnished to them by (ABC Company) and other sources.
- Neither all nor any part of the contents of this report (especially the conclusion of value, the identity of any valuation specialist(s), or the firm with which such valuation specialists are connected or any reference to any of their professional designations) should be disseminated to the public through advertising media, public relations, news media, sales media, mail, direct transmittal, or any other means of communication without the prior written consent and approval of (Valuation Firm).
- Future services regarding the subject matter of this report, including, but not limited to testimony or attendance in court, shall not be required of (Valuation Firm) unless previous arrangements have been made in writing.
- (Valuation Firm) is not an environmental consultant or auditor, and it takes no responsibility for any actual or potential environmental liabilities. Any person entitled to rely on this report, wishing to know whether such liabilities exist, or the scope and their effect on the value of the property, is encouraged to obtain a professional environmental assessment. (Valuation Firm) does not conduct or provide environmental assessments and has not performed one for the subject property.
- (Valuation Firm) has not determined independently whether (ABC Company) is subject to any present or future liability relating to environmental matters (including, but not limited to CERCLA/Superfund liability) nor the scope of any such liabilities. (Valuation Firm)'s valuation takes no such liabilities into account, except as they have been reported to (Valuation Firm) by (ABC Company) or by an environmental consultant working for (ABC Company), and then only to the extent that the liability was reported to us in an actual or estimated dollar amount. Such matters, if any, are noted in the report. To the extent such information has been reported to us, (Valuation Firm) has relied on it without verification and offers no warranty or representation as to its accuracy or completeness.
- (Valuation Firm) has not made a specific compliance survey or analysis of the subject property to determine whether it is subject to, or in compliance with, the American Disabilities Act of 1990, and this valuation does not consider the effect, if any, of noncompliance.
- (Sample wording for use if the jurisdictional exception is invoked.) The conclusion of value (or the calculated value) in this report deviates from the Statement on Standards for Valuation Services as a result of published governmental, judicial, or accounting authority.
- No change of any item in this appraisal report shall be made by anyone other than (Valuation Firm), and we shall have no responsibility for any such unauthorized change.
- Unless otherwise stated, no effort has been made to determine the possible effect, if any, on the subject business due to future Federal, state, or local legislation, including any environmental or ecological matters or interpretations thereof.
- If prospective financial information approved by management has been used in our work, we have not examined or compiled the prospective financial information and therefore, do not express an audit opinion or any other form of assurance on the prospective financial information or the related assumptions. Events and circumstances frequently do not occur as expected and there will usually be differences between prospective financial information and actual results, and those differences may be material.

- We have conducted interviews with the current management of (ABC Company) concerning the past, present, and prospective operating results of the company.
- Except as noted, we have relied on the representations of the owners, management, and other third parties concerning the value and useful condition of all equipment, real estate, investments used in the business, and any other assets or liabilities, except as specifically stated to the contrary in this report. We have not attempted to confirm whether or not all assets of the business are free and clear of liens and encumbrances or that the entity has good title to all assets.

Hypothetical Conditions

In certain projects, valuation analysis may be done assuming a **hypothetical condition**. Such conditions are, or may be contrary to, actual conditions that exist but are assumed for a particular purpose. Such assumptions may be needed for providing information to decision makers in merger and acquisition transactions, litigation, tax planning, and so on. For instance, in a potential business acquisition, an analysis might be done to estimate the value of the acquiring firm assuming it already owns a business unit that it is considering buying to assess the effect on its share price.

Summary

This chapter builds on the valuation fundamentals discussed in chapter 15, "Valuation Fundamentals," and describes some practical aspects of valuation. The business valuation process consists of collecting data, analyzing the data with tools such as financial statement analysis and industry analysis, applying valuation methodologies, and communicating the results.

This chapter expands the preceding chapter's discussion of the income approach of valuation. Common models used in valuation practice include discounted cash flow models, constant growth models, and hybrids of the two. When growth rates of expected cash flows are not steady, discounted cash flow models can be used. In contrast, constant growth models can be used when such growth rates are relatively steady over the long run. Constant growth models are simpler to apply but are more sensitive to model inputs than discounted cash flow models. Further, in business valuation, one often assumes that a firm's periodic future cash flows occur *throughout* each time period. The standard discounted cash flow model assumes cash flows at the *end* of each time period. The mid-year discounting convention adjusts the standard DCF model to accommodate cash flows occurring throughout each forecast period.

Valuation can be done at the firm level or equity level. Enterprise value is the value of a firm without a reduction for the firm's debt, whereas equity value is the price of the firm's equity. An analogy is the distinction between the value of your home and the value of your equity in the home. In applying the income approach, one needs to specify the correct measures of cash flow and required rate of return to produce either enterprise value or equity value. When applying the market approach, one can calculate price multiples of comparables for either enterprise value or equity value. Depending on the analysis objective, the particular price multiple needs to be correctly selected to produce the intended kind of result.

Practitioners face a variety of other issues, including making adjustments to historical financial information for valuation purposes. Such adjustments are needed to make estimates of future cash flows. Another issue is businesses held in pass-through tax entities. These kinds of entities do not pay income taxes. Instead, their owners report the income and pay taxes. A valuation question is whether businesses owned by pass-through tax entities are worth more than businesses owned by standard taxpaying entities, other things being equal. Another issue practitioners face is defining the standard of value and premise of value for each project. The particular specification for each of these factors may cause the valuation results to differ from alternative specifications.

The business valuation community has developed professional standards of practice to promote quality and consistency. The AICPA's valuation standard provides practitioners with guidance for developing a valuation estimate, reporting on the estimate, and ethical and practical considerations faced in practice.

Review Questions

1. When applying absolute value models, constant growth models tend to be used when
   a. There is no need to forecast future cash flows.
   b. Required returns are constant.
   c. Expected cash flows are uneven.
   d. A firm is in a steady state.

2. The denominator of constant growth models of $r–g$ is known as the
   a. Capital asset pricing model.
   b. Required return.
   c. Capitalization rate.
   d. Discount rate.

3. In the standard two-stage absolute value model, the numerator of the second stage is
   a. A constant growth model.
   b. The discounting factor for the terminal period.
   c. The present value of the terminal period.
   d. A form of the capital asset pricing model.

4. The mid-year discounting convention
   a. Addresses cash flows received throughout a time period.
   b. Is mathematically equivalent to a single cash-flow in the middle of a year.
   c. Cannot be easily applied in constant growth models.
   d. All of the above.

5. Mid-year discounting compared to end-of-year discounting results in a present value that is
   a. Higher.
   b. Lower.
   c. Higher or lower, depending on the number of time periods.
   d. Higher or lower, depending on the required return.

6. Measuring net cash flow to the firm requires adjusting net income for all of the following items EXCEPT
   a. Changes in debt.
   b. Changes in working capital requirements.
   c. Interest expense adjusted for the tax effect.
   d. Capital expenditures.

7. Measuring net cash flow to equity requires adjusting net income for all of the following items EXCEPT
   a. Changes in debt.
   b. Changes in working capital requirements.
   c. Interest expense adjusted for the tax effect.
   d. Capital expenditures.

8. The discount rate in discounted cash flow (DCF) models that determine enterprise value is
   a. Cost of debt.
   b. Cost of equity.
   c. Weighted average cost of capital.
   d. Capitalization rate.

9. DCF models with cash flow to the firm in the numerator and weighted average cost of capital in the denominator produce an estimate of a firm's
   a. Equity value.
   b. Enterprise value.
   c. Fair value.
   d. Investment value.

10. The discount rate in DCF models that determine the value of a firm's equity is
    a. Cost of debt.
    b. Cost of equity.
    c. Weighted average cost of capital.
    d. Capitalization rate.

11. DCF models with cash flow to equity in the numerator and weighted average cost of capital in the denominator produce an estimate of a firm's
    a. Equity value.
    b. Enterprise value.
    c. Fair value.
    d. None of the above.

12. In business valuation practice, what asset is generally observed for determining the risk-free return in cost of capital models to value private firms?
    a. U.S. Treasury securities with 90 days left until maturity.
    b. U.S. Treasury securities with 180 days left until maturity.
    c. U.S. Treasury securities with 20 years left until maturity.
    d. U.S. Treasury securities with 40 years left until maturity.

13. What asset prices might be observed to price a private firm when applying the market approach?
    a. Fractional shares of firms trading on a public exchange.
    b. Merger and acquisition transactions.
    c. Earlier equity sales of a private firm being valued.
    d. All of the above.

14. Which of the following pairs of earnings measures estimate a firm's enterprise value and equity value when applying a price multiple to the measure?
    a. EBITDA (enterprise value); net income (equity value).
    b. EBITDA (equity value); net income (enterprise value).
    c. EBITDA (enterprise value); EBIT (equity value).
    d. EBITDA (equity value); EBIT (enterprise value).

15. Which statement about non-operating assets is generally TRUE?
    a. The income approach produces valuations that include a firm's non-operating assets.
    b. The market approach produces valuations that include a firm's non-operating assets.
    c. The asset approach produces valuations that include a firm's non-operating assets.
    d. None of the statements are true.

16. Arguments that pass-through tax entities have higher prices than standard corporations that pay taxes are usually supported by
    a. Present-value calculation.
    b. Application of price multiples from comparables.
    c. Asset-approach methodology.
    d. Comparing prices of pass-through tax entities to standard corporations.

17. Fair market value is generally the standard of value for which of the following purposes?
    a. Generally accepted accounting principles.
    b. Minority shareholder litigation.
    c. Strategic acquisitions.
    d. Taxation.

18. Which item is NOT a premise of value?
    a. Going concern.
    b. Orderly liquidation.
    c. Forced liquidation.
    d. Fair market value.

19. Common standards of value include all of the following EXCEPT
    a. Equitable value.
    b. Fair value.
    c. Fair market value.
    d. Investment value.

20. Which of the following assumptions is a hypothetical condition?
    a. Financial statements are assumed to be accurate.
    b. Valuation analysis assumes a business merger that has not yet occurred.
    c. Value assumes that management expertise will continue to be maintained.
    d. Value assumes the firm has good title to all the assets.

Short Answer Questions

1. Describe the business valuation process.
2. What role do analytical tools play in understanding the data?
3. After an analyst uses multiple methods, he or she may have more than one indication of value. How might one reach a final, single estimate of an asset's value?
4. Describe how the constant growth model is related to the standard discounted cash flow model.
5. In what circumstances might a two-stage model be used for applying the income approach to value a firm?
6. Describe each stage of the standard two-stage valuation model when applying the income approach to value a firm.
7. Why might one discount expected cash flows to present value using the mid-year discounting convention rather than at the end of each year?
8. Compare the mid-year discounting convention to end-of-year discounting in terms of which produces higher or lower present values and relative magnitude of the differences.
9. Identify cash flow adjustments to net income when measuring net cash flow to the firm and describe the reason for each adjustment.
10. Identify the particular cash flow measure and particular required return measure in present value calculations for determining enterprise value.
11. After determining a firm's enterprise value, describe what is needed to calculate the value of its total equity. Provide an analogy using a home as an example.
12. Describe four ways that small and medium-sized entities (SMEs) generally function differently compared to publicly-registered firms.
13. From differences in ways that SMEs generally function compared to listed firms, describe which income approach valuation model inputs might be affected.
14. Describe the difference in adjustments between calculating net cash flow to the firm and net cash flow to equity.
15. Identify the particular cash flow measure and required return measure in present value calculations for determining the present value of equity.

16. Describe when present value calculations that directly determine equity value P_{EQUITY_0} may be better than present value calculations that determine enterprise value P_{FIRM_0}, from which debt can be deducted to determine equity value.
17. Describe why market yields for longer-term U.S. Treasury bonds may be better than shorter-term Treasury bills for estimating cost of capital when valuing private firms.
18. Describe how the choice of observing longer-term U.S. Treasury bonds for estimating a risk-free rate affects the methodology for calculating the average historical equity risk premium.
19. When applying the market approach, identify three general sources of information for price multiples when valuing private firms.
20. Describe when to include the value of non-operating assets in a valuation of minority equity interests.
21. Describe which general valuation approaches implicitly or explicitly include the value of a firm's non-operating assets in their methodologies.
22. What is the fundamental argument used for the claim that pass-through tax entities have higher prices than standard corporations?
23. Identify the two kinds of valuation services that are specified in the AICPA's valuation standard and the main difference between them.
24. Compare fair market value and investment value in terms of the buyer.

Brief Cases

1. You are a manager in a business valuation department planning a new client project to value a profitable, privately-owned chain of restaurants with $20 million in annual sales. In addition to you working on the project, you have a junior analyst and research assistant. Design a plan to perform the project.
2. You have been hired to value a private firm in a dissolution of marriage legal matter. The particular family law court tends to frown on the discounted cash flow methodology because the court believes it double-counts alimony (that is, future earnings from the business are the source of funds to pay alimony in the future). How do you approach the valuation project assuming the income approach is relevant and knowing the court's belief?
3. You are comparing and contrasting methodologies to value a standard government bond and an operating business. What do you consider when applying a discounted cash flow model in terms of cash flow timing for these two kinds of assets?
4. You are valuing a young technology company that is experiencing high growth. What income approach model will you likely use? Explain.
5. You are determining the enterprise value of an operating firm and need to estimate the *expected* net cash flows to the firm for applying the income approach. Describe how you would go about estimating these future cash flows.
6. You valued 100 percent of the equity of a private firm several months ago to assist the owner with estate tax planning. Now, the owner wants to sell 10 percent of his stock to a key employee and wants you to value this equity interest. How would your analysis differ for this new project compared to the valuation you performed earlier?
7. You have been hired to value a private firm with $5 million in annual revenues. To estimate the firm's cost of capital, you must decide on a risk-free rate of return. As shown in the Federal Reserve's publication H.15, available on the Internet, many kinds of U.S. Treasury securities exist that are free from default risk. Draft the language in your valuation report for this project describing which Treasury security you have chosen for your risk-free rate, and explain your reasoning for choosing that security instead of any other Treasury security.

8. You are determining the enterprise value of a private firm with a single owner. Identify three possible adjustments to the historical financial information that may be needed to determine the firm's "normalized" income? Describe each adjustment and how it affects your valuation using the income approach.
9. You are assisting a client who is negotiating the sale of her private business. Naturally, the seller wants the highest price, and the buyer wants the lowest price. What are the arguments to value the firm for the transaction using investment value (likely a higher value) and fair market value (likely a lower value)?
10. You are meeting with a potential new client about a valuation project. This person is sensitive to project fees and asks why you need to spend so much time analyzing the economy and firm's industry. How do you respond?

Cases

1. You are valuing some shares of stock in a large private firm that is over 50 years old and has been regularly paying dividends to its shareholders. You believe the shareholders will continue to receive dividends similar to what has occurred in the past. Assume the annual dividend for 20X0 is $1000 per share, and it is expected to grow 5 percent per year on average. The firm pays dividends on December 31 of each year.

   Required

   Determine the share value as of January 1, 20X1, using both a discounted cash flow model and constant growth model. Next, determine whether the values from both models produce the same result using these case assumptions.

2. You are valuing a mature firm using a constant growth model. Assume the firm's annual cash flows are $1 million for 20X0.

   Required

   Value the firm as of January 1, 20X1, assuming the required rate of return for the firm is 8 percent, 10 percent, and 12 percent, and the expected growth rate is 3 percent, 4 percent, and 5 percent. Show your work as a sensitivity analysis. This means that you are preparing 9 valuations (3 rates of return × 3 growth rates). (Hint: You might consider using use Excel's Data Table function to perform and show your sensitivity analysis.)

3. You are valuing a firm experiencing high growth. You expect the firm's growth will moderate to a steady state after five years. Expected cash flows during the high-growth stage are $2000 (Year 20X1), $3000 (Year 20X2), $4000 (Year 20X3), $5000 (Year 20X4), and $6000 (Year 20X5). After five years, you expect the firm to be in a steady state, with a growth of cash flows of 5 percent per year, on average. Assume a required rate of return of 10 percent.

   Required

   Value the firm as of January 1, 20X1, using a two-stage model and the mid-year discounting convention.

4. Your boss has just assigned you to two valuation projects. However, she did not tell you the standard of value for each project before dashing out of town on a business trip. The first project is for U.S. estate tax purposes, and the second project is for a potential merger and acquisition transaction involving your firm's client who is a strategic buyer.

   Required

   Determine the most likely standard of value for each of the two projects and explain.

5. You work as a valuation analyst for an accounting firm that follows the AICPA's Statement on Standards for Valuation Services, No. 1. You are meeting with a potential new client who is interested in hiring your firm to value his business for a possible sale. The prospect wants to manage the cost for this project.

   Required

   What would you tell the perspective client in terms of his options about the types of valuation services your firm can provide when following the AICPA standard? For each kind of service, frame your discussion around the relative number of procedures, limitations of the results, and relative costs.

Internet Research Assignments

1. Search the Internet and read about how courts of law have interpreted "fair market value." Write a brief report describing your findings.
2. Search the Internet and read about the history of the Gordon growth model. Write a brief report describing your findings.
3. Search the Internet and read about which inputs of the Gordon growth model cause the results to be highly sensitive. Write a brief report describing your findings.
4. Search the Internet and find three membership organizations with business valuation certifications. Write a brief report describing your findings in terms of criteria for certification.
5. Search the Internet and read about the capital structure of firms in terms of theories explaining capital structure. Write a brief report describing your findings.

Appendix A
Fraud-Related Laws

Overview of Various Common Law and Statutory Laws Related to Fraud

It is important that a forensic accountant have a basic familiarity with various federal statutory and common law offenses that relate to fraud and forensic accounting. We start with a description of these offenses:

- *Larceny* is the secretive and wrongful taking and asportation of the personal property of another with the intent to permanently deprive the rightful owner of use or possession. This crime does not require the use of force or fear. Someone who intends to return the property cannot be convicted of larceny. In a business, larceny happens when an employee takes a notebook computer or tablet for personal use.
- *Embezzlement* is the wrongful conversion of another's property, the possession or custody of which has been acquired lawfully. It is distinguished from larceny in that the embezzler does not take property from another as he or she is already in possession of it. If Mark turns over $20,000 to Hal, his lawyer, to place in an escrow account and then Hal takes the funds for personal expenditures, embezzlement has occurred.
- *Burglary* happens when a person unlawfully enters a building with the intent to commit a felony. The requirement for this crime is satisfied when a person enters a building, residential or commercial, without the owner's consent and with the intent to commit a wrongful act.
- *Fraud* includes any intentional or deliberate act to deprive another of property or money by guile, deception, or other unfair means. Misrepresentation of material facts is the offense most thought of when the term fraud is used. The gist of the offense is the deliberate making of false statements to induce the intended victim to part with money or property. Generally, the elements include
  - a material false statement;
  - knowledge of its falsity;
  - reliance on the false statement by the victim; and
  - damages suffered.

In most instances, only false representations of "presently existing facts" are actionable. Opinions (speculative statements about future events), even if made with intent to mislead, may not be the basis for a fraud case. The rule precluding fraud actions based on false opinions is subject to certain exceptions, principally cases involving opinions provided by professionals.

Essentials of Forensic Accounting, First Edition. Michael A. Crain, William S. Hopwood, Carl Pacini, and George R. Young.

Usually only material false statements may serve as the basis for a fraud case. Materiality refers to matters important or relevant enough to the plaintiff to influence the plaintiff's decision. The intent requirement is met in a fraud case if the prosecution or plaintiff is able to demonstrate that the false representations were made recklessly or with complete disregard for truth or falsity.

- *Robbery* is the forceful and unlawful taking of personal property or chattels. If force or fear is missing, the crime is theft. Someone who tackles you, pins you down, and takes your wallet from you has committed robbery. A pickpocket who takes your wallet while you are walking through a park has not committed robbery.
- *Extortion* involves obtaining money, property, or services from a person or entity through coercion. The actual acquisition of money or property is not required to commit the offense. The making of a threat of violence which refers to making a payment of money or property to stop future violence is enough to commit the offense. Extortion involves a written or oral threat that instills fear of something that will happen to the victim or victim's family if the victim does not comply.
- *False pretenses* refer to the illegal obtaining of property belonging to another through materially false representations of an existing fact, with knowledge of their falsity and intent to defraud. Suppose Robert sells electric appliances door-to-door at considerably low prices. A consumer must pay cash up front to get the low price. Robert has no electric appliances and has no intention of delivering any appliances. He has committed a crime under false pretenses.
- *Blackmail*, outlined as a federal statutory crime in 18 U.S.C. section 873, is a demand for money or other consideration under threat to do bodily harm, to injure property, to accuse of crime, or to expose disgraceful defects or behavior. Suppose a politician has a skeleton in his closet and he would rather keep it there. Someone else knows the politician's secret and threatens to tell the world unless he receives $100,000.
- *Bank fraud*, outlined as a federal statutory crime in 18 U.S.C. section 1344, makes it a crime to defraud, or attempt to defraud, a federally chartered or insured bank. The "defraud" includes any misrepresentations or other conduct intended to deceive others in order to obtain something of value. A person who inflates his annual income or net worth on a bank loan application to better qualify for a loan may be charged with bank fraud.
- *Forgery* is the fraudulent making or altering of any writing in a way that changes the legal rights and liabilities of another. It is also the making, adapting, or imitating of objects or statistics with the intent to deceive. Forging money or currency is counterfeiting. In fact, under 18 U.S.C. section 471, counterfeiting occurs when someone copies or imitates an item without having been authorized to do so and passes the copy off for the genuine or original item. The crime applies not just to money but to items such as clothing, DVDs, drug prescriptions, and so on.
- *Mail fraud*, outlined in 18 U.S.C. section 1341, occurs when one "having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses … places in any post office or authorized depository for mail matter, any matter or thing" that is to be sent or delivered by the Postal Service or by any private or commercial interstate carrier. The mailing itself does not need to contain false or fraudulent misrepresentations, as long as it is an integral part of the scheme.
- *Wire fraud*, outlined in 18 U.S.C. section 1343, occurs when a person

  > having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, transmits or causes to be transmitted by means of wire, radio, or television communication in interstate or foreign commerce, any writings, signs, pictures, or sounds for the purpose of executing such scheme or artifice.

- *False statements*, as outlined in 18 U.S.C. section 1001, makes it a crime to falsify, conceal, or cover up by any trick, scheme, or material fact; make any materially false, fictitious, or fraudulent statement or representation; or make or use any false writing or document knowing that it contains any material false, fictitious, or fraudulent statement or entry in any matter within the purview of the federal government. Any false statement must be made knowingly or willingly.
- *False identification fraud*, as highlighted in 18 U.S.C. section 1028, forbids the presentation or use of a falsified identification document or other identifying information that appears to have been issued by the United States.

- *Credit card fraud,* as outlined in 18 U.S. section 1029(a)(1-4), makes it unlawful to possess an unauthorized or counterfeit credit card, counterfeit or alter a credit card, use account numbers of another's credit card to perpetuate fraud, or use a credit card obtained from a third party with his or her consent, if the third party conspires to report the card as stolen.
- *The Racketeer Influenced and Corrupt Organizations Act* (RICO), as detailed in 18 U.S.C. sections 1961–1968, has both criminal and civil features. On the criminal side, it is a federal offense for any person to (1) use income derived from a pattern of racketeering activity to acquire an interest in, establish, or operate an enterprise; (2) acquire or maintain an interest in an enterprise through a pattern of racketeering activity; (3) conduct or participate in, through a pattern of racketeering activity, the affairs of an enterprise by which he is employed or with which he is affiliated; or (4) conspire to do any of the preceding acts. A RICO conviction requires proof of predicate offenses that serve as the pattern of racketeering activity. Racketeering activity includes the commission of any of more than 30 federal or state offenses such as gambling, arson, bribery, extortion, mail fraud, wire fraud, and securities fraud. A pattern of racketeering necessitates proof of the commission of at least two acts of racketeering within a 10-year period. A violation of RICO is punishable by a fine (twice the proceeds from a crime), up to 20 years in prison, or both, and asset forfeiture applies. This means that on top of fining offenders twice their proceeds from a crime, the government may also seize real estate, automobiles, boats, planes, artwork, electronics, and so on that have been purchased with proceeds of the crime. The government may place pretrial restraints on such assets so they may not be secreted.

  On the civil side, RICO allows the government to seek civil penalties for violations. These include dissolution or reorganization of an enterprise, injunctions, and divestiture of a defendant's interest in an enterprise. Private parties can launch a civil suit against the defendant and if successful, recover up to treble damages and attorney's fees for injuries caused by a violation. A successful plaintiff must prove that the defendant violated RICO's provisions and that the plaintiff was harmed due to the RICO violation. A civil RICO plaintiff does not have to prove that the defendant has been convicted criminally of a predicate offense. One exception is that a civil RICO case cannot be based on conduct that amounts to securities fraud unless it has resulted in a criminal conviction.

Sarbanes-Oxley Act

The Sarbanes-Oxley Act (SOX) became law in 2002 as a response to the accounting and business scandals of the early 2000s. The law consists mostly of new rules and regulations for public accounting firms and publicly traded companies to help reduce fraud and other questionable practices. SOX is comprised of 11 separate sections or titles. We only discuss select titles below to highlight the most important provisions of the law. Title I establishes the PCAOB. The PCAOB, under the auspices of the SEC, is charged with oversight of the audit of public firms, establishment of audit reporting standards and rules for public firms, and must inspect, investigate, and enforce compliance of applicable rules on accounting firms that audit public companies. Audit firms that audit public companies must register with the PCAOB.

Title II deals with auditor independence. Section 201 of SOX makes it illegal for public accounting firms that audit publicly traded companies to provide the following non-audit services to an audit client:

1. Bookkeeping or other services related to the accounting records or financial statements of the audit client
2. Financial information systems design and implementation
3. Broker or dealer, investment adviser, or investment banking services
4. Legal services and expert services unrelated to the audit
5. Appraisal or valuation services, fairness opinions, or contribution-in-kind reports
6. Actuarial services
7. Internal audit outsourcing services
8. Management functions or human resources

Title III addresses the board of directors and audit committees of public companies. This part of the law instructs the SEC to promulgate rules requiring the CEO and CFO to certify that the firm's audited financial statements do not

contain untrue statements or material omissions and that such statements present fairly in all material respects the financial condition and results of operations. Also, this title establishes that the CEO and CFO are responsible for internal controls designed to ensure that they receive material information about consolidated operations and that the internal controls have been reviewed for their effectiveness within 90 days prior to the financial report. Title III makes it unlawful for corporate personnel to exert improper influence upon an audit for the purpose of rendering financial statements materially misleading.

Title IV requires that financial reports filed with the SEC reflect all material correcting adjustments that have been identified. It also mandates the disclosure of all material off-balance sheet transactions and relationships that may have a material effect upon the financial status of an issue. Section 404 of SOX requires the auditor of a public company to attest to management's report on the effectiveness of internal controls over financial reporting. Auditing Standard 5, *An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements* (AICPA, *PCAOB Standards and Related Rules*, Auditing Standards) requires the audit of internal control to be integrated with the audit of financial statements. Section 404 mandates that management issue an internal control report that addresses the following:

1. A statement that management is responsible for establishing and maintaining an adequate control structure and procedures for financial reporting
2. An assessment of the effectiveness of the internal controls and procedures for financial reporting as of the end of the firm's fiscal year

Management must identify the framework used to evaluate the effectiveness of internal controls. In most instances, said framework is the one known as the Internal Control-Integrated Framework developed by the Committee of Sponsoring Organizations of the Treadway Commission. Section 404 is probably the most expensive and debated part of SOX.

Title VIII of SOX imposes criminal penalties upon those who commit various financial crimes. This title of the law

1. imposes criminal penalties for knowingly destroying, altering, concealing, or falsifying records with intent to obstruct or influence either a federal investigation or bankruptcy matter and for failure of an auditor to maintain for five years all audit or review work papers pertaining to a public firm;
2. extends the statute of limitations to allow a private right of action for a securities fraud claim to no later than two years after its discovery or five years after the date of the violation; and
3. provides whistleblower protection to prevent a public firm from retaliation against an employee because of any lawful act by the employee to assist in an investigation of fraud or other conduct by federal regulators or to file or participate in a proceeding relating to fraud against shareholders.

Federal Tax Crimes

The IRC contains numerous criminal provisions, some of which relate to tax fraud and other tax crimes. The tax evasion or fraud statute (18 U.S.C. section 7201) makes it a felony to evade or defeat any tax or payment of any tax at the federal level. Those who are potentially liable under section 7201 include individuals, partners, corporate officers and employees, and corporations. Conviction is possible even if the tax evaded is not the defendant's tax. Section 7201 defines two distinct crimes: the attempt to defeat or evade a tax and the attempt to defeat or evade the payment of any tax. The former is prosecuted far more often than the latter. To obtain a conviction under section 7201, the government must prove beyond a reasonable doubt (1) an affirmative act of evasion or attempted evasion; (2) an additional tax due and owing; and (3) willfulness. Unless there is a deficiency in tax, a conviction under section 7201 cannot be upheld. The government need not prove the exact amount of the deficiency. Given it is a state of mind, willfulness must usually be proven by circumstantial evidence. After many years of confusion, the U.S. Supreme Court stated that the meaning of the term *willfulness* simply means a voluntary, intentional violation of a known legal duty. Proof of willfulness is accomplished through circumstantial evidence known as badges of fraud, such as keeping a double set of books, making false entries or alterations, creating false invoices or documents, destroying books or records, concealing assets or covering up sources of income, or handling one's affairs to avoid making the records usual in

transactions of the kind and any conduct, the likely effect of which would be to mislead or conceal. Other badges of fraud include lying to IRS agents, consistently overstating deductions, holding property in nominee names, diverting corporate funds to pay an officer's personal expenses, and concealing bank accounts. Aside from the willfulness element, the most difficult trial problem for the government can be proving that the defendant actually had more income than reported on the return.

Section 7206(1) makes it a felony to willfully make and subscribe a false document if the document was signed under penalties of perjury. This section does not require a tax deficiency. The elements of a section 7206(1) violation are as follows: (1) the defendant made and subscribed a return, statement, or other document which was false as to a material matter; (2) the return, statement, or other document contained a written declaration that it was made under the penalties of perjury; (3) the defendant did not believe the return, statement, or other document to be true and correct as to every material matter; and (4) the defendant falsely subscribed to the return, statement, or other document willfully, with the specific intent to violate the law. A completed form 1040 does not become a return, and a taxpayer does not make a return, until the form is filed with the IRS. Also, a return preparer can be charged under this section for willfully making and subscribing a false tax return. The submission of a false, unsigned return cannot, by itself, serve as the basis for a prosecution under this section (prosecutions under 7206[1] are not perjury prosecutions). This section requires that a return, statement, or other document must be "true and correct as to every material matter." The government must prove that the matter charged as false is material. A line on a tax return is a material matter if the information required to be reported is capable of influencing the correct computation of the amount of the tax liability of the person or the verification of the accuracy of the return. Section 7206(1) does not require a showing that the government relied on the false statements. This section is a specific intent crime requiring a showing of willfulness. Proof of this element is essential and neither a showing of careless disregard nor gross negligence in signing a tax return will suffice. The government is not required to prove intent to evade income taxes and does not have to prove an affirmative act of concealment.

Section 7206(2) is often used to prosecute individuals who advise or otherwise assist in the preparation or presentation of false documents. This statute is not limited to preparers, but applies to anyone who causes a false return to be filed. To establish a 7206(2) offense, the government must prove the following elements beyond a reasonable doubt:

1. the defendant aided or assisted in, procured, counseled, or advised the preparation or presentation of a document in connection with a matter arising under the internal revenue laws;
2. the document was false as to a material matter; and
3. the act of the defendant was willful. The purpose of the statute is to make it a crime for one to knowingly assist another in preparation of a false and fraudulent income tax return.

The question is whether the defendant consciously did something that led to the filing of a false tax return. The fact that the defendant does not actually sign or file the document itself is not material. It is no defense to a 7206(2) prosecution that the taxpayer who submitted the return was not charged, even when the taxpayer was aware of the falsity of the return, went along with the scheme, and could have been charged with a violation. It is not enough that the defendant's purposeful conduct merely resulted in the filing of a false return; the false filing must also have been a deliberate objective of the defendant. Charges under this section often arise in prosecutions of promoters of abusive tax shelters.

To establish a section 7212(a) violation, the government must prove beyond a reasonable doubt that the defendant, in any way, corruptly endeavored to obstruct or impede the due administration of the IRC. This section is referred to as the omnibus clause. Under this statute, *corruptly* means to act with the intent to secure an unlawful advantage or benefit either for oneself or another. The acts themselves need not be illegal, as long as the defendant commits them to secure an unlawful benefit for himself, herself, or another. The term *endeavor* means to effectuate an arrangement or to try to do something, the natural and probable consequence of which is to obstruct or impede the due administration of the IRC. Examples of corrupt endeavors for the purposes of 7212(a) include statements, whether threats or not, designed to convince witnesses not to testify, attempting to interfere with the auction of property to pay tax debt, backdating documents, concealing assets, and hiding corporate assets. Mere harassment of an agent, if it is not done to obtain an undue advantage, may not rise to the level of a section 7212(a) violation. There is no requirement that a defendant's actions have an adverse effect on the government's investigation.

Section 7203 of the IRC covers four different situations, each of which constitutes a failure to perform a duty imposed by the IRC in a timely fashion:

1. failure to pay an estimated tax;
2. failure to make or file a return;
3. failure to keep records; and
4. failure to supply information.

The charge most often brought under this section is the failure to make or file a return. To establish the offense of failure to make or file a return, the government must prove the following elements beyond a reasonable doubt:

1. the defendant was a person required to file a return;
2. the defendant failed to file at the time required by law; and
3. the failure to file was willful.

Most courts take the approach that a form which does not contain sufficient financial information to allow the calculation of a tax liability is not a return for purposes of section 7203. The crime of failing to file a return is complete if a return was required to be filed at a given date and the taxpayer intentionally did not file a return. There is no requirement that the government prove a tax liability, as long as the proof establishes that the taxpayer had sufficient gross income to require the filing of a return. To establish the offense of failure to pay a tax, the government must prove beyond a reasonable doubt that:

1. the defendant had a duty to pay a tax;
2. the tax was not paid at the time required by law; and
3. the failure to pay was willful. In the typical failure to pay tax, the taxpayer will have filed a return and then failed to pay the tax.

Section 7202 describes two offenses: (1) a willful failure to collect and (2) a willful failure to truthfully account for and pay over. It was designed to assure compliance by third parties obligated to collect excise taxes or to deduct from wages paid to an employee the employee's share of FICA taxes and the withholding tax on wages applicable to individual income taxes. To establish a violation of this section, the government must prove the following elements beyond a reasonable doubt: 1) the duty to collect, truthfully account for, or pay over; 2) the failure to collect, truthfully account for, or pay over; and 3) willfulness. Cases prosecuted under this section usually involve social security taxes and withholding taxes. It is the individual with the duty to collect, truthfully account for, and pay over who is culpable when there is a failure to perform this duty.

Section 7207 is used in a limited number of criminal tax cases often referred to as altered document cases. These cases involve the submission of checks to the IRS containing amounts which have been altered after the checks have cleared the bank, altered invoices, and similar documents as support for overstated deductions. Section 7207 has been restricted to those cases where the IRS decided that the circumstances did not warrant a felony prosecution. To establish a violation of section 7207, the following elements must be proved beyond a reasonable doubt:

1. submission of a return, statement, or other document to the IRS;
2. the return, statement, or other document is false or fraudulent as to a material matter; and
3. willfulness.

There is no limit on the type of document that can be the subject of a violation. The usual situation will involve an IRS audit and the submission of altered cancelled checks, altered invoices, or altered receipts and the like, as support for overstated deductions.

Federal Securities Law Offenses (Securities Fraud)

Two of the most important federal statutes affecting securities fraud are the Securities Act of 1933 and the Securities Exchange Act of 1934. The Securities Act of 1933 regulates the disclosure of material facts in the registration statement and prospectus as part of a new offering of securities to the public. A registration statement contains

information and documents that must be filed with the SEC, such as capital structure, description of management and the business enterprise, and financial statements certified by an independent auditor. A prospectus is a document created by a securities issuer setting forth the nature and objects of an issue of securities and inviting the public to subscribe to the issue.

Section 11 of the 1933 Act imposes civil liability on any party, including accountants, who prepare or certify any portion of a registration statement that contains materially misleading information. A purchaser of a security must only show that a loss has been suffered on the security. Reliance upon a materially false statement or misleading omission need not be proved. Privity between the purchaser and accountant or other party is not necessary. In stating a section 11 claim, a plaintiff need not prove fraud, gross negligence, causation, or intent to deceive to recover. After the purchaser demonstrates a loss, the burden of proof shifts to the accountant or other defendant to show that he or she had "after reasonable investigation, reasonable grounds to believe and did believe, at the time such part of the registration statement became effective, that the statements therein were true and that there was no omission of a material fact …." This is the burden of proving due diligence by the defendant. A defendant may also raise as defenses that no misstatements or omissions existed, any misstatements or omissions did not pertain to material facts, or the misstatements or omissions were not causally related to the purchaser's loss.

Section 12 of the 1933 Act consists of two parts, sections one and two. Section 12(1) imposes civil liability on anyone who violates the registration requirements of the SEC. Section 12(2) applies to any person who offers or sells securities by means of any prospectus containing an untrue statement of a material fact. It also applies to the omission of a material fact necessary to make a prospectus, in the light of the circumstances under which the prospectus is provided, not misleading. Section 12 covers the same kind of misleading information as does section 11, but looks to the offending prospectus, rather than the offending registration statement, for its application.

The Securities Exchange Act of 1934 is directed at protecting investors. This Act embraces a philosophy of full disclosure for the investor rather the notion of caveat emptor. Section 10b is arguably the most significant provision of the 1934 Act. This section provides the SEC with the authority to prohibit fraud in connection with the purchase or sale of any security. In 1942, the SEC promulgated Rule 10b-5, which delineates the types or classes of deception outlawed by section 10b. Although the three sections of Rule 10b-5 provide broad indications of conduct that violates section 10b, no details are given on the elements or conduct that constitutes a violation of 10b. Rule 10b-5 states

> [i]t shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or the mails or of any national securities exchange,
>
> *a.* To employ any device, scheme, or artifice to defraud;
> *b.* To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; or
> *c.* To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.

Section 10b and rule 10b-5 are coextensive. If rule 10b-5 does not give rise to liability, neither does section 10b and vice versa.

Neither section 10b nor rule 10b-5 provide an explicit private cause of action for plaintiffs injured by securities fraud. An implied private right of action was first recognized in *Kardon v. Nat'l. Gypsum Co.*, 73 F. Supp. 798 (E.D. Pa. 1947). In cases involving publicly traded securities, a section 10b private cause of action includes these elements:

1. A material misrepresentation or omission
2. Intent to deceive (scienter)
3. A connection between the misrepresentation or omission with the purchase or sale of a security
4. Reliance
5. Economic loss
6. Loss causation

Privity is not required to bring an action under section 10b. The requirement of scienter means that mere negligence on the part of the defendant is insufficient to impose liability under this section.

In *Central Bank of Denver v. First Interstate Bank of Denver*, 511 U.S. 164 (1994), the U.S. Supreme Court ruled that civil liability under 10b does not extend to those who aid and abet a primary section 10b fraud violation. Despite

this edict, however, this decision also holds that the absence of aiding and abetting liability does not mean that secondary actors in the securities markets, such as accountants, investment bankers, lawyers, and others, are always free from liability under section 10b. Any person or entity who employs a manipulative device or makes a material misstatement or omission on which a purchaser or seller of securities relies may be liable as a primary violator under 10b.

Section 18 of the 1934 Act also imposes liability on those involved with applications, reports, documents, and registration statements filed with the SEC. Shareholders' annual reports are not considered to be filed with the SEC unless they are included in an SEC filing. Section 18 applies to buyers and sellers of securities. A buyer or seller filing a section 18 claim must demonstrate

1. the existence of a material false or misleading statement;
2. that he or she acted in good faith and relied on the statement;
3. that he or she had no knowledge of the inaccuracy of the statement; and
4. damage from the statement.

A defendant can be relieved of liability upon proof of good faith. This means that the minimum standard for liability under section 18 is gross negligence.

The Private Securities Litigation Reform Act amended the federal securities laws to limit the use of joint and several liability, provide a limitation on the damages for which an accountant and others can be held liable, limit or restrict discovery proceedings by plaintiffs at the early stages of class action securities lawsuits, and require any plaintiff bringing an action under section 10b to prove that material misstatements or omissions actually caused the plaintiff's loss.

Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act (FCPA) (codified as amended at 15 U.S.C. §§78m[b],[d][1], [g]-[h], 78dd-1 to -3, 78ff) has attracted much attention in recent years with an ever-increasing number of enforcement actions taken by the SEC and the Department of Justice (DOJ) against corporations and individuals. The increase in FCPA prosecutions over the last decade or so can be attributed to an increase in voluntary reporting by corporations, increased international law enforcement cooperation, a renewed focus on internal controls, the SOX requirement of executive certifications, proactive law enforcement investigations, and the global antifraud climate. When FCPA allegations arise, forensic accounting investigations and engagements follow. We now take a close look at the FCPA and its provisions.

A bribe is an illegal or unethical business transaction that involves the offering, promising, or giving of something in order to influence a public official in the execution of his or her duties. A key element that distinguishes unacceptable payments is the corruption of a relationship of trust. One distinctive element of bribery is the quid pro quo, or the sense that the office is abused in exchange for the benefit conferred. "According-to-rule benefits" confer something on a bribe-giver that the briber should have received under the rules; the bribe-taker acts in a manner that he or she would have done anyway. According-to-rule benefits are "grease" or "facilitation" payments. These payments consist of small payments to a person to obtain a favor such as expediting an administrative process. An "against-the-rule benefit" is more egregious and is illustrated by the award of a contract to a party who should not have won the contract. This is political or grand corruption that involves relatively large sums of money paid to alter policy formulation, legislation, and large contract awards.

Two main themes are captured by the FCPA. The first is that no entity or person may offer or pay anything of value to an official of a foreign government or certain international organizations that would cause the official to misuse power or influence to benefit a business interest of any entity or person. The second is that if any payment is made to an official, whether the purpose is proper or corrupt, the payment must be reported in the payer's financial statements according to Generally Accepted Accounting Principles (GAAP). In July 2010, the Dodd-Frank Act amended the FCPA. Section 922 of Dodd-Frank grants significant protections and rewards to individuals who voluntarily provide the SEC with original information relating to the violation of the FCPA and other securities laws. Individuals (apart from certain ineligible persons such as law enforcement officers) who provide original information that leads to the assessment of monetary sanctions in excess of $1 million are entitled to receive between 10 percent and 30 percent of

the sanction amount as an award. No award will be made, however, to any whistleblower who gains the information through an audit of financial statements of a publicly traded firm.

The basic elements of any FCPA bribery violation include a private or publicly traded firm or any foreign person in the United States who corruptly pays or offers to pay money or anything of value to a foreign official, a foreign political party, or to any person while knowing that all or part of the payment will be offered or paid to a foreign official for the purpose of influencing the official to obtain, retain, or direct business to any person or to secure an improper advantage.

The anti-bribery provisions are broader than the accounting or internal control provisions. The former apply to issuers, domestic concerns, and foreign persons acting within the United States. An issuer is a public company which includes firms using American Depositary Receipts (ADRs). A domestic concern is any business that has its principal place of business in the United States or is organized under the laws of the United States, its states, territories, or possessions. Citizens, nationals, or residents of the United States are domestic concerns. Officers, directors, employees, agents, and stockholders of foreign persons are also subject to the FCPA if they commit a violation while in the United States. The FCPA provides that a foreign citizen, who is an agent of a domestic concern, is subject to the anti-bribery provisions even for acts committed outside the United States. It is not uncommon for a U.S. parent, venture, or personnel to be liable for the corrupt practices of foreign affiliates. One basis for parent liability turns on whether or not the parent participated in the improper conduct. The FCPA itself provides for direct parent liability under the following conditions: (1) the commission of an act in furtherance of an improper payment by the affiliate; (2) the authorization by the parent of the affiliate's action; or (3) a direct offer, promise, or transfer of value by the parent. The parent is not liable absent knowledge of the corrupt purpose of the payment.

The FCPA renders it illegal to make a payment corruptly to a foreign official or to corruptly commit any act within the United States in pursuit of prohibited conduct. The statute itself does not define the term corruptly. Case law yields some insight into the meaning of corruptly. In *U.S. v. Liebo*, 923 F. 2d 1308 (8th Cir. 1991), a federal appellate court upheld the trial court's jury instruction regarding the meaning of corruptly:

> The offer, promise to pay, payment, or authorization of payment, must be intended to induce the recipient to misuse his official position or to influence someone to do so and that an act is "corruptly" done if done voluntarily and intentionally, and with a bad purpose of accomplishing either an unlawful end or result, or lawful end or result by some unlawful method or means.

A defendant need not be aware of the actual statutory provision nor know of the FCPA's existence to be found guilty of an anti-bribery violation. The bribe or illegal gratuity must be linked to a specific government action or meet the requirement that some particular official act be identified and proved.

Although the FCPA does not define the term anything of value, the law prohibits not only consummated bribes but also unaccepted offers of bribes. Recent enforcement actions indicate that there are virtually no limitations on what can be considered anything of value. The payment or offer of payment of anything of value includes employment of officials as consultants, expense paid travel, loans with favorable interest rates and repayment terms, golf outings, sports equipment, transportation of household goods, discounts, and college scholarships. The context in which a promise, offer or payment is made may be dispositive of whether something is anything of value.

Under the FCPA, a foreign official is anyone who acts in an official capacity for a foreign government and who exercises some discretionary authority, which includes an officer of a foreign government and even an officer in its armed forces. The term also covers any person acting in an official capacity for or on behalf of a state-owned enterprise or business.

The FCPA does not provide guidance concerning what types of entities are instrumentalities of a foreign government, such that their employees are foreign officials. It remains unclear what level of government ownership or control will make a business an agency or instrumentality of the state. Despite the lack of guidance, the DOJ and SEC broadly interpret the definition of foreign official in application to state-owned enterprises. One of the most aggressive agency interpretations of foreign official in the context of a state-owned enterprise occurred in the Kellogg Brown & Root (KBR) and Halliburton case.

Case in Point

In February 2009, Kellogg Brown & Root (KBR), a former subsidiary of Halliburton, agreed to pay the DOJ a fine of $402 million to settle FCPA charges related to the payment of about $180 million to foreign officials in Nigeria from 1994 to 2004. Nigerian officials awarded KBR four contracts worth $6 billion to build natural gas facilities. The SEC and DOJ claimed that officers and employees of Nigeria LNG Limited (NLNG) were foreign officials even though NLNG was 51 percent owned by multinational oil companies and 49 percent owned by Nigerian National Petroleum Corporation (NNPC). The enforcement agencies claimed that effective control of NLNG belonged to NNPC. *U.S. v. Kellogg Brown & Root LLC,* No. H-09-071 (S.D. Tex. Feb. 6, 2009).

A clear federal appellate court's interpretation of foreign official would help reduce uncertainty for business. The need for a clear court interpretation increases as business ownership arrangements evolve on a global scale.

Although proving that an FCPA defendant knew or had knowledge that a payment to a foreign official was unlawful is often not an issue in direct bribery cases, it often becomes a contentious point in cases involving third party agents. In such cases, the FCPA outlaws payments to any person while knowing that all or a portion of such money or thing of value will be offered, given, or promised, to any foreign official for a purpose prohibited by the FCPA. The law itself provides that a person has knowledge when (1) such person is aware that such person is engaging in such conduct, that such circumstance exists, or that such result is substantially certain to occur, or (2) such person has a firm belief that such circumstance exists or that such result is substantially certain to occur. The statute defines conscious avoidance as "knowledge of the existence of a particular circumstance," established by being "aware of a high probability of the existence of such circumstance, unless the person actually believes that such circumstance does not exist."

The statutory definition of knowing is much broader than just actual knowledge. One federal district court (*U.S. v. Kozeny*, 664 F. Supp. 2d 369 [S.D.N.Y. 2009]) found that the knowledge requirement cannot be met merely by a failure to perform adequate due diligence. Mere negligence in not performing due diligence does not satisfy the FCPA knowledge requirement. If a defendant takes affirmative steps to avoid knowledge and possesses awareness of a high probability that illegal conduct is afoot, then that defendant has knowledge.

The fifth element of the anti-bribery provision, also called the business nexus requirement, requires that a FCPA violator must take some action to influence a foreign official to obtain or retain, to direct business to any person, or to obtain an improper advantage. Business is not limited to foreign government contracts but includes any commercial activity. The FCPA's legislative history shows that Congress intended to extend liability to situations where bribes improved business opportunities. The SEC and DOJ continue to interpret the fifth element to include payments intended to influence governmental decisions having a positive impact on a defendant's business.

Congress created a "facilitating payments" exception to the FCPA in recognition of the fact that small grease payments are a cost of doing business in many countries. The FCPA's legislative history includes a four-factor test to help distinguish between facilitating payments and illegal payments. With regard to payment purpose, Congress sought to criminalize:

1. payments intended to alter discretionary decision-making so as to increase the payer's business;
2. payments that are unusually large in relation to the government action done;
3. payments that directly affect competition in contracts; and
4. payments in exchange for services to which the bribe-giver is not entitled.

SEC publications emphasize the significance of two factors: (1) the discretionary nature of the acts performed and (2) the degree to which the payor was entitled to the benefits of the payee's performance. Payments to expedite such things as obtaining permits, licenses, or other official documents; processing governmental papers such as visas and work permits; providing police protection, mail pickup and delivery; scheduling inspections; and providing phone service, power, and water supplies are considered exceptions to the FCPA by the SEC.

One affirmative defense to the FCPA anti-bribery provisions is if a payment is lawful under the written laws and regulations of the foreign official's country. Lawful under written law is different from being consistent with local custom and practice. This defense is also not activated by the lack of or nonexistence of written laws in the foreign official's country. A second affirmative defense is available for "reasonable and bona fide expenditures, such as travel and lodging expenses, incurred by or on behalf of a foreign official" that are directly related to (1) the promotion, demonstration, or explanation of products or services, or (2) the execution or performance of a contract with a foreign government. The federal government strictly construes this defense, knowing that firms will use it as a means of hiding excessive payments under the guise of reasonable promotion expenses. A party charged with an FCPA violation must prove that the payments satisfy the affirmative defense.

Federal enforcement agencies also rely on other statutes that are complementary to the FCPA. Complementary statutes such as export control laws, false statement statutes, mail and wire fraud, and money laundering laws may be employed in bringing bribery-related charges.

Publicly traded firms are required to "make and keep books, records, and accounts which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company."[1] The recordkeeping provisions are intended to prevent three types of improprieties: (1) the failure to record illegal transactions, (2) the falsification of records to conceal illegal transactions, and (3) the creation of records that are quantitatively accurate but fail to specify qualitative aspects of the transaction. No materiality requirement applies with regard to making and keeping accurate financial records.

Although the FCPA does not define books, records, and accounts, the statute applies to a wide variety of corporate records. For FCPA purposes, records include accounts, correspondence, memorandums, tapes, disks, papers, books, and other documents or transcribed information of any type whether expressed in ordinary or machine language. Virtually any tangible embodiment of information made or kept by a publicly traded firm is within the scope of the accounting provisions. Not only internal corporate records, such as ledgers and journal entries, but also records of corporate transactions with third parties, such as agreements with third party vendors, are covered. Also, transactions must be accurately recorded in reasonable detail. For FCPA purposes, reasonable detail means such level of detail as would satisfy prudent officials in the conduct of their own affairs. This means that records should include any information tending to alert the SEC to any impropriety.

All public companies that file Form 10-K reports must observe the accounting provisions regardless of whether they engage in foreign operations. Officers, directors, employees, and stockholders or agents of a publicly traded firm are also subject to the accounting provisions. The accounting provisions apply to various types of corporate activities, even wholly domestic activities and the manner in which those activities or transactions are reflected in corporate accounting records. A U.S. publicly traded firm must ensure that any majority-owned subsidiary adheres to the accounting provisions. A parent issuer may be held responsible in some cases of less than 50 percent ownership. When an issuer does not have an ownership interest greater than 50 percent, it must proceed in good faith to use its influence, to the extent reasonable under the issuer's circumstances, to cause the affiliate to devise and maintain a system of internal accounting controls consistent with the accounting provisions.

The FCPA requires publicly traded firms to design and maintain a system of internal controls sufficient to provide reasonable assurances that (1) transactions are executed in accordance with management's general or specific authorization; (2) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP or any other criteria applicable to such statements, and to maintain accountability for assets; (3) access to assets is permitted only in accordance with management's general or specific authorization; and (4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The SEC does not mandate any specific internal controls. The SEC articulates broad goals that controls should achieve and leaves the implementation of specific policies and procedures to issuers. Several factors are considered in the determination of whether a system of internal controls is reasonable under the circumstances: (1) the role of the board of directors, (2) communication of corporate procedures,, (3) assignment of authority and responsibility, (4) competence and integrity of personnel, (5) accountability for performance and compliance with policies and procedures, and (6) objectivity and effectiveness of the internal audit function.

[1] www.sec.gov/spotlight/fcpa/fcpa-recordkeeping.pdf

Both the SEC and DOJ have enforced the FCPA's accounting and recordkeeping provisions, with the SEC often taking the lead. In an anti-bribery case, one of the most difficult elements is tracing funds through offshore corporations and bank accounts, the beneficial ownership of which can be extremely costly to determine. If law enforcement in a foreign country fails to cooperate then the U.S. government must prove the case here without subpoena and search powers where the bribe may have occurred. For a FCPA case involving the accounting provisions, no need exists to prove corrupt intent; whether a foreign official was involved; or to demonstrate whether a promise, offer, or payment was made to obtain or retain business or secure an improper advantage. The elements of an accounting violation are limited to whether the business record is covered by the accounting provisions, whether the conduct was willful, and whether the record was accurate in reasonable detail.

Case in Point

In July 2010, the SEC filed books and records, and internal controls charges against General Electric (GE) and two GE subsidiaries: Ionics Inc. and Amersham PLC. The SEC alleged that the two subsidiaries made $3.6 million in illegal kickback payments to the Iraqi Health Ministry, that GE and the two subsidiaries failed to maintain adequate internal controls to detect and prevent the payments, and that the accounting for the transactions failed to properly record the nature of the payments. GE agreed to pay $23.4 million to settle the charges.[2]

An individual or entity can be held vicariously liable for the conduct of a third party when the latter is acting for or on behalf of the individual or entity. Even if a third party is not subject to the accounting and internal control provisions, an individual or entity may become subject to vicarious liability if that individual or entity directs, authorizes, or ratifies prohibited conduct. The key determinant is whether the agent is acting within the scope of express, implied, or apparent authority. An accounting or internal controls charge may be pressed against a parent based on the notion that had appropriate internal controls been enforced any improper payment would not have happened. For criminal liability to attach for the conduct of third parties, a publicly traded firm must possess knowledge that the third party has circumvented or intends to violate the accounting provisions. Knowledge may reside with one person not necessarily a senior officer, or may be the collective knowledge of various employees acting within the scope of employment. Vicarious criminal liability can also emanate from an entity or individual being an accomplice under the aiding and abetting statute. Also, a conspiracy of two or more entities or individuals to violate the accounting or internal control provisions may serve as the basis for a federal conspiracy offense. A civil action under the accounting and internal control provisions does not require knowledge. An entity can be held strictly liable (in some cases) for the actions taken by an officer, director, employee, shareholder, or agent acting on behalf of an issuer.

Criminal and civil penalties can result from violation of the FCPA. A company that violates the anti-bribery provisions may be fined up to $2 million per offense and be subject to civil penalties of $100,000 per violation. An individual may be fined up to $100,000 per violation and imprisoned for five years for a willful violation, and may be subject to civil penalties of $10,000 per violation. Fines can be levied up to $250,000 for an individual and $500,000 for a corporation, or twice the gross gain from unlawful activity, whichever is greater.

A company that knowingly commits a violation of the accounting provisions may be fined up to $25 million and face civil penalties of up to $500,000. An individual may be fined $5 million, imprisoned for 20 years, and face up to $100,000 in civil penalties. Other penalties for accounting provision violations include SEC injunctive actions, civil penalty actions, equitable remedies, and administrative proceedings.

The main reasons for an FCPA compliance program are to prevent violations prior to their occurrence, quickly detect any violations, and mitigate the penalties in the event of a violation. The DOJ and SEC have indicated that the existence of a compliance program is a significant factor taken into account in deciding whether to bring charges, what charges to bring, and what penalties to impose. The failure to establish a FCPA compliance program may be seen as evidence of a lack of internal controls that might in and of itself be a violation of the accounting provisions.

[2] *SEC v. Gen. Elec. Co.,* Exchange Act Release, No. 3159, CA No. 1:10-CV-01258 (D.D.C. July 27, 2010).

All compliance efforts should be documented carefully to permit the U.S. firm to prove later that it implemented a rigorous program in practice.

Federal False Claims Act

The Federal False Claims Act (FCA) was enacted in 1863 to protect the federal government from fraud perpetrated by unscrupulous Civil War contractors. Since 1986, the FCA has been successful in recovering more than $28 billion, increasingly through qui tam lawsuits. The FCA was recently amended by the Fraud Enforcement and Recovery Act of 2009, the Patient Protection and Affordable Care Act, and the Dodd-Frank Financial Reform Act. Today, the law is aimed at those responsible for the $100 billion or more in fraudulent activity diverted every year from federal health-care, defense, and other programs. The current version of the FCA makes liable any person who knowingly presents or causes to be presented a false or fraudulent claim to the U.S. government for payment or approval. The law also imposes liability for making false records or statements designed to conceal, avoid, or decrease an obligation to pay or transmit money or property to the federal government. The FCA does not apply to claims, records, or statements made under the IRC. Many FCA violations involve submission of false information while presenting payments to the federal government. The following Case in Point boxes include examples of false claims that have been submitted to the U.S. government:

Case in Point

This case centered around a contract awarded to Munford Construction in August 1991 for building and repairing washracks at Fort McClellan, Alabama. Differences arose early in the contract performance period and much disagreement ensued. The government contended that Munford failed to commence work on time, failed to make timely progress, offered nonconforming performance, and submitted dual claims for building and repairing washracks.[3]

Case in Point

An employee alleged that employer Dyncorp engaged in multiple fraud schemes in violation of the False Claims Act. These schemes included seeking double reimbursement for travel expenses, reimbursement for inflated or unearned per diem, danger pay, charging the government for services without verifying documentation, and seeking reimbursement for employee living expenses such as cable television and lawn services, and others.[4]

Private citizens using a unique characteristic of the FCA known as a qui tam action are allowed to challenge FCA violations. A qui tam plaintiff, or a whistleblower, is a private citizen who files a civil lawsuit against an alleged fraudster on behalf of himself or herself and the U.S. government. If the government does not pursue the action, the plaintiff pursuing the case is entitled to no less than 25 percent and no more than 30 percent of the proceeds of the judgment or settlement. The qui tam plaintiff is entitled to collect from the defendants reasonable attorneys' fees and expenses incurred from pursuing the claim. Without the help of whistleblowers, the government would discover few fraudulent transactions and thus, would not be able to secure many recoveries at all.

The legal claim must be brought in the name of the U.S. government. The federal government must be provided with a written disclosure of substantially all material evidence and information that serves as a basis for the lawsuit. The purpose of the written disclosure requirement is to provide the United States with enough information on alleged

[3] *Al Munford, Inc. v. U.S.*, 34 Fed. Cl. 62 (1995).

[4] *U.S. ex. rel. Longrest v. Dyncorp.*, 2006 U.S. Dist. LEXIS 1838 (M.D. Fla. Jan. 9, 2006).

fraud to be able to make a well-reasoned decision on whether it should participate in the filed lawsuit or allow the qui tam plaintiff to proceed alone. The qui tam plaintiff serves his own best interest by producing a disclosure statement that is thorough but not overdone. Inadequate disclosure increases the probability that the government may decline to intervene or move to dismiss the lawsuit. Also, a qui tam plaintiff is typically awarded less money while incurring substantially more expenses when the government does not join the legal action.

Once a qui tam plaintiff initiates a lawsuit by filing a complaint in camera, the complaint and accompanying material remain under seal for a minimum of 60 days. The purpose of this requirement is to provide the federal government with enough information on the alleged fraud to make an informed decision on whether to intervene. In practice, it is not uncommon for government reviews of FCA filings to take one to two years. While the lawsuit is under seal, the government can exercise a number of options to further its investigatory goals. First, the government can decide to join the civil lawsuit. If the government intervenes, it assumes primary responsibility for pursuing the lawsuit. The government may not eliminate the qui tam plaintiff's right to continue as a party to the lawsuit. If the government wishes to limit the qui tam plaintiff's participation, the trial court may restrict the number of witnesses the plaintiff may call, the duration of the witnesses' testimony, or the length of the plaintiff's cross-examination. The government is allowed to pursue the action through an alternative remedy such as administrative relief. If the government pursues such an alternative remedy then the qui tam plaintiff retains the same legal rights as in the initial action. When the government intervenes, the plaintiff relinquishes a great deal of control to determine the outcome of the lawsuit. Government investigators rarely provide information to the qui tam plaintiff concerning any new facts or evidence uncovered in any investigation. The passage of time without updates may be disconcerting because some investigations take years before findings are presented to an appropriate judicial body.

A second alternative for the government is not to participate in the lawsuit. If the government notifies the court that it will not intervene then the qui tam plaintiff has the right to conduct the lawsuit. The government retains only the right to receive copies of all pleadings filed in the action and deposition transcripts.

A third option open to the government is to intervene and settle the lawsuit. A fourth alternative available to the government is to dismiss the lawsuit. If the qui tam plaintiff objects, the suit may be dismissed only after the government has notified the plaintiff and the court has granted the plaintiff a hearing on the issue.

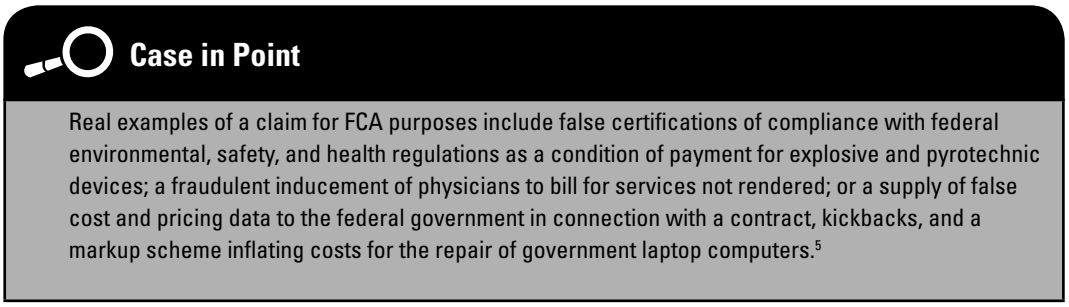
The FCA sets up a two-part test to determine whether a federal court can hear a qui tam case. First, the court must ascertain whether the fraud allegations are based on publicly disclosed material. To establish subject matter jurisdiction, the qui tam plaintiff must prove by a preponderance of the evidence that the suit is not based upon a prior public disclosure or, if it is, that he or she was an original source of the information. The three ways in which prior public disclosure can occur include (1) in a civil, criminal, or administrative hearing; (2) in a Congressional, administrative, or General Accountability Office (GAO) report, audit, or investigation; or (3) in the media (unless the action is brought by the Attorney General). The broader a court construes these types of disclosures, the more likely it is that a case will be barred by a court. A federal court may hear a qui tam action based upon information previously disclosed to the public if the qui tam plaintiff is the original source of the information. The FCA defines an original source as an individual who either (1) prior to a public disclosure, voluntarily disclosed to the government the information on which the allegations or transactions in a claim are based, or (2) has knowledge that is independent of and materially adds to the publicly disclosed allegations or transactions, and who has voluntarily provided the information to the government before filing an action.

If the qui tam plaintiff is convicted of criminal conduct stemming from his or her role in violation of the FCA, that person shall be dismissed from the civil action and shall not receive any share of the proceeds of the action. Even masterminds of fraud perpetrated against the federal government may receive qui tam awards for initiating suits if they are not criminally convicted. The amount of the award is not guaranteed and may be reduced by a court to zero. No qui tam suit may be filed against a member of Congress, a member of the judiciary, or a senior executive branch official if the action is based on evidence or information known to the government when the action was brought. A qui tam action against a state is barred because a state or state agency is not a person, for purposes of qui tam liability. Local governments, such as counties and cities, are amenable to suit.

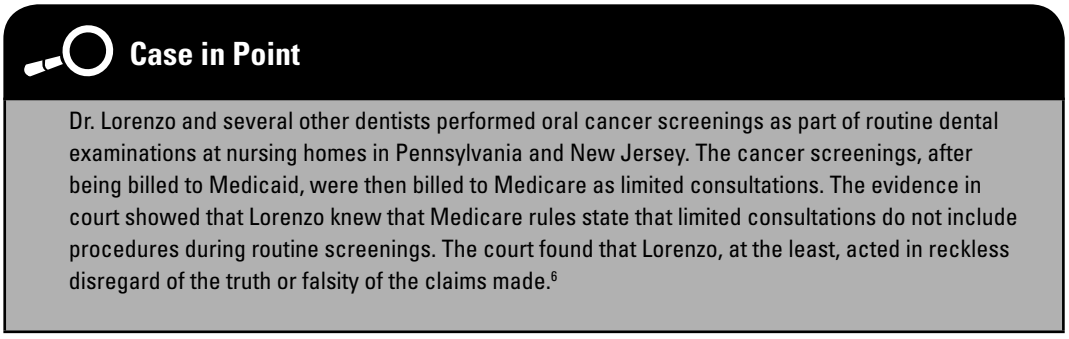
Under the FCA, section 3729(a)(1) establishes liability for submitting a false claim and section 3729(a)(2) creates liability for making or using false records in support of a false claim. FCA liability for making or using false records includes an obligation to pay or transmit money or property to the United States. All legal claims filed under

section 3729(a) require proof of several elements to establish a violation of the FCA: (1) a claim must be presented to the government by the defendant or the defendant must cause a third party to submit a claim; (2) the claim must be made knowingly; (3) the claim must be false or fraudulent; (4) the claim must be material; (5) causation for the claim must exist; and (6) the claim must have resulted in damage to the federal government.

The determination of whether an actual claim has been made is often not a simple task. The term claim includes any request or demand, whether under a contract or otherwise, for money or property that is presented to an officer, employee, or agent of the United States; is made to a contractor, grantee, or other recipient if the U.S. government provides, or has provided, any portion of the money or property which is requested or demanded or if the government will reimburse such contractor, grantee, or other recipient for any portion of the money or property which is requested or demanded; or is made to a contractor, grantee, or other recipient if the money or property is to be spent or used on behalf of the United States or to advance a government program or interest. Claim also includes retaining overpayments of money (of importance to health care providers). The FCA does not attach liability to the underlying fraudulent activity or to the government's wrongful payment, but to the claim for payment. The claim does not have to be presented to an officer or employee of the federal government.



The qui tam plaintiff does not have to prove specific intent to defraud on the part of the defendant. The knowledge element is satisfied if the fraudster had actual knowledge of the falsity of the claim, acted in deliberate ignorance of the truth or falsity of the claim, or acted with reckless disregard of the truth or falsity of the claim. The requisite intent is the knowing presentation of what is known to be false. Negligence and innocent mistakes are not sufficient to establish liability.



By not requiring proof of specific intent to defraud, Congress and the judiciary have extended liability to almost anyone associated with a false or fraudulent claim.

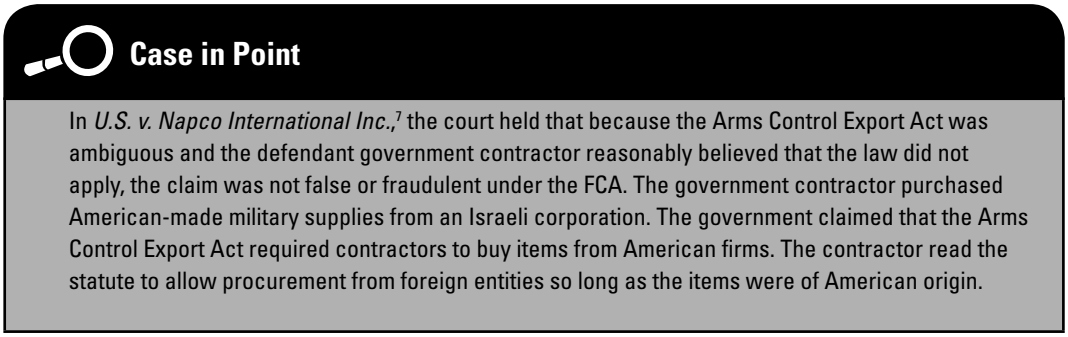
Government vendors and others who submit claims for payment to the government have a strong incentive to make sure that their claims are accurately presented. The broadened knowledge requirement makes it risky for individuals to look the other way with regard to a fraudulent claim.

[5] *U.S. ex rel. Holder v. Special Devices Inc.*, 296 F. Supp. 2d 1167 (C.D. Cal. 2003); *U.S. v. Merck-Medco Managed Care, LLC*, 336 F. Supp. 2d 430 (E.D. Pa. 2004); *U.S. ex. rel. Campbell v. Lockheed Martin Corp.*, 282 F. Supp. 2d 1324 (M.D. Fla. 2003); *U.S. ex. rel. Barrett v. Columbia/HCA Healthcare Corp.*, 251 F. Supp. 2d 28 (D.D.C. 2003); *U.S. v. Rachel*, 289 F. Supp. 2d 688 (D. Md. 2003).
[6] *U.S. v. Lorenzo,* 768 F. Supp. 1127 (E.D. Pa. 1991).

The FCA is not designed to reach every kind of fraud committed against the federal government. The words "false" and "fraudulent" were not defined by Congress in the statute. Because the FCA uses the disjunctive "or," no need exists for a qui tam plaintiff to prove a claim is both false and fraudulent. Either will do.

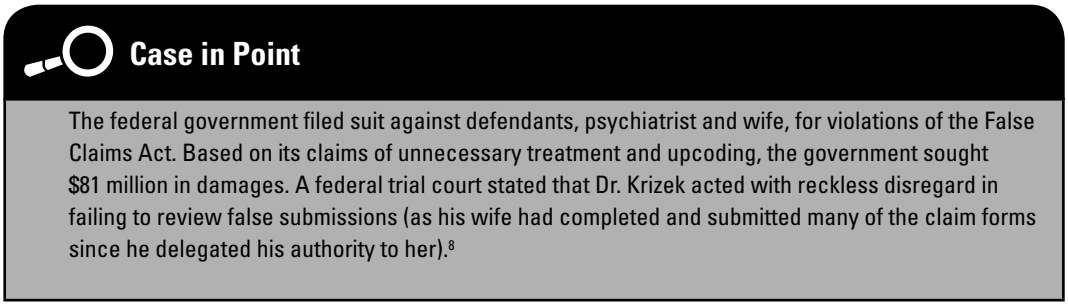
A false claim can take many forms, the most common being a claim for goods or services not provided, or provided in violation of contract terms, specification, statute, or regulation. Although the determination of whether the defendant in a given case submitted a false or fraudulent claim depends on the court's application of the FCA, a regulation, or a contract, a violation of laws or regulations alone does not create a cause of action under the FCA. The withholding of information critical to the government's decision to pay is the essence of a false claim.

Courts have generally held that contractors are not liable under ambiguous or vague contract terms when the contractor's interpretation is reasonable.



The FCA requires that the qui tam plaintiff prove materiality to make a successful claim. Materiality is defined as whether the false or fraudulent claim has a natural tendency to influence agency action or is capable of influencing agency action.

Numerous courts have ruled that a FCA defendant's action must be the cause of the government's loss. The causation element is satisfied if a person presents or causes to be presented a false or fraudulent claim to the government for approval. The statute applies to any person who knowingly assisted in causing the government to pay claims that were grounded in fraud, without regard to whether that person had direct contractual relations with the government. Thus, a person need not be the one who actually submitted a claim for payment.



Under the FCA, liability for a false claim is not contingent upon the government suffering damages. Some courts have held the government does not have to sustain damages to invoke FCA liability. Again, the focus of FCA liability is on the presentation of a false claim, not the payment of it. In attaching liability to the claim itself, Congress decided that fraud against the government is best deterred by attacking the act that presents the risk of wrongful payment by the United States. Another minority line of cases requires that the false or fraudulent claim actually result in financial loss to the government. As a practical matter, fraud enforcement efforts would be hindered if no legal cause of action arose until the government paid the claim.

[7] 835 F. Supp. 493 (D. Minn. 1993)
[8] *U.S. v. Krizek*, 111 F. 3d 934 (D.C. Cir. 1997)

The FCA sets out three types of monetary interest in a claim. First, the statute awards the plaintiff a percentage of the total recovery ranging from 15 to 30 percent. Second, the law provides for reasonable expenses, attorneys' fees, and costs to the plaintiff who pursues the claim. Third, if the qui tam plaintiff has been discharged, demoted, suspended, harassed, or discriminated against by his or her employer because of lawful acts, then the relator is entitled to all necessary relief. Employees who initiate qui tam lawsuits under the FCA against their employers are protected by the statute from retaliation. A whistleblower action under the FCA is a separate and distinct claim from the qui tam action itself.

The FCA provides the court discretion in the determination of the relator's share of any recovery. The federal government has developed various internal guidelines in establishing an appropriate share for qui tam plaintiffs. It is important for forensic accountants to be aware of the various factors for consideration for a possible increase in the percentage:

1. The plaintiff reported the fraud promptly.
2. When he learned of the fraud, the relator tried to stop the fraud or reported it to a supervisor or the government.
3. The qui tam filing, or the ensuing investigation, caused the offender to halt the fraudulent activity.
4. The complaint warned the government of a significant safety issue.
5. The complaint exposed a nationwide practice.
6. The relator provided extensive, first-hand details of the fraud to the government.
7. The government had no knowledge of the fraud.
8. The relator provided substantial assistance during the investigation or pretrial phase of the case.
9. At his deposition or trial, the relator was an excellent, credible witness.
10. The relator and his counsel supported and cooperated with the government during the entire proceeding.
11. The case went to trial.
12. The FCA recovery was small.
13. The filing of the complaint had a substantial adverse impact on the relator.
14. The relator's counsel provided substantial assistance to the government.

Items for consideration for a possible decrease in percentage include the following:

1. The plaintiff participated in the fraud.
2. The plaintiff delayed substantially in reporting the fraud or filing the complaint.
3. The plaintiff, or plaintiff's counsel, violated FCA procedures (for example, the complaint was served on the defendant or not filed under seal, the plaintiff publicized the case while still under seal, or a statement of material facts and evidence was not provided).
4. The plaintiff had little knowledge of the fraud or only suspicions.
5. The plaintiff's knowledge was based primarily on public information.
6. The plaintiff learned of the fraud in the course of his government employment.
7. The government already knew of the fraud.
8. The plaintiff or plaintiff's counsel did not provide any help after filing the complaint, hampered the government's efforts in developing the case, or unreasonably opposed the government's position in litigation.

In light of the longevity and success of the FCA, Congress, in the Deficit Reduction Act of 2005, created a large financial reward for states that adopt state versions of the FCA. Any state that passes its own false claims act with qui tam provisions that are at least as strong as those of the FCA is eligible for a 10 percent increase in its share of Medicaid fraud recoveries. Now the majority of states have their own version of the FCA, with variations. Other states are considering enacting a state false claims law.

Federal Anti-Kickback Statute

The federal anti-kickback statute, found in 42 U.S.C. sections 1320a-7b, is a criminal statute that prohibits knowingly and willfully paying or receiving any compensation directly or indirectly, in cash or in kind, in exchange for

prescribing, purchasing, or recommending any service, treatment, or item for which payment will be made by Medicaid, Medicare, or any other federally funded health care program. The anti-kickback statute is broadly drafted and establishes liability for individuals and entities on both sides of prohibited transactions. Said prohibited transactions include not only kickbacks and bribes, but also an array of economic relationships that can be more complex than simple payment for services. Although the anti-kickback statute does not afford a private right of action, the Federal False Claims Act provides a vehicle whereby individuals may bring qui tam actions alleging violations of the anti-kickback law.

Case in Point

An example of a kickback is a hospital overcharging a radiologist for a transcription copy, then getting reimbursed through Medicare Part A. The radiologist is then faced with either paying the higher amount, beyond what Medicare will cover for the services, or having the hospital terminate the contract for the physician to provide radiology services. If investigated, the radiologist would not be in trouble for refusing to pay, but the hospital would be in violation for its actions.

A conviction under the anti-kickback statute requires the government to prove beyond a reasonable doubt that the defendant knowingly and willingly solicited or received compensation or anything of value in return for, or to induce, referral of program-related business. To prove that the defendant knowingly and willingly solicited or received compensation, the accuser must prove that the alleged offender was aware that his or her conduct was unlawful and acted voluntarily and purposely. The 2010 Patient Protection and Affordable Care Act makes clear that actual knowledge of the anti-kickback statute is not necessary for a conviction. The second element applies to not just money but anything of value.

Case in Point

In one case, the benefit of heart station time was compensation as the mere opportunity to work can be something of value.[9]

The third element of in return for or to induce business has been interpreted by most courts using the one purpose standard. This means the statute is violated if one purpose of the offer or payment was to induce referrals. The Secretary of Health and Human Services position is that to induce means an intent to exercise influence over the reason or judgment of another in an effort to cause the referral of program-related business.

The anti-kickback statute is so broad that it may outlaw innocuous conduct. The Office of Inspector General (OIG) has chosen to outline 26 safe harbor provisions to protect certain conduct and business arrangements that might otherwise fall within the ambit of the statute. Each transaction or arrangement, however, must be evaluated on a case-by-case basis to ascertain whether it constitutes an anti-kickback violation. The following list is an enumeration of some, but not all, of the safe harbor provisions set forth by the OIG:

1. *Investment interest safe harbor.* This protects an investor who holds a security issued by an entity, provided he or she satisfies certain statutory requirements. This safe harbor applies to three types of securities: investments in large entities, those in small entities, and those in medically underserved areas.
2. *Sale of physician practices.* This safe harbor is divided into two sections: sales to another practitioner and sales to a hospital or other entity. Each type of sale has different criteria.
3. *Practitioner recruitment safe harbor.* This is designed to allow areas that have difficulty attracting physicians to offer incentives to potential practitioners. Various conditions must be met for this safe harbor.

[9] *U.S. ex. rel. Fry v. Health Alliance of Greater Cincinnati*, 2009 WL 485501 (S.D. Ohio Feb. 26, 2009).

4. *Rental agreements.* This safe harbor prevents prosecution of space rental agreements, equipment rental agreements, and personal services and management contracts if payments thereunder meet the following criteria: (*a*) the written contract covers all of the property or services exchanged between the parties; (*b*) the contract is in writing and is signed by all parties; (*c*) the schedule of use, length of each use, and exact rent is set for those property or services that are only used periodically; (*d*) the contract is for at least one year; (*e*) the payments are equal to fair market value and are set in advance; and (*f*) the space or amount of services is no more than necessary for a reasonable business purpose.
5. *Referral services safe harbor.* This protects organizations that operate referral services for a fee, such as professional societies or consumer groups. The safe harbor does not extend to situations where the operator of the referral service adjusts the fees that it charges participating physicians based on the number of referrals the physician makes to the operator of the service.
6. *Referral agreement safe harbor.* This is designed to allow a practitioner to refer a patient to another party for the provision of a specialty service, with an agreement that the patient will be referred back at a specified time or under certain conditions.

Violations of the anti-kickback statute may result in criminal and civil penalties. Violators may be fined up to $25,000, imprisoned up to five years, or both. The government also has the right to bar a physician or other violator from participating in Medicaid or Medicare for up to one year. Civil remedies may also be imposed.

Stark Law

The Stark Law, found at 42 U.S.C. section 1395nn, prohibits physicians from referring Medicare patients for certain designated health services (DHS) to an entity with which the physician or a member of the physician's immediate family has a financial relationship, unless an exception applies. This law also forbids an entity from presenting or causing to be presented a bill or claim to anyone for a DHS furnished as a result of a prohibited referral. A financial relationship includes an ownership or investment interest in an entity by a physician or his or her immediate family member, or a compensation arrangement between a physician or his or her immediate family member and the entity. Prohibited compensation arrangements include direct or indirect remunerations, which can be any payment, discount, forgiveness of debt, or other benefit made directly or indirectly, in cash or in kind. A referral includes a request for any DHS payable under Medicare or Medicaid. Strict liability is imposed for referrals if a financial relationship exists. DHS include clinical laboratory services; physical therapy services; occupational therapy services; outpatient speech-language pathology services; radiology and certain other imaging services; radiation therapy services and supplies; durable medical equipment and supplies; parenteral and enteral nutrients, equipment, and supplies; prosthetics, orthotics, and prosthetic devices, and supplies; home health services; outpatient prescription drugs; and inpatient and outpatient hospital services.

Any entity receiving a prohibited referral may not make a Medicare claim. Such an entity is also forbidden from billing any individual, third-party payor, or other entity for DHS for which the physician made the referral. Once the government shows that an individual or entity has violated the Stark law, the burden shifts to the defendant to demonstrate that the offender's conduct falls within one of the established exceptions.

The Stark law provides four sanctions or penalties. First, claims filed for services that violate the self-referral prohibitions will result in nonpayment. Next, civil monetary penalties and exclusion from Medicaid and Medicare participation may occur. The penalty may not exceed $15,000 per violation. Also, a civil penalty not to exceed $100,000 applies to circumvention schemes (those intended to go around the statute). Any person who is subject to and fails to meet the reporting requirements faces a civil penalty not to exceed $10,000 per day in which reporting was required. False Claims Act liability also may apply.

The Anti-Kickback Statute and the Stark Law

	The Anti-Kickback Statute (42 USC Section 1320a-7b[b])	The Stark Law (42 USC Section 1395nn)
Prohibition	Prohibits offering, paying for, soliciting, or receiving anything of value to induce or reward referrals or generate federal health care program business	Prohibits a physician from referring Medicare patients for designated health services to an entity with which the physician (or immediate family member) has a financial relationship, unless an exception applies Prohibits the designated health services entity from submitting claims to Medicare for those services resulting from a prohibited referral
Referrals	Referrals from anyone	Referrals from a physician
Items or Services	Any items or services	Designated health services
Intent	Intent must be proven (knowing and willful)	No intent standard for overpayment (strict liability) Intent required for civil monetary penalties for knowing violations
Penalties	Criminal: • Fines up to $25,000 per violation • Up to a five-year prison term per violation Civil or Administrative: • False Claims Act liability • Civil monetary penalties and program exclusion • Potential $50,000 civil monetary penalty per violation • Civil assessment of up to three times amount of kickback	Civil: • Overpayment or refund obligation • False Claims Act liability • Civil monetary penalties and program exclusion for knowing violations • Potential $15,000 CMP for each service • Civil assessment of up to three times the amount claimed
Exceptions	Voluntary safe harbors	Mandatory exceptions
Federal Health Care Programs	All	Medicare or Medicaid

Money Laundering Laws

Forensic accountants should familiarize themselves with various federal laws and regulations to fully understand their part in the fight against money laundering and terrorist financing. One important law in this area is the Bank Secrecy Act (BSA) (Titles I and II of Public Law 91-508 or 12 U.S.C. sections 1829b, 1951-1959, and 31 U.S.C. sections 5311-5330) and related regulations. BSA regulations require financial institutions to keep an original microfilm or other copy of documents related to checking and savings accounts. These documents include signature cards; bank statements; a copy of both sides of checks, drafts, money orders, and cashier's checks over $100; the identity of each certificate of deposit purchaser; and deposit slips. Financial institutions are also mandated to capture and retain data on the identity of the purchasers of monetary instruments in amounts of $3000 or more or transfers of funds of $3000 or more.

Moreover, financial institutions are obligated to file a Currency Transaction Report (CTR) for deposits, withdrawals, exchanges of currency, or other payment or transfer by or through the financial institution which involves more than $10,000. A CTR contains the name(s) of the individual(s) conducting the transaction(s) or the name(s) of the person or entity on whose behalf the transaction is being conducted. Casinos licensed by state or local government and having annual gross revenues over $1 million must file a form similar to the CTR.

The BSA also requires financial institutions to report "any suspicious transaction relevant to a possible violation of law or regulation." The federal government has developed a form known as a Suspicious Activity Report (SAR) which must be filed when there is

- any known or suspected criminal violation involving the financial institution and the latter has a substantial basis for identifying one of its directors, officers, employees, or agents as having committed the act or aided in its commission;
- any known or suspected criminal violation involving the financial institution and totaling $5000 or more and the institution has a substantial basis for identifying a suspect or suspects; or
- any transaction conducted through the financial institution where it is suspected that (1) the funds were derived from illegal activities; (2) the transaction is designed to evade the BSA regulations; or (3) the transaction appears to have no business purpose or appears unusual.

A related, but broader reporting requirement is contained in the IRC (26 U.S.C. section 6050I). Any person engaged in a trade or business and who, in the course of operating that business, receives more than $10,000 in cash in one or more related transactions must file IRS Form 8300. Cash includes U.S. and foreign currency, cashier's checks, bank checks, traveler's checks, bank drafts, and money orders. Transactions subject to the reporting requirement include any sale made in a retail business, a sale of real property, exchange of cash for cash, a collectible, consumer durable, and a conversion of cash to a negotiable instrument. Civil and criminal penalties apply to failure to file Form 8300 or filing a false form.

A second important law is the Money Laundering Control Act of 1986 (MLCA) (18 U.S.C. sections 1956–57, as amended by the Antiterrorism and Effective Death Penalty Act of 1996). This law imposes criminal liability on any person who conducts a monetary transaction knowing that the funds involved were derived from unlawful activity. Unlike prior laws, this law targets the essence of money laundering (the conversion of funds derived from illegal activities into a liquid or usable form). The reporting requirements of prior laws failed because they imposed an obligation not on the suspected money launderer, but on the financial institution.

The MLCA contains two main provisions. Section 1956 addresses the knowing and intentional transportation or transfer of monetary funds derived from specified unlawful activities (SUAs). Section 1957 covers transactions involving property exceeding $10,000 in value derived from the specified unlawful activities.

Section 1956 investigations have no dollar amount limit (with few exceptions) and no requirement that a financial institution be involved. This section's three subdivisions address domestic money laundering and participation in transactions involving criminal proceeds, international money laundering, transportation of criminally derived monetary instruments in foreign commerce, and the use of government sting operations to expose criminal activity.

With regard to section 1956(a)(1), the government must prove, beyond a reasonable doubt, that the defendant conducted or attempted to conduct a financial transaction knowing that the property involved in the transaction represented the proceeds of some form of unlawful activity, and which in fact involved the proceeds of specified unlawful activity (SUA are various crimes set out in federal statutes) with one of the following intents:

a. Acting with the intent to promote the carrying on of a SUA
b. Acting with the intent to engage in conduct which violates section 7201 (tax evasion) or section 7206 (false return or false records)

With regard to section 1956(a)(2), the government must prove beyond a reasonable doubt that the defendant transports, transmits, or transfers (or attempts to do so) a monetary instrument or funds from a place in the United States to or through a place outside the United States, or to a place in the United States from or through a place outside the United States with one of the following intents:

a. The intent to promote a SUA
b. Having the knowledge that the funds involved in the transportation, transmission, or transfer represent the proceeds of some form of unlawful activity and knowing that such transportation, transmission, or transfer is designed in whole or in part to conceal or disguise the nature, location, source, ownership, or the control of the proceeds of the SUA or to avoid a federal or state transaction reporting requirement

There is no requirement under this section that the monetary instrument or funds be the product of unlawful activity. For both sections (*a*) and (*b*), the government does not have to prove that a defendant intended to violate a specific statute, but did intend to promote or facilitate an activity that he or she knew to be illegal. A violation may occur even if the promoted SUA is not completed.

The third part of section 1956(a) is a sting provision that allows for undercover operations where the government, or a direct informant, represents funds as being derived from a SUA. The elements include that a defendant conducts or attempts to conduct a financial transaction involving property represented to be either proceeds of a SUA or property used to conduct or facilitate a SUA. The government must prove that the defendant's intent was to promote the carrying on of a SUA; conceal or disguise the nature, location, source, ownership, or control of property represented to be proceeds of the SUA; or avoid a federal or state transaction reporting requirement.

The word "proceeds" is not defined in the statute. It has been judicially interpreted to include a line of credit, real property, uncashed checks, inventory acquired in a fraud scheme, and assets concealed in bankruptcy fraud. The government does not have to trace proceeds involved in a scheme back to a particular offense. Instead, the government may present evidence that the defendant engaged in conduct typical of criminal activity and had no other legitimate source of funds. Evidence of a lack of a legitimate source of income will probably not support a conviction standing alone. Section 1956 does not require tracing when illegal proceeds are commingled with legitimate funds. To sustain a conviction, the government need only prove that part of the funds involved in a transaction represent illegal proceeds.

The occurrence of a financial transaction is critical to a violation of section 1956. The term *financial transaction* means a transaction which in any way or degree affects interstate or foreign commerce involving the movement of funds by wire or other means; involving one or more monetary instruments; or involving the transfer of title to any real property, vehicle, vessel, or aircraft; or a transaction involving the use of a financial institution which is engaged in, or the activities of which affect interstate or foreign commerce in any way or degree. Virtually any exchange of money between two parties constitutes a financial transaction subject to criminal prosecution provided that the transaction has a minimal effect on interstate commerce. Courts have ruled that mere possession of drug money in one's house and mere transportation of funds by car or airplane are not financial transactions.

The criminal penalty for a violation of sections 1956(a)(1) and (2) is a penalty up to $500,000 or twice the value of the monetary instruments involved, whichever is greater, or imprisonment up to 20 years or both. The penalty for violation of (a)(3) is an undetermined fine, or up to 20 years in prison, or both. Violators under sections (a)(1) and (2) are also liable for a civil penalty of not more than the greater of the value of the property, funds, or monetary instruments involved in the transaction, or $10,000.

Section 1957 is aimed at prohibiting all monetary transactions in criminally derived property over $10,000. An individual need not actually exchange or launder funds nor have any intent to further or conceal unlawful activity to be covered by the statute. The wide ambit of section 1957 may criminalize seemingly innocent commercial transactions. In essence, section 1957 prohibits the knowing receipt or disbursement of more than $10,000 in criminally derived proceeds if a financial institution is utilized at some point. The statute prohibits an actual or attempted monetary transaction of over $10,000 in SUA proceeds. To prove a violation of section 1957, the government must prove beyond a reasonable doubt that the defendant knowingly engaged in, or attempted to engage in, a monetary transaction in criminally derived property of a value in excess of $10,000 and the property is derived from a SUA. The statute applies not only to a person who engages in a monetary transaction with a financial institution knowing the cash is criminal proceeds but also to a financial institution employee who accepts cash knowing it is criminal proceeds.

The term monetary transaction is narrower than the term financial transaction as used in section 1956. The terms monetary transaction and financial institution mean the deposit, withdrawal, transfer, or exchange, in or affecting interstate or foreign commerce, of funds or a monetary instrument by, through, or to a financial institution, including any transaction that would be a financial transaction under section 1956(c)(4)(B) (as previously noted), but

such term does not include any transaction necessary to preserve a person's right to representation as guaranteed by the Sixth Amendment to the U.S. Constitution. The term financial institution includes any financial institution such as banks; savings and loans; trust companies; credit unions; securities brokers; loan or finance companies; money transmitters; futures commissions merchants; credit card system operators; precious metal dealers; jewelers; insurance companies; telegraph companies; companies involved in the sale of vehicles, aircraft, or boats; persons involved in real estate closings; pawnbrokers; and travel agents.

The criminal penalty for a violation of section 1957 is a fine up to twice the amount of any criminally derived property, up to 10 years imprisonment, or both. Section 1957 does not carry any civil penalties.

Specified Unlawful Activity—Title 18 U.S.C Sections 1956 and 1957 (Money Laundering Control Act of 1986)

Violations of Federal and State or foreign laws which are identified as specified unlawful activities included in Title 18, U.S.C., Section 1956(c)(7). Some of the SUAs have been added since the law was originally passed, and their date of inclusion in the statute is shown. The following list is not necessarily inclusive of all SUAs shown in federal statutes.

Title	Section	Violation of Federal Law Relating to…	Effective Date
11	101 et. seq.	Bankruptcy (any offense involving fraud under Bankruptcy Act of 1978)	10/27/86
15	78m, 78dd-1, 78ff	Foreign Corrupt Practices Act (felony violations)	10/28/92
18	32	Destruction of Aircraft	04/24/96
18	37	Violence at International Airports	04/24/96
18	115	Influencing, impeding, or retaliating a federal official by treats to family	04/24/96
18	152	Bankruptcy (concealment of assets, false oaths and claims, bribery)	10/27/86
18	201	Bribery (bribery of public officials and witnesses)	10/27/86
18	215	Bribery (commissions or gifts for procuring loans)	10/27/86
18	224	Bribery (in sporting contests)	10/27/86
18	351	Congressional or cabinet member assassination	04/24/96
18	471	Counterfeiting (obligations of securities of United States)	10/27/86
18	472	Counterfeiting (uttering counterfeit obligations or securities)	10/27/86
18	473	Counterfeiting (dealing in counterfeit obligations or securities)	10/27/86
18	500	Counterfeiting (money orders)	10/27/86
18	501	Counterfeiting (postage stamps, postage meter stamps, and postal cards)	10/27/86
18	502	Counterfeiting (postage and revenue stamps of foreign governments)	10/27/86
18	503	Counterfeiting (postmarking stamps)	10/27/86
18	513	Counterfeiting (securities of states and private entities)	10/27/86
18	542	Customs (entry of goods by means of false statements)	11/18/88
18	545	Customs (smuggling goods into the United States)	10/27/86
18	549	Customs (removing goods from the custody of customs)	11/18/88
18	641	Embezzlement (public money, property of records)	10/27/86
18	656	Embezzlement (theft, embezzlement, or misapplication by bank officers or employee)	10/27/86
18	657	Embezzlement (lending, credit, and insurance institutions)	11/18/88

Specified Unlawful Activity—Title 18 U.S.C Sections 1956 and 1957 (Money Laundering Control Act of 1986) *(continued)*

Title	Section	Violation of Federal Law Relating to…	Effective Date
18	658	Embezzlement (property mortgaged or pledged to farm credit agencies)	11/18/88
18	659	Embezzlement (felonious theft from interstate shipment)	10/27/86
18	664	Embezzlement (from pension and welfare funds)	10/27/86
18	666	Embezzlement (theft of bribery concerning programs receiving federal funds)	10/27/86
18	793	Espionage (gathering, transmitting, or losing defense information)	10/27/86
18	794	Espionage (gathering or delivering defense information to aid foreign government)	10/27/86
18	798	Espionage (disclosure of classified information)	10/27/86
18	831	Prohibited transactions involving nuclear materials	04/24/96
18	844(f) or (i)	Destruction by fire or explosives of government property	04/24/96
18	875	Extortion and Threats (interstate communications)	10/27/86
18	892	Extortionate Credit Transactions (making extortionate extensions of credit)	10/27/86
18	893	Extortionate Credit Transactions (financing extortionate extensions of credit)	10/27/86
18	894	Extortionate Credit Transactions (collection of extensions of credit by extortion)	10/27/86
18	956	Conspiracy to kill, kidnap, maim, or injure certain property in a foreign country	04/27/96
18	1005	Fraud and False Statements (fraudulent bank entries)	11/29/91
18	1006	Fraud and False Statements (fraudulent credit institution entries)	11/29/90
18	1007	Fraud and False Statements (federal deposit insurance corporation transactions)	11/29/90
18	1014	Fraud and False Statements (fraudulent loan or credit applications)	11/29/90
18	1029	Fraud and False Statements (fraud and related activity-access devices)	11/18/88
18	1032	Fraud and False Statements (concealment of assets from conservator, receiver or liquidating agent of financial institution)	11/29/90
18	1084	Gambling (transmission of wagering information)	10/27/86
18	1114	Murder of U.S. law enforcement officer	04/24/96
18	1116	Murder of foreign officials, official guest, or internationally protected persons	04/24/96
18	1201	Kidnapping	10/27/86
18	1203	Kidnapping (hostage taking)	10/27/86
18	1341	Mail Fraud (frauds and swindles)	10/27/86
18	1343	Wire Fraud (fraud by wire, radio, or television)	10/27/86

Specified Unlawful Activity—Title 18 U.S.C Sections 1956 and 1957 (Money Laundering Control Act of 1986) *(continued)*

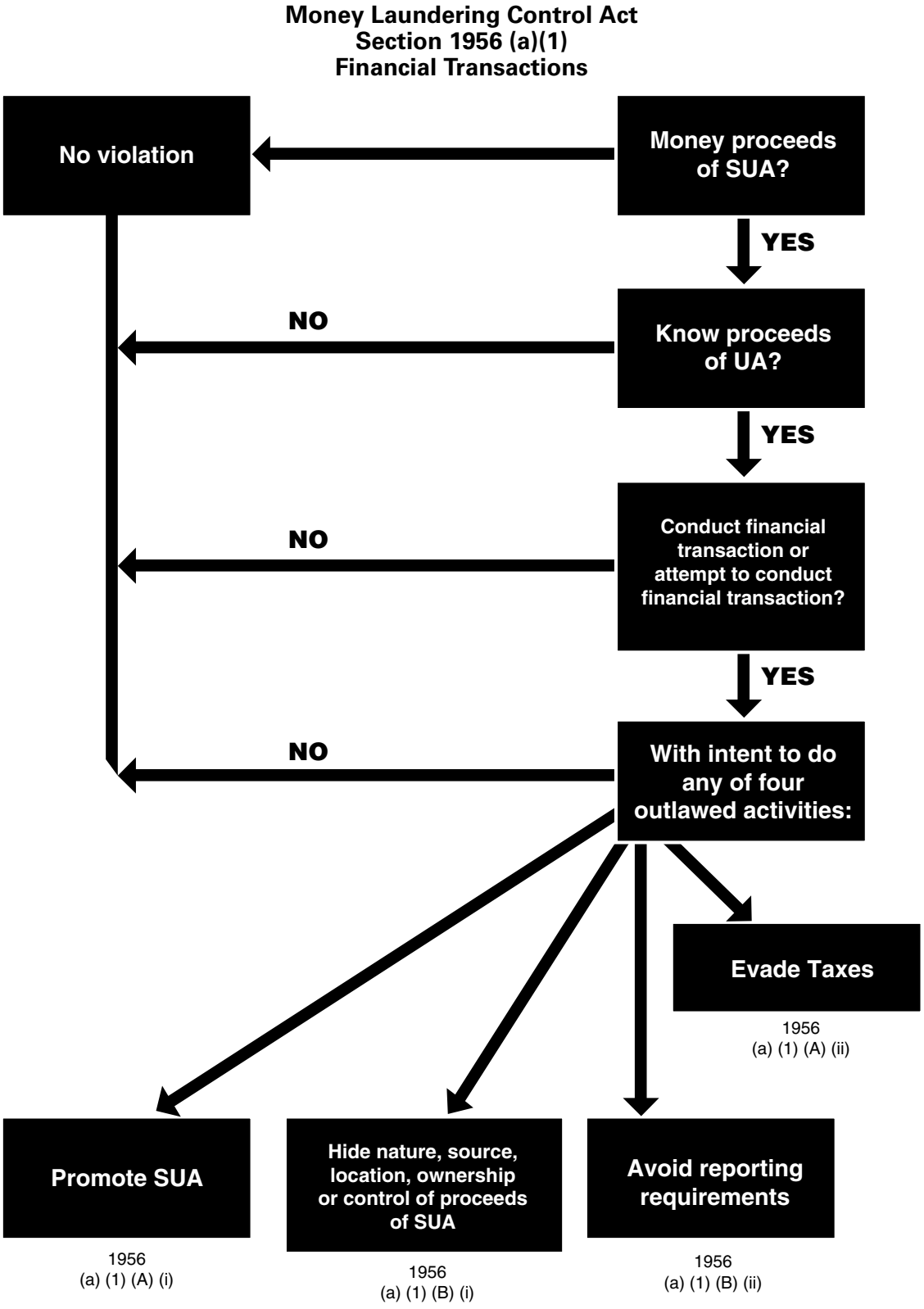
Title	Section	Violation of Federal Law Relating to…	Effective Date
18	1344	Bank Fraud (defrauding a federally chartered or insured financial institution)	11/18/88
18	1361	Willful injury of government property	04/24/96
18	1363	Destruction of property within special maritime jurisdiction	04/24/96
18	1461	Obscenity (mailing obscene or crime-inciting matter)	10/27/86
18	1462	Obscenity (importation or transportation of obscene matters)	10/27/86
18	1463	Obscenity (mailing indecent matter on wrappers or envelopes)	10/27/86
18	1464	Obscenity (broadcasting obscene language)	10/27/86
18	1465	Obscenity (transportation of obscene matters for sale or distribution)	10/27/86
18	1503	Obstruction of Justice (influencing or injuring officer or juror generally)	10/27/86
18	1510	Obstruction of Justice (obstruction of criminal investigations)	10/27/86
18	1511	Obstruction of Justice (obstruction of state or local law enforcement)	10/27/86
18	1512	Obstruction of Justice (tampering with a witness, victim, or an informant)	11/10/86
18	1513	Obstruction of Justice (retaliating against a witness, victim, or an informant)	11/10/86
18	1708	Theft From the Mail	10/28/92
18	1751	Presidential Assassination	04/24/96
18	1951	Racketeering (interference with commerce by threats or violence)	10/27/86
18	1952	Racketeering (interstate and foreign travel or transportation in aid of racketeering enterprises)	10/27/86
18	1953	Racketeering (interstate transportation of wagering paraphernalia)	10/27/86
18	1954	Racketeering (unlawful welfare or pension fund payments)	10/27/86
18	1955	Racketeering (prohibition of illegal gambling businesses)	10/27/86
18	1956	Racketeering (laundering of monetary instruments)	10/27/86
18	1957	Racketeering (engaging in monetary transactions in property derived from specified unlawful activity)	10/27/86
18	1958	Racketeering (use of interstate commerce facilities in the commission of murder-for-hire)	11/18/88
18	2113	Robbery and Burglary (bank robbery and incidental crimes)	10/27/86
18	2114	Robbery and Burglary (mail, money, or other property of United States)	10/27/86
18	2251	Sexual Exploitation of Children (sexual exploitation of children)	11/18/88
18	2251a	Sexual Exploitation of Children (selling or buying of children)	11/18/88
18	2252	Sexual Exploitation of Children (activities relating to material involving the sexual exploitation of minors)	11/18/88

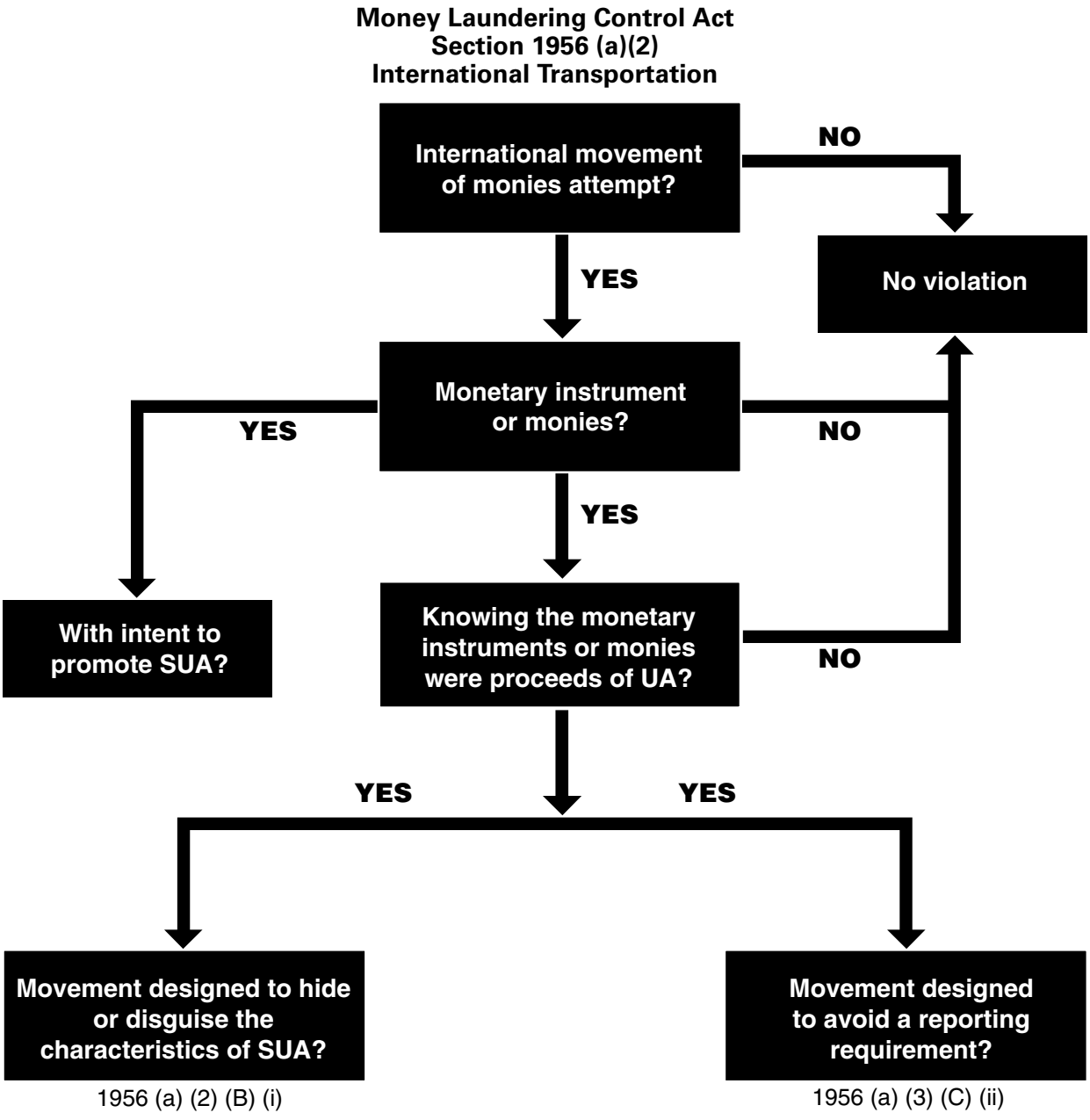
Specified Unlawful Activity—Title 18 U.S.C Sections 1956 and 1957 (Money Laundering Control Act of 1986) *(continued)*

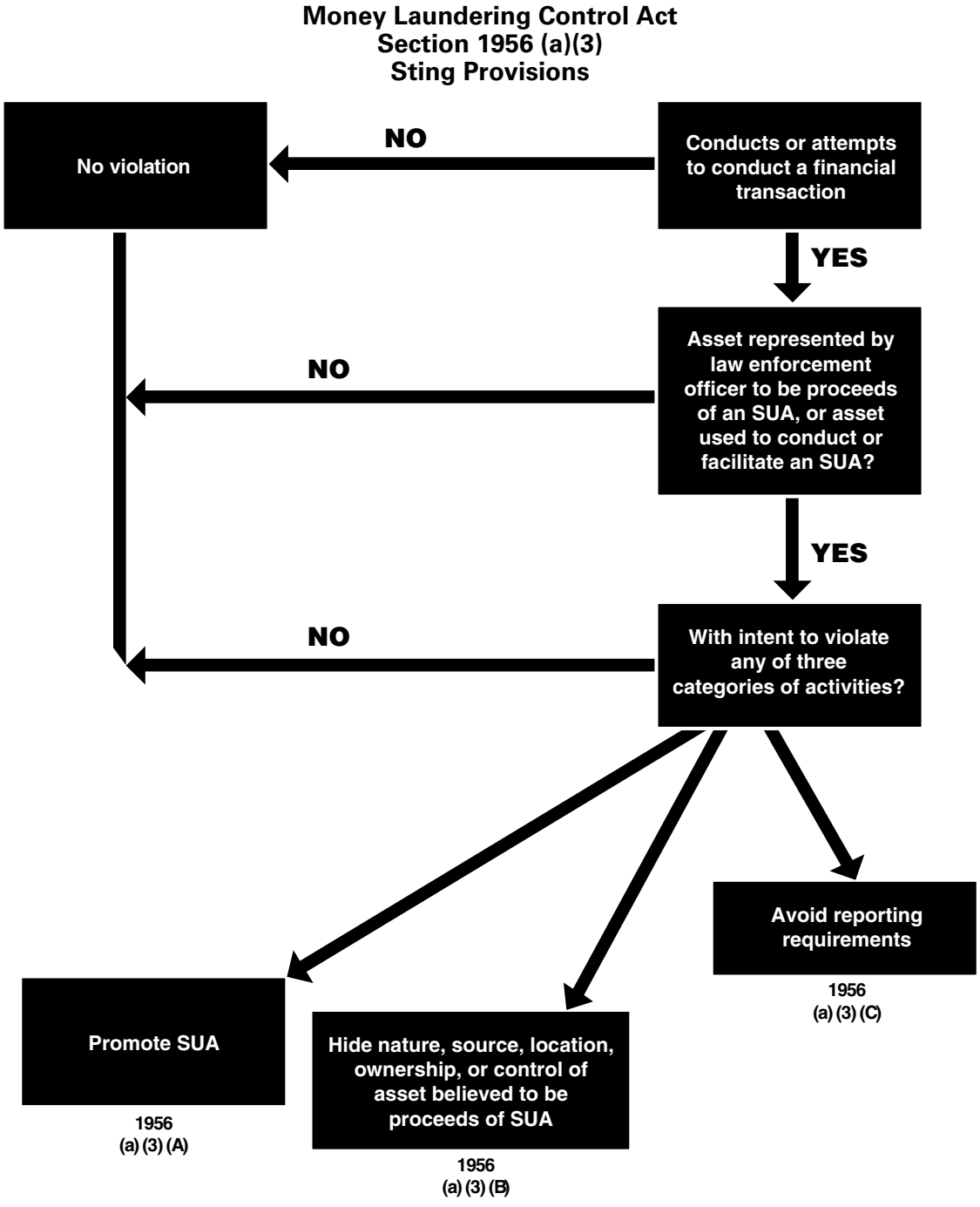
Title	Section	Violation of Federal Law Relating to…	Effective Date
18	2280	Violence Against Maritime Navigation	04/24/96
18	2281	Violence Against Maritime Fixed Platforms	04/24/96
18	2312	Stolen Property (interstate transportation of stolen motor vehicles)	10/27/86
18	2313	Stolen Property (sale or receipt of stolen motor vehicles)	10/27/86
18	2314	Stolen Property (interstate transportation of stolen property)	10/27/86
18	2315	Stolen Property (sale, receipt, or possession of stolen property moved interstate)	10/27/86
18	2319	Stolen Property (criminal infringement of a copyright)	11/18/88
18	2320	Trafficking in counterfeit goods and services	10/13/94
18	2321	Stolen Property (trafficking in certain motor vehicles or motor vehicle parts)	10/27/86
18	2332	Terrorist Acts Abroad Against United States Nationals	04/24/96
18	2332(a)	Weapons of Mass Destruction	04/24/96
18	2332(b)	International Terrorist Acts	04/24/96
18	2339A	Providing Material Support to Terrorists	
18	2342	Trafficking in Contraband Cigarettes (unlawful acts)	10/27/86
18	2421	Transportation for Illegal Sexual Activity (transportation of an individual interstate to engage in a criminal sexual activity)	10/27/86
18	2422	Transportation for Illegal Sexual Activity (coercion and enticement to travel interstate to engage in criminal sexual activity)	10/27/86
18	2423	Transportation for Illegal Sexual Activity (transportation of minors interstate to engage in criminal sexual activity)	10/27/86
18	2424	Transportation for Illegal Sexual Activity (filing factual statement about alien individuals)	10/27/86
19	1590	Tariff Act of 1930 (aviation smuggling)	11/18/88
21	830	Drug Abuse Prevention and Control (regulation of listed chemicals and certain machines)	11/18/88
21	848	Drug Abuse Prevention and Control (continuing criminal enterprise)	10/27/86
21	857 (repealed) 11/29/90 (now codified at 863)	Drug Abuse Prevention and Control (transportation of drug paraphernalia)	11/18/88
22	2778	Arms Export Control (criminal violations of Arms Export Control Act)	10/27/86
29	186	Labor-Management Relations (restrictions on financial transactions)	10/27/86
29	501(c)	Reporting and Disclosure (fiduciary responsibility of officers of labor organizations embezzlement of assets)	10/27/86
33	1251 et seq.	Federal Water Pollution Control Act (felony violations concerning the discharge of pollutants into the Nations waters)	11/29/90

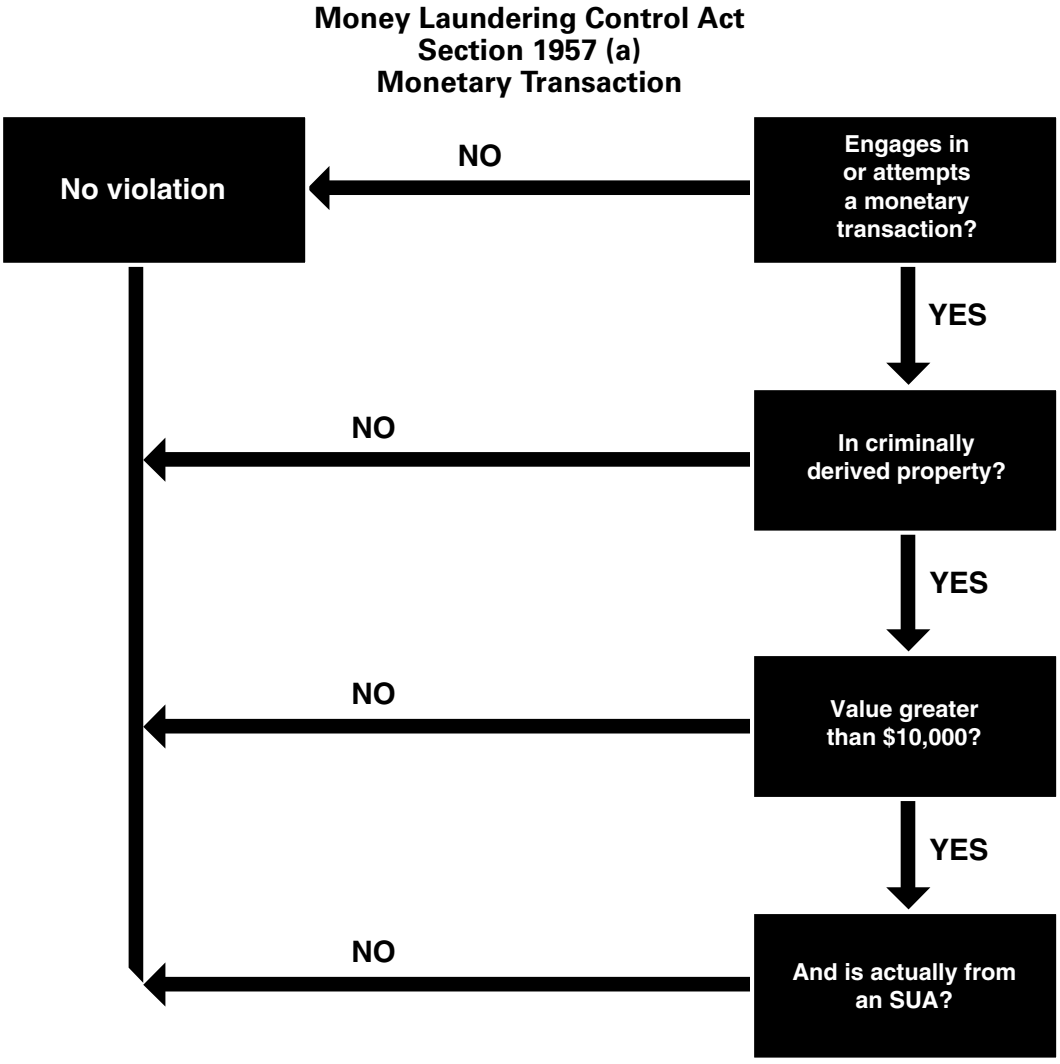
Specified Unlawful Activity—Title 18 U.S.C Sections 1956 and 1957 (Money Laundering Control Act of 1986) *(continued)*

Title	Section	Violation of Federal Law Relating to…	Effective Date
33	1401 et seq.	Ocean Dumping Act (felony violations concerning the dumping of materials into ocean waters)	11/29/90
33	1901 et seq.	Act to Prevent Pollution From Ships (felony violations concerning the discharge of pollutants from ships)	11/29/90
42	300f et seq.	Safe Drinking Water Act (felony violations concerning the safety of public water systems)	11/29/90
42	6901 et seq.	Resources Conservation and Recovery Act (felony violations concerning resource conservation and recovery)	11/29/90
50	1705	Emergency Economic Powers (willful violations of the International Emergency Economic Powers Act)	10/27/86
50	App. 3	Trading With Enemy Act (acts prohibited)	10/27/86
50	App. 2410	Export Regulation (knowingly violating the provisions of the Export Administration Act of 1979)	10/27/86


Money Laundering Control Act
Section 1956 (a)(1)
Financial Transactions
Money proceeds of SUA?
No violation
YES
NO
Know proceeds of UA?
YES
NO
Conduct financial transaction or attempt to conduct financial transaction?
YES
NO
With intent to do any of four outlawed activities:
Evade Taxes
1956
(a) (1) (A) (ii)
Promote SUA
1956
(a) (1) (A) (i)
Hide nature, source, location, ownership or control of proceeds of SUA
1956
(a) (1) (B) (i)
Avoid reporting requirements
1956
(a) (1) (B) (ii)


Money Laundering Control Act
Section 1956 (a)(2)
International Transportation
International movement of monies attempt?
NO
No violation
YES
Monetary instrument or monies?
YES
NO
YES
With intent to promote SUA?
Knowing the monetary instruments or monies were proceeds of UA?
NO
YES
YES
Movement designed to hide or disguise the characteristics of SUA?
Movement designed to avoid a reporting requirement?
1956 (a) (2) (B) (i)
1956 (a) (3) (C) (ii)


Money Laundering Control Act
Section 1956 (a)(3)
Sting Provisions
Conducts or attempts to conduct a financial transaction
NO
No violation
YES
Asset represented by law enforcement officer to be proceeds of an SUA, or asset used to conduct or facilitate an SUA?
NO
YES
With intent to violate any of three categories of activities?
NO
Promote SUA
1956 (a) (3) (A)
Hide nature, source, location, ownership, or control of asset believed to be proceeds of SUA
1956 (a) (3) (B)
Avoid reporting requirements
1956 (a) (3) (C)



Conspiracy

It is a separate criminal offense for any person to conspire or agree with another person to do something that, if carried out, would be a criminal offense. A charge of conspiracy gives the federal government significant substantive and tactical advantages before, during, and after trial. Conspiracy is unusual in that liability accrues before any criminal harm is done. This charge is often bundled with other substantive criminal offenses or with such crimes as mail fraud, wire fraud, or a tax crime to provide federal prosecutors with numerous tactical and evidentiary advantages.

Federal law contains numerous sources for a conspiracy charge. The most important is 18 U.S.C. section 371, as it is the general conspiracy statute. This section makes it a crime to conspire to commit any federal criminal offense or to defraud the United States. This section is used in the majority of conspiracy charges in white-collar crime cases. Under section 371, the federal government must prove beyond a reasonable doubt that (1) an agreement existed to commit an offense against the United States or to defraud the United States; (2) two or more persons were parties to the agreement; (3) the defendant intended to (*a*) enter into the agreement and (*b*) that the object offense(s) or fraud came to pass; and (4) a coconspirator committed an overt act in furtherance of the offense.

The language of section 371 criminalizes both civil and criminal offenses by including "any offense against the United States." Conspiracy can be charged whenever defendants have conspired to deprive the United States of money or property or to subvert the functioning of the government or deprive it of information. Courts generally permit

one conspiracy charge to be based on both the theory that the defendant conspired to commit an offense against the United States and on the theory that the defendant conspired to defraud the United States. A conspiracy charge permits the federal government to prosecute all defendants at a single trial who allegedly were involved in the conspiracy. Federal Rule of Criminal Procedure 8(d) allows all defendants to be joined if the government alleges sufficiently that the defendants participated in "the same act or transaction or in the same series of acts or transactions."

The government obtains evidentiary advantages by charging conspiracy. The inclusion of a conspiracy charge in an indictment or information expands the scope of relevant evidence as all acts done by any coconspirator to further the conspiracy are germane. Also, under the Federal Rules of Evidence, statements made by a coconspirator during the course and in furtherance of the conspiracy are admissible even if such evidence would normally be inadmissible as hearsay.

The heart of a conspiracy charge is the agreement itself. The agreement determines both the parties to the conspiracy and the scope of the object of the crime. The requirement of at least two parties to the crime of conspiracy is called the plurality requirement. A coconspirator may be tried, convicted, and sentenced even if other coconspirators are never charged. The plurality requirement has to be considered in situations of collective and individual liability in the corporate context. Federal courts have ruled that two or more corporations may conspire with one another. Some courts have held that a corporation may itself conspire with individuals associated with that entity as long as there is a minimum of two conspiring corporations. Also, a corporate entity may be liable for a conspiracy entered into by one of its agents.

The offense clause of section 371 (a conspiracy to break federal law) creates liability whenever the defendant has agreed to violate a federal law with at least one other conspirator. An agreement to commit wire fraud also would involve the crime of conspiracy. The defraud clause of section 371 (criminalizing a conspiracy to defraud the federal government) covers both schemes to deprive the United States of money or property and schemes to obstruct government functioning or depriving the government of information.

Case in Point

In one case, a federal indictment charged defendants Sanford Ltd. and Pogue with conspiracy, falsification of records, obstruction of justice, unlawful discharge of oil waste, and other offenses. For the conspiracy charge, the government contended that the defendants entered into a conspiracy to fail to maintain an accurate Oil Record Book (ORB) and did fail to maintain the ORB.[10]

Case in Point

A defendant may be charged, for example, with impairing or obstructing the lawful functioning of the IRS to compute or collect income taxes. This type of conspiracy is known as a Klein conspiracy.

Many courts permit the federal government to bring one conspiracy charge that alleges the defendant violated both the offense and defraud clauses of section 371. Other courts allow federal law enforcement authorities to charge two separate crimes, one for each clause.

For purposes of intent, the government must prove that the defendant specifically intended to enter into a conspiratorial agreement and specifically intended that the object offense (for example, wire fraud) be committed. The prosecution need not prove that the defendant specifically intended to violate the law nor that he or she knew all the details of the object crimes. The most difficult element of conspiracy to prove is the meeting of the coconspirators' minds. Direct evidence of such a meeting of the minds is rare. Facts from which a jury or judge (in a bench trial) could deduce a person's participation often supports a conviction.

[10] *U.S. v. Sanford Ltd. and Pogue*, 878 F. Supp. 2d 137 (D.D.C. 2012).

Case in Point

In one case, an associate in a law firm that aided and abetted two clients in a bankruptcy fraud scheme was found to be involved in a conspiracy scheme even though he acted at a supervisor's direction. The associate attended meetings at which wrongdoing was discussed. He was also involved in destroying records and failing to produce documents.[11]

In any conspiracy case, the government must prove an overt act in furtherance of the conspiracy. An overt act is any act, or failure to act (where a duty to act exists), by any coconspirator during and in furtherance of the conspiracy. The overt act itself does not have to be unlawful as long as it contributes to an illegal end. Minor actions, such as a phone call or a meeting qualify as an overt act. An overt act is attributable to all coconspirators who are members of the conspiracy at the time that an overt act is committed or for those who join later.

A defendant may be vicariously liable for a substantive offense that another conspiracy member committed if (1) the defendant was a party to the conspiracy; (2) the offense was within the scope of the unlawful behavior; and (3) the defendant could have reasonably foreseen the offense as a natural consequence of the unlawful agreement. This is known as the Pinkerton rule.

Case in Point

The defendant, Daniel Pinkerton, was found to have entered into a conspiracy with his brother to commit tax fraud. The brother committed tax fraud when Daniel was actually in prison and did not participate in or even know about the crimes. The U.S. Supreme Court upheld Daniel's conviction on the substantive tax offenses under the theory that coconspirators are responsible for each other's acts.[12]

12

Defendants are convicted under the Pinkerton rule in white-collar crimes on more than rare occasions.

It is important to determine when a conspiracy started or when it ended. The statute of limitations starts to run when the conspiracy ends in some cases. Also, the Pinkerton rule only applies to crimes committed while the conspiracy is ongoing. The coconspirator exception to the hearsay rule only applies to statements made during the life of the conspiracy.

A conspiracy may be ongoing but a coconspirator may withdraw at any time during its life. The statute of limitations starts to run for one who withdraws at the time of withdrawal. One who has withdrawn from a conspiracy may not be found vicariously liable under the Pinkerton rule for acts committed after withdrawal. Coconspirator statements made after withdrawal are not admissible as to the one who withdrew.

Aiding and Abetting

Federal law recognizes that those accused of criminal behavior related to business sometimes do not act alone. An accused can be assisted by coworkers, subordinates, or individuals outside the business organization. If a person acts under the direction of someone accused of criminal acts, this person could be held responsible for aiding and abetting in the commission of a crime. A charge of aiding and abetting is somewhat similar to the charge of conspiracy. One accused of aiding and abetting did not necessarily engage in the same criminal conduct as others.

[11] *U.S. v. Brown*, 943 F. 2d 1246 (9th Cir. 1991).

[12] *Pinkerton v. U.S.*, 328 U.S. 640 (1946).

Indictments and information often charge the accused with conspiracy to commit some offense and aiding and abetting others. Such allegations are used to charge persons often only minimally or peripherally involved with the substantive crime. Offenders charged with these crimes often agree to testify against those more directly involved in the substantive crimes in exchange for reduced punishment or immunity from prosecution.

Obstruction of Justice

Obstruction of justice covers several offenses based upon acts that affect administrative, legislative, or judicial proceedings. An obstruction of justice charge may stand alone or may emanate from an attempt to hide illegal activity. It is not uncommon for obstruction charges to be based upon destroying or altering documents, promoting or offering false testimony, and threatening or influencing witnesses, jurors, and court officials.

Although there are numerous obstruction of justice statutes, the most important ones are 18 U.S.C. sections 1503 (judicial proceedings), 1505 (administrative and Congressional proceedings), 1512 (tampering with witnesses and documents), 1519 (destruction, alteration, or falsification of records in federal investigations and bankruptcy), and 1520 (destruction of corporate audit records). SOX added sections 1519 and 1520 to the federal criminal code. The most often-used statute is section 1503, which provides that whoever corruptly, by threats of force, or by any threatening letter or communication, (1) endeavors to influence, intimidate, or impede any grand or petit juror, or officer in or of any court of the United States; (2) injures any such grand or petit juror in his person or property on account of any verdict or indictment assented to by him or any such officer on account of the performance of his official duties; or (3) corruptly or by threats of force, or by any threatening letter or communication, influences, obstructs, impedes, or endeavors to influence, obstruct, or impede, the due administration of justice shall be punished under this statute. The third clause, called the omnibus clause, is all-encompassing and used by the feds as a popular add-on charge in white-collar cases.

Under sections 1503 and 1505, the government must prove beyond a reasonable doubt that (1) the defendant acted with corrupt intent; (2) the defendant endeavored to interfere with a judicial, administrative, or congressional proceeding; (3) there was a connection between the endeavor and the proceeding; (4) the proceeding was actually pending at the time of the endeavor; and (5) the defendant knew that the proceeding was pending. The heart of an obstruction charge is the endeavor. A defendant need not succeed at the endeavor for this element to be accomplished. It does not even need to rise to the level of an attempt. A common circumstance for an obstruction charge is concealing, altering, or destroying documents that are relevant to judicial, administrative, or legislative proceedings.

Case in Point

In one case, two different grand juries investigating alleged antitrust violations issued subpoenas to an electrical contracting firm. The subpoenas requested documents relating to alleged bid-rigging conduct of various employees, including a man named Lench. In response, he sent the contractor's lawyers a letter falsely stating that various requested documents did not exist, instructed another person to destroy various materials, and withheld documents. Lench was convicted of two counts of obstruction of justice.[13]

A frequently litigated element in obstruction cases is the nexus or connection requirement. There must be a nexus between the alleged endeavor to obstruct and the pending proceeding. An alleged obstructive act must have a relationship in time, causation, or logic with the relevant proceedings. The endeavor must be the natural and probable effect of interfering with the due administration of justice.

Federal law enforcement authorities must prove that the defendant knew of the pending proceeding. Also, it must be shown that the defendant had corrupt intent. Courts have not been uniform in their interpretation of the term

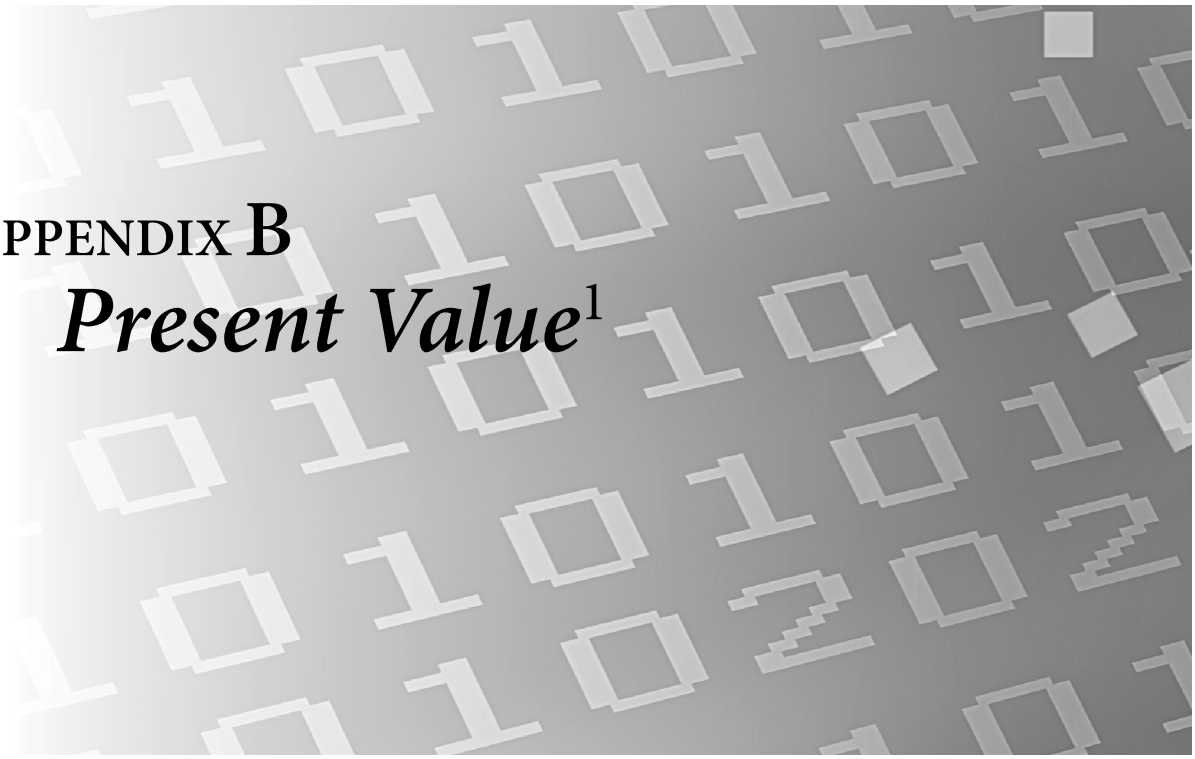
[13] *U.S. v. Lench*, 806 F. 2d 1443 (9th Cir. 1986).

corruptly. The narrowest interpretation requires the government to show that the accused acted with an improper or evil motive. Other courts hold that under section 1503 that the government must demonstrate that the accused knew of the pending proceeding and acted with purpose to interfere with the proceeding's functioning.

Section 1519 deals with the alteration, destruction, and falsification of records and was added by SOX:

> Whoever knowingly alters, destroys, mutilates, conceals, covers up, falsifies, or makes a false entry in any record, document, or tangible object with the intent to impede, obstruct, or influence the investigation or proper administration of any matter within the jurisdiction of any department or agency of the U.S. … shall be fined under this title, imprisoned not more than 20 years, or both.

Section 1520 applies to the destruction of corporate audit records in the same fashion. Under this section, the defendant must have acted knowingly and willfully.



Appendix B
Present Value[1]

Introduction

Time discounting extends into multiple knowledge domains, such as psychology, sociology, economics, marketing, decision analytics, and neuroscience.[2] Humans tend to give less importance to rewards in the distant future compared to rewards in the near future or the present. The timing and probability of future events occurring shape present behavior. We can observe this kind of behavior in ordinary and financial activity.

One of the more important subjects in finance and accounting is the notion of "present value." Intuitively, we know without any financial training that receiving $100 today is more desirable than getting $100 in a year. This is a kind of ordinal ranking of preferences. Using financial language, we say the present value of a $100 payment one year in the future is less than $100. These simple ideas go much deeper.

In finance, we often use the arithmetic of present value to estimate values of financial assets, like stocks, bonds, annuities, and derivatives. We also apply these ideas in business valuation to value commercial enterprises. Thus, it will be important to thoroughly understand the concepts and arithmetic of present value in order to understand valuation theory. If you have previously studied time value of money (TVM) and feel confident in your knowledge, you can proceed rapidly through this appendix.

Why Present Value Is Important

We have said present value is an important topic, but why? The fields of finance and accounting often examine events that either generate or consume cash flows. When these events occur at different times, the related cash flows—even those with identical amounts—are not directly comparable. We need a tool that allows us to compare time-variant cash flows. TVM math is the tool that allows us to make these comparisons.

Such comparisons are a means to an end. The objective is to make better decisions as accountants, managers, and advisers. Present-value amounts provide information to equity investors, bondholders, lenders, senior managers, and others, allowing them to make better decisions. Take company managers, for instance. This tool allows them to

[1] Copyright © 2014. Michael A. Crain.

[2] For a review of multidisciplinary time-discounting models developed to explain financial decisions, see Doyle, JR, "Survey of time preference, delay discounting models." *Judgment and Decision Making*, 8(2):116-35 (2013).

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compare alternative capital opportunities so they can make optimal decisions of where to invest. Say a firm has three potential opportunities, but it has resources to invest in only one of these projects. Which opportunity is the best choice? Each of these projects likely has different capital investment requirements, timelines, risks, and expected cash flows. How can managers compare all of this complex information? By using present-value math as a tool, each project can be reduced to a single number, and then managers can directly compare the three amounts for decision-making.

Equity analysts have different needs for using present values. They may want to know the intrinsic value of a share of stock so they can compare it to the stock's market price. Present-value math might be used to estimate a stock's intrinsic value. If an analyst believes it is higher than its market price, they may decide to buy the stock (or publish a buy recommendation). In contrast, if the intrinsic value is below market price, they may short the stock (or publish a sell recommendation).

What one does in business valuation with present values is similar to equity analysts. Valuation practitioners estimate a firm's value as the present value of its future cash flows, but they cannot observe the firm's market price for comparison.

In summary, we use present-value math to simplify information so we can make better decisions. Without this tool, we may make less than ideal decisions because complex data can be difficult to interpret.

Basic Math Behind TVM Calculations

The basic arithmetic of TVM is straightforward. We can express it in a simple formula:

$$\textit{present cash flow} \times (1 + \textit{interest rate}) = \textit{future cash flow} \tag{B.1}$$

Assume that you put $100 into a new bank account, and you will earn 8 percent (0.08) interest. What will your account balance be in a year? The math is straightforward:

$$\$100 \times 1.08 = \$108 \tag{B.2}$$

Next, we can rearrange equation B.1 using basic algebra:

$$\textit{present cash flow} = \frac{\textit{future cash flow}}{1+\textit{interest rate}} \tag{B.3}$$

Thus, we get the following:

$$\$100 = \frac{\$108}{1.08} \tag{B.4}$$

This equation tells us the present value of $108 that we expect to receive in one year is $100.

Embedded in equations B.1 and B.3 is that the time horizon is one year. If the horizon is two years, for instance, we modify the formulas somewhat by adding *t* as the number of years.

$$present\ cash\ flow \times (1 + interest\ rate)^t = future\ cash\ flow \tag{B.5}$$

$$present\ cash\ flow = \frac{future\ cash\ flow}{(1+interest\ rate)^t} \tag{B.6}$$

Now, assume that you want to know your bank account balance in two years:

$$\$100 \times 1.08^2 = \$117 \tag{B.7}$$

Why is the answer \$117, rather than \$100 + \$8 + \$8? Because we earn interest in the second year on \$108, rather than \$100. We call this idea *compound interest*. In plain English, it is interest on interest. Now, let's use equation B.6 for this example:

$$\$100 = \frac{\$117}{1.08^2} \tag{B.8}$$

This example tells us the present value of \$117 that we expect to receive in two years is \$100.
In the next section, we expand on these ideas.

Components of TVM Calculations

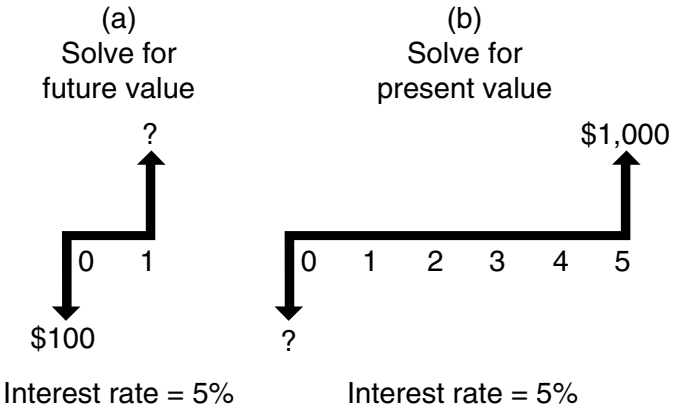
The following are five components in TVM calculations. Financial calculators have these functions (the usual short forms are in parentheses), and Microsoft Excel uses these variables for its TVM functions. Don't worry about the mechanics of the calculations now. We want to cover concepts here.

- Present value (PV)
- Future value (FV)
- Cash flows payment (PMT)
- Interest rate (i)
- Length of time (n)

In the next four figures, we show these TVM components in six cases to demonstrate their interactions. The basic idea is if we know three or four of the TVM components, we can solve for an unknown one. The syntax in these figures is that an upward arrow means cash received (a good event that we hope to get), and a downward arrow represents cash paid (often an investment we make). Further, the passage of time is from left to right.

First, look at the left side of figure B.1. This is a simple problem of future value. You deposited \$100 in a new bank account today and will earn 5-percent interest. The TVM question is what will be your account balance in one year. Next, the right side of this figure is a case in which you currently own a zero-coupon bond that will pay you \$1,000 in five years at maturity, and the interest rate is 5 percent. The TVM question is what is the current value of your bond?

Figure B.1
Time Value of Money, Illustration 1



In figure B.2 on the left side, you pay $100 today for a bond, and you will receive $112 in one year when the bond matures. The TVM question is what is your expected percentage return on investment? Next, on the right side, you loan someone $1 today. That person promises to pay you $2 sometime in the future, which includes 5-percent interest. The TVM question is when will you get paid the $2?

In these four cases, we have covered four of the TVM components: present value, future value, interest rate, and length of time. In the next two cases, we introduce the payment component of TVM.

Figure B.2
Time Value of Money, Illustration 2

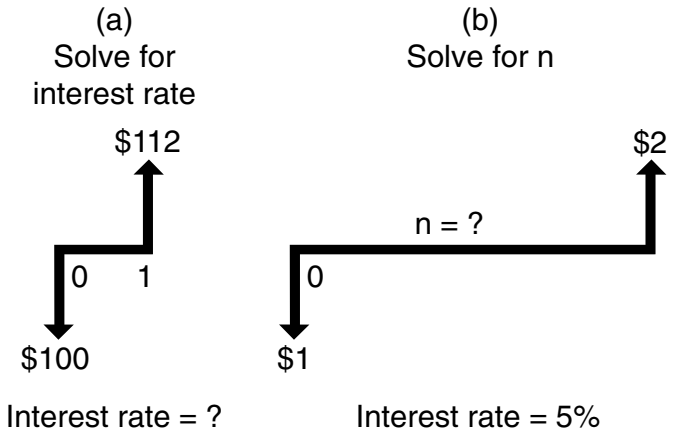
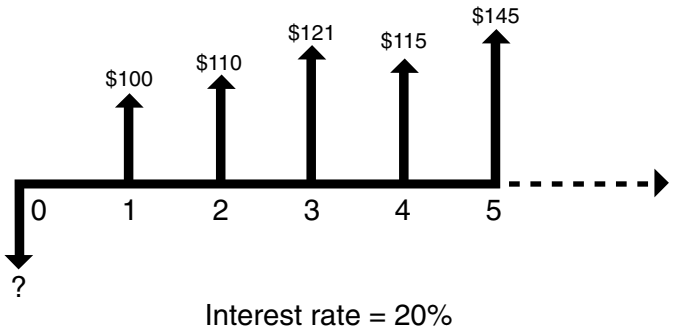


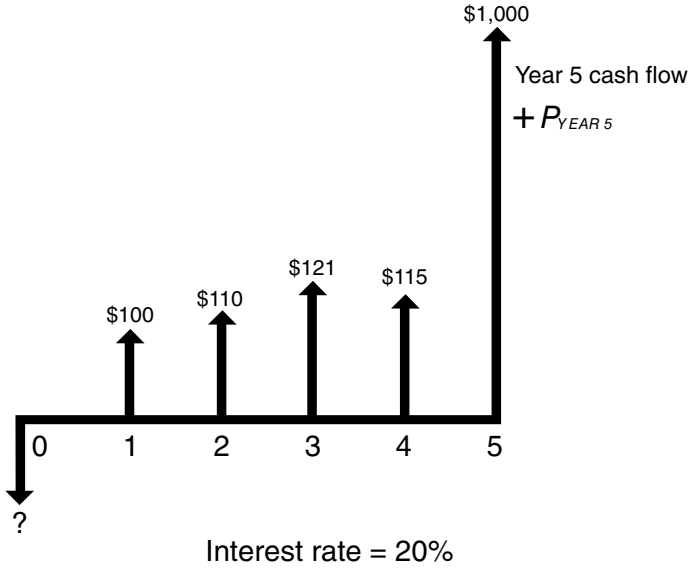
Figure B.3 looks like the cash flows when buying and owning a business. Imagine that you are interested in buying a restaurant, and you expect its future net cash flows will be $100 in year 1, $110 in year 2, $121 in year 3, and so on. In theory, you could try to forecast its cash flows for as long as you expect to own the restaurant, say, 10 or 20 years. Further, assume that the interest rate for this kind of investment is 20 percent. The TVM question is what should you pay today to buy this restaurant? Figure B.3 represents the theoretical model that analysts use to value many commercial enterprises. But it is challenging to forecast cash flows too many years into the future. In general, model risk—the probability that a model will differ from what actually happens in the future—increases with longer time horizons.

Figure B.3
Time Value of Money, Illustration 3



One model that valuation practitioners use takes the form of figure B.4. Instead of forecasting cash flows for, say, 20 years—the time you expect to own the business—analysts may construct five-year models. They forecast annual cash flows for maybe five years and then estimate the firm's value at the end of the fifth year. Why five years? It is a convention many analysts use.[3] Using this model, analysts forecast two amounts for the fifth year: the firm's cash flows from operations for this year and the asset's expected price on the last day of the fifth year ($P_{YEAR\ 5}$).[4] One reason for this kind of cash flow model is to simplify some of the math, so that detailed assumptions about events many years into the future are not needed. Finally, in this case, the TVM question is the same as in figure B.3. We are trying to estimate a firm's present value.

Figure B.4
Time Value of Money, Illustration 4



[3] We might also see 10-year models.

[4] For illustration, we might think of the asset's estimated price at the end of the fifth year as cash flow from a sale if one were to sell the asset. It is not, however, necessary to assume a sale to apply this model because the asset's price is this amount regardless of whether an investor keeps or sells the asset. In chapter 16, "Valuation Applications," we describe these kinds of models as two-stage models.

To mechanically calculate the present value of an investment or project expected to produce a series of cash flows, we determine the present value of *each* cash flow event and then add up all the present values, as shown in table B.1. Assume you own a bond that will pay you $500 per year in interest at the end of the next five years and a $10,000 principal amount when the bond matures at the end of the fifth year. The TVM question is what is the present value of the bond? To solve this problem, we make five present-value calculations. We determine the present value of each $500 interest payment for the first four years and then the present value of the $10,500 we receive at the end of the fifth year. We now have five present values. Next, add these five amounts to get the present value of the bond.

To solve this problem, we need the market interest rate. Assume that the current market interest rate is 3 percent, today is January 1, 20X1, and the first interest payment will be received December 31, 20X1. What is the present value of the bond? We use equation B.6 on each cash flow event to solve this problem. The answer is $10,915. Why is the present value of this bond more than its $10,000 face amount?[5]

Table B.1 Solution to Present Value of a Bond

Year	Cash Flow	Present Value
1	$500	$485
2	500	471
3	500	458
4	500	444
5	10,500	9,057
Total		$10,915

Summary and Conclusion

Let's summarize what we have learned in this appendix. First, we have learned why present-value calculations matter. Present value is a tool that converts complex information about multiple cash flows over various time horizons into simpler information, so we can make better decisions. Second, we have dissected investing and business activities into cash-flow events. We identify the amount and timing of these cash flows. Third, we have identified five components related to these events. We need to know several of these components to perform TVM calculations.

Now, we suggest that you practice the first four cases discussed earlier in this appendix on your own to reinforce your learning experience.[6] You might want to first practice using a financial calculator before doing this in Microsoft Excel. Spreadsheets have a lot of bells and whistles, which can be distracting when learning a new concept. Moreover, you need to be mindful of whether an event is cash-flow positive (received) or negative (paid) to make the calculations work. $1000 paid is very different than $1000 received.

[5] The answer is that this bond is paying more interest (5%) than the current interest rate of 3 percent, which makes the bond desirable, causing its price to be bid up in the market.

[6] The answers are $105, $784, 12 percent, and 15 years.

Glossary

* This definition is from the *International Glossary of Business Valuation Terms*.

**This definition is from the AICPA's Statement on Standards for Valuation Services, No. 1.

accounting and enforcement releases. A publication in which the SEC discloses administrative proceedings or litigation that involves an accounting- or auditing-related violation of the securities laws.

administered arbitration. Parties submit to the arbitration rules promulgated by an arbitration organization such as the American Arbitration.

admissibility. The quality of being allowed to be entered into evidence in a trial, hearing, or other proceeding.

admission. Any statement or assertion made by a party to a case and offered against that party.

admission-seeking questions. In interviewing, these questions represent a preliminary step in obtaining a confession. Rather than directly asking the suspect to give a complete confession, the investigator may seek to get the suspect to admit to specific acts. Such acts might be tantamount to the suspect accepting some responsibility for the fraud.

advanced digital forensics. The work in digital forensics that includes acquiring data from complex accounting systems, examination, analysis, and reporting.

aggravated identity theft. See Identity Theft Penalty Enhancement Act.

allegation. A statement of a party to an action in a declaration or pleading of what the party intends to prove.

Alternative Dispute Resolution (ADR). A process in which opposing parties are brought together to resolve their disputes through the help of a neutral third party.

American Institute of Certified Public Accountants (AICPA). The premier organization for CPAs and the largest membership organization for accountants in the world. It develops and grades the Uniform CPA exam and the exam associated with the Certified in Financial Forensics (CFF) credential. The CFF credential is available to CPAs and includes both forensic accounting and business valuation components. The AICPA also makes available the Accredited in Business Valuation (ABV) credential.

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American Registry for Internet Numbers (ARIN). A service that manages the distribution of IPs for the United States, Canada, and many Caribbean and North Atlantic islands.

American Society of Appraisers (ASA). A nonprofit, international organization of professional appraisers that represents a variety of appraisal disciplines, including business valuation. It establishes and maintains a set of principles of appraisal practice and a code of ethics. It offers two designations for qualified candidates: accredited member (AM) and accredited senior appraiser (ASA).

American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB). A body that provides accreditation of forensic science testing laboratories that perform testing activities involving digital and multimedia evidence.

answer. The defendant's response to the plaintiff's complaint. The defendant states in concise terms his defenses to each claim asserted and admits or denies each count of the plaintiff's complaint.

applicable financial reporting framework. The financial reporting framework adopted by management and those charged with governance (or required by law or regulation) for the purpose of preparing financial statements that are acceptable with respect to the nature of the entity and the objective of the financial statements.

apportionment or apportioned. The division of an asset between spouses.

arbitration. Involves a third-party neutral (an arbitrator) who is empowered to render opinions and findings, very much like a trier of fact in a court proceeding.

assessment questions. In interviewing, questions designed to determine if the suspect shows signs of deception.

asset (asset-based) approach. A general way of determining a value indication of a business, business ownership interest, or security, using one or more methods based on the value of the assets net of liabilities.*

asset misappropriation. A type of occupational fraud that involves an employee converting an asset of the company for personal use.

associates. New members of La Cosa Nostra.

Association of Certified Fraud Examiners (ACFE). The world's largest antifraud organization. The ACFE offers the Certified Fraud Examiner (CFE) credential. The CFE exam covers four disciplines that comprise the fraud examination body of knowledge: fraud, prevention and deterrence, financial transactions, and fraud schemes, investigations, and law.

assumptions and limiting conditions. Parameters and boundaries under which a valuation is performed, as agreed upon by the analyst and the client, or as acknowledged or understood by the analyst and the client, as being due to existing circumstances. An example is the acceptance, without further verification, by the valuation analyst from the client of the client's financial statements and related information.**

attest. An engagement, other than services such as those performed in accordance with Statements on Standards for Consulting Services and Statements on Standards for Valuation Services (as well as other services), in which a CPA in the practice of public accounting is engaged to issue or does issue an examination (for example, audit), a review, or an agreed-upon procedures report on subject matter (or an assertion about the subject matter), that is the responsibility of another party; services for which independence is required such as services governed by AICPA Statements on Auditing Standards, Statements on Standards for Accounting and Review Services, and Statements on Standards for Attestation Engagements.

attorney-client privilege. A rule that says a client can tell his or her lawyer anything about the case without fear that the attorney will be called as a witness against the client.

audit management systems. A class of software that can be helpful in fraud detection and includes functionality to assist in risk assessments, including risk scoring.

audit opinion. A statement which is the expression of an opinion regarding whether the financial statements, taken as a whole, present fairly, in all material respects, financial position, results of operations, and cash flows in accordance with a specific applicable financial reporting framework.

authentication. One who proffers evidence must demonstrate that the object is what he or she purports it to be. It requires that the evidence be in substantially the same condition it was when obtained or seized.

authoritative guidance. Pronouncements, such as statements on standards, that are issued only after an authoritative body has followed a process that includes deliberation in meetings open to the public, public exposure of proposed statements, and a formal vote by the appropriate authoritative body.

avoided costs. In lost profits measurements, the costs a firm does not or should not incur because of a loss of revenues related to not producing or selling goods or services.

bail. Some form of property deposited or pledged to a court to persuade it to release a suspect from jail, on the understanding that the suspect will return for trial or forfeit the property.

Bankruptcy Appellate Panel (BAP). A group of judges from bankruptcy courts who hear appeals of decisions from bankruptcy courts.

basic digital forensics. The work in digital forensics that involves collecting (also known as *acquiring*) data from computers and electronic devices, especially documents, messages, and files.

Bates numbers. Involve marking or stamping documents with arbitrary identification numbers or codes. The common practice is to stamp the original documents and then work with scanned images or copies, while keeping the original documents in secure storage.

bearer stock certificates. Stock certificates that do not require registration of the owner. They are sometimes used as a money laundering layering tool.

Benford analysis. Approaches fraud detection by examining the frequency of the numbers 1–9 as they appear as the first number in certain random data sets. Benford analysis is based on Benford's law, which says that in the first digit, the number 1 is more likely to appear than the number 2, the number 2 is more likely to appear than the number 3, and so on.

best evidence or original document rule. Federal Rules of Evidence (FRE) 1002 states that originals of writings, recordings, or photographs are preferred as evidence and may be required when proving the content of the writings, recordings, or photographs.

beyond a reasonable doubt. The burden of persuasion in a criminal case that no other logical explanation can be derived from the evidence admitted except that the defendant committed the crime.

bid rigging. A type of fraud that involves manipulation of a bidding process so that the outcome of the bidding and the related awarding of a purchase or service contract are secretly predetermined.

book value. See **net book value**.

burden of persuasion. The burden on a party at trial to present sufficient evidence to persuade the fact-finder, by the applicable standard, of the truth of a fact or assertion and to convince the fact-finder to interpret the facts in a way that favors the party.

burden of production. A party's duty to introduce enough evidence on an issue and to have it decided by the fact finder rather than decided against the party in a peremptory ruling, such as summary judgment.

burden of proof. A party's duty to prove a disputed assertion or charge. The burden of proof includes both the burden of persuasion and the burden of production.

business valuation. A very important subspecialty area within forensic accounting. Forensic accounting and business valuation are so intertwined that they are in the same interest area within the AICPA. Their interest area is called Forensic and Valuation Services (FVS). Business valuation involves not only valuing businesses, but almost any kind of asset or liability.

bust-out and bleed-out schemes. Bankruptcy fraud schemes in which fraudsters establish businesses to operate with no intention of paying vendors.

but-for condition. A hypothetical state as if a wrongdoing had not occurred.

but-for profits. Profits that would have been created if a wrongdoing had not occurred.

but-for sales. Revenues that would have been created if a wrongdoing had not occurred.

but-for wages. Wages that would have been earned if a wrongdoing had not occurred.

CAATs (computer-assisted audit techniques). Specialized software platforms sometimes designed to assist in audits. Four general types of CAATs exist: data analysis software, network security evaluation software, operating system and database system evaluation software, and software testing tools.

calculation engagement. One of two types of valuation services specified by the AICPA's Statement on Standards for Valuation Services, (SSVS) No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset*, in which the analyst and the client agree on the specific valuation approaches and valuation methods that the analyst will use and the extent of valuation procedures the analyst will perform to estimate the value of a **subject interest**. The result of the engagement is a calculated value, which may be either a single amount or a range. A calculation engagement generally does not include all the valuation procedures required for a valuation engagement.

capitalization rate. The denominator in constant growth models.

capo. See **sgarrista**.

career risk. The risk that a forensic accountant's career as an expert witness can come to a sudden end due to one error or mistake.

caucusing. Speaking to each party to the divorce action separately, with their attorneys, or with only one side.

channel stuffing. The act, by a company, of shipping more merchandise to customers than its customers can sell within a reasonable period of time.

Chapter 7. A proceeding that applies to both individuals and businesses. Subject to certain exceptions, it provides for complete liquidation of all the debtor's assets and the complete elimination of debtor's obligations.

Chapter 11. A bankruptcy proceeding that generally applies to businesses but also sometimes to individual debtors. Rather than completely discharging all debt, the court focuses on developing a payment plan to satisfy creditors.

Chapter 13. A bankruptcy proceeding that applies to individuals with means-tested income large enough to disqualify them from filing under Chapter 7. The court may discharge some of the debt and create a payment plan for the rest.

check laundering. A sophisticated scheme in which the thief submits via mail the stolen check in payment of an account balance the thief owes under a fake name or stolen identity.

check washing. A type of fraud that involves using chemicals to erase from checks data such as the name of the payee, the date, and the amount of the check. The check washer typically fills in the blank check and cashes it using a false or stolen identity.

circumstantial evidence. That which does not resolve a matter at issue unless additional reasoning is used to reach the proposition at which the evidence is aimed.

clear and convincing evidence. The burden of persuasion in a minority of civil cases (for example, fraud) that is higher than preponderance of the evidence but less than beyond a reasonable doubt.

COBIT (Control Objectives for Information and Related Technology). Published by ISACA (www.isaca.org), COBIT provides a comprehensive framework for ISMSs and a generic set of processes for IT governance and management.

collaborative law. A legal process by which couples who are separating or divorcing can arrive at a mutually-beneficial arrangement to divide assets, liabilities, and income.

compensatory damages. A monetary amount that if paid will make an injured party whole or, alternatively, will put an injured party in the same economic position as immediately prior to the injury.

competency. Refers to a witness having the qualifications necessary to give testimony. Incompetence under the FRE exists for two reasons: (1) a witness has no personal knowledge of a matter or (2) a witness will not promise to tell the truth.

complaint. The pleading which starts a civil suit. It must contain a short and plain statement of the grounds upon which the court's jurisdiction depends. It also contains a concise statement of the claim(s) showing that the plaintiff is entitled to relief. The plaintiff need only state the facts, not the legal theory upon which he or she is relying.

complete fraud detection system. Involves five components: risk assessment, exploitation of expert knowledge, knowledge discovery, scoring and assessment, and implementation.

composite fraud indicators. Involve the combination of more than one individual fraud indicator. Ratios represent a classic example of composite indicators.

computer forensics. The branch of digital forensics that focuses on obtaining evidence from computers.

concluding questions. In interviewing, such questions may include a thank you for the cooperation, an offer for the suspect to add any additional information, and a request for continued cooperation.

confrontational question. In interviewing, an accusatory question that is best asked right after telling the suspect that the investigation has revealed solid evidence to justify asking such a question.

consensus forecast. A prediction of future earnings or earnings per share made up of two or more separate forecasts by different analysts.

constructive fraud. Reckless behavior that is nearly the equivalent of fraud, except that no intent to deceive is present.

consulting expert. A person with special knowledge hired in a dispute or potential dispute to assist a client or client's attorney and is not expected to testify before a trier of fact.

continuous monitoring. Ongoing monitoring and measurements to evaluate, remedy, and improve the organization's fraud prevention and detection techniques.

cookie jar reserves. Reserves that are established in one or more periods for the purpose of increasing income in subsequent periods.

corruption fraud. A type of occupational fraud that involves an employee committing acts that are not in the best interest of the organization because of some type of improper influence that affects the employee's conduct.

COSO internal control framework. A fundamental framework that describes internal control as a process; is affected by an entity's board of directors, management, and other personnel; and is designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations, reliability of financial reporting, compliance with applicable laws and regulations, and safeguarding of assets.

cost approach. A general way of determining a value indication of an individual asset by quantifying the amount of money required to replace the future service capability of that asset.*

counterclaim. A claim brought by the defendant in a civil suit that contains assertions that the defendant could have made by starting a lawsuit if the plaintiff had not already commenced the action. It is part of the answer that the defendant produces in response to the complaint. It must contain facts sufficient to support the granting of relief to the defendant if the facts are verified.

court-annexed arbitration program (CAAP). A court mandates that parties to a lawsuit enter into nonbinding arbitration.

covered member. An individual (1) on the attest engagement team; (2) in a position to influence the attest engagement; (3) who is a partner, partner equivalent, or manager who provides non-attest services to the attest client beginning when he or she provides 10 hours of non-attest services to the client within any fiscal year and ending on the later date on which (i) the firm signs the report on the financial statements for the fiscal year during which those services were provided, or (ii) he or she no longer expects to provide 10 or more hours of non-attest services to the attest client on a recurring basis; or (4) who is a partner or partner equivalent in the office in which the lead attest engagement partner or partner equivalent primarily practices in connection with the attest engagement. A covered member can also refer to the firm, including the firm's employee benefit plans, or an entity whose operating, financial, or accounting policies can be controlled by any of the individuals or entities described in items (1)–(5) or two or more of these individuals or entities if they act together.

coverture fraction. A formula used to calculate the percentage of stock options (or pensions) to be included in the marital estate.

cross examination. A lawyer's questioning of a witness called by the adversary.

current monthly income (CMI). The average of the debtor's CMI over the six months prior to the bankruptcy filing, adjusted for certain classes of income (for example, Social Security).

curtilage. A location for which there is no reasonable expectation of privacy. The curbside area used for trash pickup is a good example of curtilage.

Daubert rule. A U.S. Supreme Court holding that created a more stringent test for expert evidence admissibility, especially in civil cases. This decision made trial judges gatekeepers of science and of expert evidence in courts of law.

debtor audit program. An often underfunded program authorized by the Bankruptcy Abuse Prevention and Consumer Protection Act to create procedures for independent firms to audit debtor petitions for Chapters 7 and 13 petitions.

denial of service (DOS) attacks. Attacks frequently made against the distributed name servers (DNSs) that serve as general directories on the Internet to direct traffic to websites and e-mail to the correct destination. Attacks against DNSs prevent traffic from even getting to the destination website. DOS attacks may also be made directly against individual websites.

deponent. One who testifies by deposition.

deposition. Oral testimony given by a party or witness prior to trial. The testimony is given under oath and is transcribed or recorded audio visually.

digital forensics lab. A special, secure laboratory to which computers, storage devices, and data for analysis are transported after having been removed from a crime scene.

digital forensics. The application of computer science investigation and analysis techniques to discover and preserve evidence in computers and networks. Digital forensics assists in achieving the following objectives: identifying perpetrators or other individuals of interest; locating and recovering data, files, and e-mail; reconstructing damaged databases and files; and identifying causes of disasters.

direct evidence. Tends to show the existence of a fact in question without the intervention of proving any other fact.

direct examination. A lawyer's questioning of his or her own witness.

discount for lack of control. An amount or percentage deducted from the pro rata share of value of 100 percent of an equity interest in a business to reflect the absence of some or all of the powers of control.*

discount for lack of marketability. An amount or percentage deducted from the value of an ownership interest to reflect the relative absence of marketability.*

discount rate. A rate of return used to convert a future monetary sum into present value.*

discovery. A legal process during which both parties engage in various activities to elicit facts of the case from the other party and witnesses prior to the trial.

distributed denial of service (DDoS) attack. An attack that typically originate as Trojans (or viruses) infecting large numbers of computers. The Trojan contains software that, upon remote orders from a command and control server controlled by the perpetrator, begins to flood the target Internet server with traffic. The infected computers are called *zombies*, and collectively, the entire network of zombies and command and control servers is called a *botnet*.

documentary evidence. Paper and electronic documents that are frequently relevant to fraud investigations.

due professional care. The type of care that experts in the same field would exercise under similar circumstances.

dummy returns. Income tax returns prepared for non-tax-filing purposes (for example, obtaining a bank loan); these returns may or may not contain accurate information.

early neutral evaluation. Involves submitting the dispute to an expert or panel of experts for evaluation before the case is to be tried in court.

earnings capacity. In individual litigation, the potential earnings an injured person would likely have based on their education, skills, experience, age, and possibly other factors, such as pre-existing medical conditions and wage history, regardless of the person's present employment status. Earnings capacity often arises in circumstances when a person is currently unemployed or underemployed.

earnings management. Actions by management to legitimately use the flexibility allowed by accounting standards or engage in or structure transactions to produce financial statements that present financial position, results of operations, or cash flows more favorably than would be presented had the entity not engaged in or structured its transactions to produce the desired financial statements.

engagement letter. A letter of agreement between the forensic accountant and client regarding the terms of an engagement.

enterprise risk management (ERM) process. The process by which organizations manage risks according to their appetite for risk.

equalization note. A note given by one party to another to make up a difference caused by the inability to equally divide marital assets.

equity risk premium. The extra return that investors require for investing in risky stocks rather than a risk-free asset.

evaluative (mediation). The mediator actively gives opinions and recommendations to both parties.

evidence. Anything that may clarify the truthfulness or falsity of any assertion that may be relevant to the case at hand. For the investigator, evidence generally includes tangible objects, physical or electronic documents, and results of observations and interviews. For an attorney in a court setting, the investigator's evidence may be presented in the form of tangible objects, exhibits, and fact-based testimony.

exchange value. See **value in exchange**.

exclusionary rule. The rule that bars the admissibility in criminal proceedings of evidence seized in violation of the Fourth Amendment's prohibition against unreasonable searches and seizures.

expert consultant. Among forensic accountants, someone who gives expert opinions on a wide range of areas. The expert consultant provides assistance in litigation, but does not testify and is not normally subject to discovery. Examples include fraud risk mitigation, internal dispute resolution systems, the value of an estate, and the financial impact of bankruptcies, mergers, and or acquisitions.

expert witness services. Litigation services in which a member is engaged to provide an opinion, based on the member's expertise, before a trier of fact about one or more matters in dispute, rather than testimony on his or her direct knowledge of the disputed facts or events.

expert witness. A person qualified by education or experience to render an opinion based on facts. The expert witness assists the trier of fact through an expert report and testimony and is subject to discovery.

external fraud. Fraud perpetrated by any party that the organization comes into contact with, including customers or clients, vendors, business partners, and the general public.

extra out-of-pocket costs. Costs that a party incurred (or will incur) that it would not have incurred had a wrongdoing not happened.

eye movements. In interviewing, patterns of eye movements can be used to assess deception.

facilitative (mediation). In a facilitative role, the mediator focuses in a nonjudgmental way on helping the opposing parties to understand each other's positions, to communicate well, and to find common ground.

fact witness services. Services of testimony based on the member's direct knowledge of the matters, facts, or events in dispute obtained through the member's performance of prior professional services for an attest client.

fact witnesses. Testimony offered by witnesses and which is based on the witnesses' direct knowledge of the matters, facts, or events in dispute.

Fair and Accurate Credit Transaction Act of 2003 (FACTA). Updated the Federal Fair Credit Reporting Act and added many specific related obligations for business and protections for consumers.

fair market value. The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.*

False Claims Act. A federal act that permits any whistleblower to initiate a civil action against a company that falsely bills the U.S. government and receive an award in the amount of 15 percent to 30 percent of the amount overbilled. Such claims are filed under seal and served on the government and not the defendant.

Federal Alternative Dispute Resolution Act (28 U.S. Code Chapter 44). Required that all federal trial courts implement ADR programs. It also empowered the courts to require that litigants submit to ADR.

Federal Rules of Bankruptcy Procedure. The set of rules promulgated by the U.S. Supreme Court to govern bankruptcy proceedings.

Federal Rules of Evidence. Rules that govern the admissibility of evidence in civil and criminal trials in federal courts.

fee contingency basis. Pertains to an engagement in which the fee paid is based on a specific finding or result. Such an arrangement would, at a minimum, impair the appearance of objectivity and would likely open an easy line of attack by a cross-examining attorney. CPAs are not permitted to perform work on a fee contingency basis.

financial affidavit. A signed statement, sworn under oath, executed by each spouse to certify that the assets, liabilities, income, and expenses disclosed on the form are true.

Financial Crimes Enforcement Network (FinCEN). The primary U.S. government organization that enforces anti-money-laundering laws. FinCEN operates under the U.S. Department of Treasury. Its enforcement powers primarily originate from the Bank Secrecy Act (also known as the Currency and Foreign Transactions Reporting Act).

financial statement fraud. Intentional manipulation of financial statements (including footnotes) or underlying records by the inclusion, exclusion, or alteration of information to affect the decisions of users of the financial statements.

forced liquidation value. Liquidation value at which the asset or assets are sold as quickly as possible, such as at an auction.*

foregone costs. See **avoided costs**.

forensic accounting services. Non-attest services that involve the application of special skills in accounting, auditing, finance, quantitative methods and certain areas of the law, research, and investigative skills to collect, analyze, and evaluate evidential matter in order to interpret and communicate findings. These services consist of litigation services and investigative services.

forensic accounting. Involves the application of special skills in accounting, auditing, finance, quantitative methods and certain areas of the law, research, and investigative skills to collect, analyze, and evaluate evidential matter to interpret and communicate findings.

foundation. The basis on which something is supported, especially evidence or testimony that establishes the admissibility of other evidence.

fraud. An intentional act or omission that is designed to deceive and results in a loss to a victim and a gain to a perpetrator.

fraud auditors. Auditors with special skills relevant to fraud investigations.

fraud detection. A system to detect frauds as they occur. In the same way that the fraud prevention system requires preventive controls, the fraud detection system requires detective controls.

fraud prevention. Typically the most cost-effective component of a fraud risk management system because it poses barriers to fraud, deters fraud, and can eliminate costly investigations.

fraud risk assessment. The three key elements of fraud risk assessment are (1) identifying inherent fraud risk, the risk of frauds; (2) assessing the likelihood and significance of each inherent fraud risk; and (3) responding to reasonably likely and significant inherent risks.

fraud risk management system. Processes for prevention, detection, investigation, and correction of fraud in balance with the cost of fraud losses.

fraud theory. A theory of the fraud scheme—the who, what, why, when, where, and how.

fraud triangle. Suggests three factors that generally apply to fraudsters: pressure, opportunity, and rationalization.

fraudulent conveyances. Assets that are secretly transferred through below-market-value sales.

Frye standard. Frye held that expert opinion based on a scientific technique is admissible if the technique is generally accepted as reliable in the scientific community. In the federal courts, this standard has been superseded by the Daubert standard.

fully-qualified domain names (FQDNs). Names (URLs) like www.google.com to address "places" on the Internet.

future losses. Economic losses that occur after some point in time, such as a trial date.

gatekeeper responsibility. The judge's responsibility to rule as a matter of law as to the admissibility of evidence and whether the expert witness is qualified to testify in particular areas.

generalized audit software (GAS). General purpose audit software with data analysis capabilities.

going concern. An ongoing operating business enterprise.*

grand jury. A body of 16–23 citizens empaneled by a federal court to consider evidence presented concerning alleged crime(s) to determine whether or not probable cause exists that a particular defendant or defendants committed said crime(s). A simple majority is sufficient to find probable cause. If probable cause is found, then an indictment issues.

grey directors. Directors who have potential or existing business ties to the firm but are not employed by the firms for which they serve as directors.

gross negligence. Reckless behavior that is more egregious than ordinary negligence.

handwriting analysis. The process of verifying whether a handwriting sample in question was authored by a particular person of interest.

harmless error rule. Applies when a litigant appeals the decision of a judge or jury claiming that an error of law occurred at trial that led to an incorrect verdict or judgment. If an appellate court deems any error to be harmless, the lower court decision is upheld (that is, the error alleged would not have affected the trial outcome).

header information. Information that is buried in e-mail messages but not normally visible to e-mail users. This information contains the IP address associated with the sender. The forensic examiner can do a reverse lookup of this IP address to identify the sender.

hearsay. A statement other than one made by the declarant while testifying at a trial or hearing, offered in evidence to prove the truth of the matter asserted (in the statement). It covers oral and written statements. The purpose for which the statement is offered determines whether or not it is hearsay.

hypothetical condition. That which is, or may be, contrary to what exists but is supposed for the purpose of analysis.**

identified risks. Risks that have been identified by the risk assessment team.

identity theft. Involves one individual fraudulently obtaining goods, funds, or services under someone else's name.

Identity Theft and Assumption Deterrence Act. A federal act that provides criminal penalties of up to 15 years in prison for identity theft.

Identity Theft Penalty Enhancement Act. A federal act that adds additional penalties for aggravated identity theft, which is identity theft committed in conjunction with certain other crimes, including, for example, mail fraud, wire fraud, bank fraud, certain thefts relating to employee benefit plans, and crimes relating to obtaining consumer information under false premises.

impaired earnings. An injured party's earnings after an injury, presumably lower than what was expected.

impeachment. The act of discrediting a witness by catching the witness in a lie or by demonstrating that the witness has been convicted of a criminal offense.

income (income-based) approach. A general way of determining a value indication of a business, business ownership interest, security, or intangible asset using one or more methods that convert anticipated economic benefits into a present single amount.*

indictment. A written accusation or document submitted to a grand jury by a prosecutor that charges a person with a crime. Such a written document must contain the elements of the alleged offense or offenses.

informal value transfer systems (IVTSs). Such systems involve one person sending cash to another. The sender gives the cash (including a fee) to a representative and designates the name and location of the recipient. The representative then notifies a second representative near the recipient. The second representative then gives the money to the recipient.

information security assurance (ISA). An evidence-based statement regarding the ability of a particular security-related deliverable's ability to withstand specified security threats.

information security management system (ISMS). A system that focuses on protecting information's confidentiality, integrity, and availability (CIA).

information. A written accusation or document prepared by a prosecutor in the name of the state that charges a person with the commission of a crime. It is an instrument used to charge persons with criminal offenses in cases in which an indictment is not required or is waived by the accused.

informational questions. In interviewing, questions designed to obtain information relevant to the investigation and possibly eliminate the interviewee as a suspect.

innocent spouse. A spouse who meets certain criteria specified in IRC Section 6015, including the test that, at the time the innocent spouse signed the return that included an understatement of tax due to the action of the other spouse, did not know, and had no reason to know, that the understatement existed.

inside directors. Directors are usually those who are employees, officers, major shareholders, or someone significantly related to the corporation.

inspector general. A governmental official who monitors for, detects, and investigates fraud.

intangible assets. Nonphysical assets, such as franchises, trademarks, patents, copyrights, goodwill, equities, mineral rights, securities, and contracts (as distinguished from physical assets) that grant rights and privileges and have value for the owner.*

integration. A money-laundering step that involves making the funds available for use by the money launderer. If the money launderer has succeeded in layering, funds that have been integrated will be completely beyond suspicion.

Internet directory (called a DNS). Associates an IP address with a domain name.

Internet False Identification Prevention Act. A federal act that makes it a crime to sell various types of government-issued identification cards.

interrogatories. Written questions submitted by one party to another party. The questions must be answered in writing within a stipulated time.

interviewing. A process of asking questions, giving feedback, and listening to responses.

introductory questions. In interviewing, questions intended to establish rapport with the suspect, obtain the suspect's cooperation, state the purpose of the interview, and gain an understanding of the suspect's demeanor in a non-confrontational context.

investigative services. Services in which the forensic accountant serves as a consultant in cases that do not involve actual or threatened litigation, performing analyses, or investigations that may require the same skills as used in litigation services.

invigilation. A special observation technique used by investigators that monitors employees' conduct first when they believe they are being observed, and then again when they believe they are not being observed.

IP (Internet Protocol) addresses. Unique addresses assigned to all devices connected to local or wide-area (Internet) networks.

IP spoofing. A technique that involves sending a fake IP with an Internet message or request to view content from an Internet server. IP spoofing is possible with one-way communications. It's obviously not possible to respond to a sender whose address is a fake.

ISACA. An association whose mission is to develop, adopt, and use widely accepted industry-leading knowledge and practices for information systems. ISACA offers three credentials of interest to forensic accountants. These include the Certified Information Systems Auditor (CISA) credential, the Certified in Risk and Information credential, and the Certified Information Security Manager (CISM) credential.

ISO/IEC 15408 (also called common criteria). Sets forth evaluation assurance levels numbered from 1 to 7, which represent progressively higher levels of assurance.

ISO/IEC 15443. A general framework for security assurance that classifies many different security methods that are in turn based on their own published standards.

ISO/IEC 27000 series. A large number of individual ISMS-related standards that deal with issues ranging from best practices to risk management and network security.

judgment as a matter of law (JMOL). A motion made by a litigant during trial which asserts that the opposing party has insufficient evidence to reasonably support its case. It is a creation of FRCP 50. The motion is decided by the standard of whether a reasonable jury could find in favor of the party opposing the JMOL motion.

judicial notice. A court's acceptance, for purposes of convenience and without requiring a party's proof, of a well-known and indisputable fact (FRE 501).

La Cosa Nostra (LCN). An Italian organized crime enterprise. The LCN consists of five families, with each family having its own "boss" or head.

lapping. A fraud scheme in which the fraudster steals a customer's incoming payment on account. The fraudster then diverts a second customer's incoming payment to cover the first customer's outstanding account balance. The fraudster then diverts a third customer's incoming payment to cover the second customer's outstanding account balance and so on.

larceny. The intentional taking of an entity's assets already recorded on the books without the consent of the entity.

layering. A money-laundering step that involves moving money, typically from one account to another in such a way that it can't be traced back to the initial deposit made in the placement step.

leading question. A question that suggests to the witness the answers desired by the examiner. In interviewing, a type of admission-seeking question that can provide the suspect with rationalizations.

lifestyle analysis. An examination of the standard of living, primarily to determine the income and expenses necessary to support this standard.

litigation consulting services. Litigation services in which a member provides advice about the facts, issues, or strategy pertaining to a matter. The consultant does not testify as an expert witness before a trier of fact.

litigation services (litigation support services). Services that include a litigation consultant, expert witness, mediator, arbitrator, fraud investigator, and bankruptcy trustee.

litigation services. Services that recognize the role of the member as an expert or consultant and consist of providing assistance for actual or potential legal or regulatory proceedings before a trier of fact in connection with the resolution of disputes between parties. Litigation services include expert witness services, litigation consulting services, and other services where the professional serves as a trier of fact.

long-arm statute. A state statute that grants to a state or federal court broad authority to exercise jurisdiction over out-of-state persons and business entities who have contacts with the state.

loss of value. In civil litigation, the decrease in an asset's value from shortly before to shortly after a wrongdoing.

loss period. In damage measurements, the time horizon for which expected economic resources were not received, commonly associated with a wrongdoing.

lost profits. In business litigation, a measurement of an injured party's economic loss commonly comprising lost revenues minus avoided costs. Profits in this usage may differ from the accounting term *net income*.

mandatory disclosure. Various information and materials may be disclosed before formal discovery. These items include identity of witnesses, documents that may be used, damages computation, and insurance policies

market (market-based) approach. A general way of determining a value indication of a business, business ownership interest, security, or intangible asset by using one or more methods that compare the subject to similar businesses, business ownership interests, securities, or intangible assets that have been sold.*

Maurice Peloubet (1892–1976). Coined the term *forensic accounting* in 1946 when he published an article titled, "Forensic Accounting—Its Place in Today's Economy."

means test. The debtor's CMI over the six months prior to the bankruptcy filing as compared to the debtor's state median income.

Med-arb. An ADR approach that entails beginning with mediation and then switching to arbitration if mediation fails to resolve the dispute.

mediation. Involves structured negotiation with the help of the third-party neutral.

Meyer v. Sefton. A case that is, perhaps, the first North American case of an accountant testifying in court as an expert witness.

mitigation. In civil litigation, the duty an injured party has to minimize its ongoing damages by taking reasonable action.

money laundering. The process of placing illegally-obtained funds into the financial system. The goal of the expert money launderer is to make it appear as though the laundered funds have come from legitimate sources.

money-laundering process. Involves three steps: placement, layering, and integration.

motion in limine. A written motion that requests an order regarding the admissibility of particular evidence at trial.

motion to dismiss. A motion made by a party in a civil case to defeat the other party's case, usually after the complaint or counterclaim or all the pleadings have been completed.

multiple deliverables. A contract under which the seller has various requirements (for example, delivery of a product, installation, and testing to perform before the seller's obligation under the contract has been fulfilled).

multiple filing schemes. Bankruptcy fraud schemes in which fraudsters use many false identities in different states to incur debt and then file separate bankruptcies under the different identities.

National Association of Certified Valuators and Analysts (NACVA). An association of professionals who provide valuation and litigation services for various types of business transactions and which offers the following credentials: Certified Valuation Analyst (CVA), Accredited Valuation Analyst (AVA), Accredited in Business Appraisal Review (ABAR), and Master Analyst in Financial Forensics (MAFF).

net book value. With respect to a business enterprise, the difference between total assets (net of accumulated depreciation, depletion, and amortization) and total liabilities as they appear on the balance sheet (synonymous with shareholder's equity). With respect to a specific asset, the capitalized cost less accumulated amortization or depreciation as it appears on the books of account of the business enterprise.*

network forensics. The branch of digital forensics that focuses on obtaining evidence from computer and storage networks.

network intrusion detection. The detection of violations in network spaces. Intrusions can be anything from a minor annoyance to a major disaster.

network storage devices. Computer storage devices that share data with multiple computers and users as part of an organization's network.

nominal amounts. In economic terms, a currency amount or monetary value as of a point in time.

non-administered arbitration. The parties must agree among themselves as to the arbitration arrangement.

non-authoritative guidance. Practice aids, special reports, and white papers designed to serve as educational and reference material on technical issues, but not intended to serve as authoritative guidance.

normalization. A modification of the financial statements (or financial information from other sources, such as income tax returns) so that they more closely reflect the true financial position and results of operations of the practice or business.

observation. Visual, audio, or electronic monitoring of the conduct of persons of interest in an investigation.

occupational fraud. Includes three types of fraud involving company employees: corruption, asset misappropriation, and fraudulent financial statements.

omerta. The LCN oath of silence.

online dispute resolution (ODR). A growing area of ADR that typically uses the Internet as a hub for resolving disputes.

orderly liquidation value. Liquidation value at which the asset or assets are sold over a reasonable period of time to maximize proceeds received.*

ordinary negligence. The absence of a reasonable level of care that is expected of persons in similar situations.

other litigation services. Litigation services where a member serves as a trier of fact, special master, court-appointed expert, or arbitrator (including serving on an arbitration panel) in a matter involving a client. These other services create the appearance that the member is not independent.

past losses. Economic losses that occurred before some point in time, such as a trial date.

pattern-based indicator. Pattern indictors work by analyzing patterns to establish normal behavior.

peer review. An evaluation of whether a CPA firm's system of quality control was designed in accordance with AICPA quality controls standards and whether the firm's quality control policies and procedures were complied with to provide reasonable assurance of meeting professional standards or a review of the firm's accounting reports and financial statements to determine conformity with professional standards, applicable to those engagements in all material respects.

peremptory challenge. A challenge to a proposed juror that a defendant may make as an absolute right and that cannot be questioned by either opposing counsel or the judge.

petition mills. Bankruptcy fraud schemes in which unqualified individuals offer low-quality filing services, instruct debtors to file without an attorney, and steal debtors' assets by having the debtor transfer assets to the fraudster.

physical evidence. Evidence that is tangible; that is, it can be touched.

piciotto. An LCN solider.

placement. A money-laundering step that involves depositing the illegally obtained funds into some type of financial institution. The money launder seeks to deposit the funds in such a way to avoid suspicion.

point of service (POS) skimming scheme. A type of fraud that involves the employee pocketing cash and not recording the sale.

predication principle. The need to justify launching and continuing an investigation.

prejudgment interest. In civil litigation, interest imposed by a court of law on a wrongdoer related to an injured party's monetary losses that occurred before the time of a legal judgment. The applicable interest rate may be specified by law or governmental administrative action.

premise of value. An assumption regarding the most likely set of transactional circumstances that may be applicable to the subject valuation (for example, going concern, liquidation).*

preponderance of the evidence. The burden of persuasion in most civil trials for the trier of fact to decide in favor of one side or the other. It usually means more probable than not and is based on the more convincing evidence and not on the amount of evidence.

present value. The value, as of a specified date, of future economic benefits and/or proceeds from sale, calculated using an appropriate discount rate.*

prima facie case. A sufficiently strong case that, unless rebutted by the defendant, entitles the plaintiff to relief against the defendant.

private networks (VPNs). Techniques that can be used to hide one's IP address. Both proxy servers and VPNs essentially work the same way: They route traffic through a third party in such a way that the third party's IP address, rather than the fraudster's IP address, appears in all Internet communications.

private trustees. Trustees appointed by United States Trustees but who are not governmental employees.

privilege. Allows a party to refuse to reveal and prohibit others from disclosing certain confidential communications.

probable cause. Apparent facts discovered through logical inquiry that would lead a reasonably intelligent and prudent person to believe that an accused person has committed a crime.

production fraud scheme. A type of fraud that typically includes theft of inventory, waste, or scrap.

production of documents. A request by one party to another to produce documents relevant to the case prior to trial.

profile of a typical fraudster. There is no standard profile of the typical fraudster. The fraud triangle is helpful in identifying those who may have committed occupational fraud.

protective order. An order issued by a court to prevent undue burdens that might otherwise be imposed by discovery.

proxy servers. See **virtual private networks**.

punitive damages. In civil litigation, a monetary penalty imposed by a court of law to punish a wrongdoer that is independent of compensatory damages.

quantitative approach to risk assessment. Estimated probabilities and dollar losses are combined to produce either expected estimated losses or estimates of probability distributions for losses.

questioned documents. Documents in which the authorship or authenticity is in question.

Racketeer Influenced Corrupt Organizations (RICO) Act. The primary legal weapon used against the LCN. This act permits the FBI to intervene even if evidence is only at a state level.

RAID (redundant array of independent disks). A storage device protocol that typically marries together multiple drives to act as one drive. RAID arrays can be used for fault tolerance or to obtain increased speed. When they are used for fault tolerance, one or two drives in the array (depending on the particular RAID protocol or "level" being used) can fail without the array losing any data.

random fraud indicator. Strictly speaking, random numbers do not in of themselves indicate fraud. However, they are included in the discussion to emphasize that reliance only on red flags and composite indicators is not sufficient to develop a comprehensive fraud detection system.

real amounts. In economic terms, a nominal amount adjusted to remove the effect of inflation.

rebuttable presumption. An inference drawn from certain facts that establish a prima facie case, which may be overcome by the introduction of contrary evidence.

red flags. Indicators of fraud but not conclusive proof that fraud exists.

re-dating. Adjusting (by extending) the due date of an accounts receivable so that the receivable is not considered past due.

relevance. Involves analysis of the relationship between a factual proposition and substantive law. Evidence is relevant only if it tends to prove or disprove a proposition of fact. Evidence must be material to a claim, charge, or defense.

reliable principles and methods. One important FRE 702 criterion for the admissibility of expert testimony. The expert's opinions must be based on reliable principles and methods.

rent-a-judge approach. An approach to arbitration that involves retaining a retired judge to proceed over a full-blown trial. It could be a bench trial or a trial with a rented jury. Such a trial could be carried out under the Federal Rules of Evidence and Federal Rules of Civil Procedure, or under similar state rules, subject to the absence of normal subpoena powers.

reperform. An auditing technique that involves re-doing a calculation, test, or other procedure.

request for admission. A request that imposes a duty on the party served to acknowledge the existence of facts that are not in doubt and that should not be necessary to prove at trial.

required rate of return. See **required return**.

required return. The return that compensates investors in a particular investment for their time, expected inflation, and uncertainty of returns.

res judicata. A matter that has been adjudicated or that which is definitely settled by a judicial decision.

retrospective valuation. An asset valuation as of a specified earlier date.

revenue recognition fraud. The most common type of financial statement fraud.

reviews. An engagement that is substantially less in scope than an audit (the objective of which is the expression of an opinion regarding the financial statements as a whole) and which does not involve obtaining an understanding of the entity's internal control; assessing fraud risk; testing accounting records by obtaining sufficient appropriate audit evidence through inspection, observation, confirmation, or the examination of source documents; or other procedures usually performed in an audit; no opinion is expressed on the financial statements as a whole.

risk assessment team. Includes accounting and finance personnel, legal counsel, risk management personnel, internal audit staff, and any other persons who may be helpful. The team should brainstorm to identify fraud risks.

risk-free asset. An asset that is free of default risk.

risk-free rate. The rate of return available in the market on an investment free of default risk.*

rule 26(f) conference. Counsel are to meet and confer as soon as practicable after the suit is filed to allow the parties to discuss the nature of their claims and defenses and to develop a proposed discovery plan.

Rule 201. General standard of conduct for CPAs, as defined by the AICPA Code of Professional Conduct, that requires professional competence, due professional care, adequate planning and supervision, and the procurement of sufficient relevant data.

Rule 2004. A Federal Bankruptcy Code rule that grants the trustee broad powers to require the production of documents or compel testimony from almost anyone.

sales skimming scheme. A type of fraud that involves misappropriation of incoming cash.

Sarbanes-Oxley Act (SOX 404). Requires management to produce an internal control report that, subject to criminal penalties, must be certified by the CEO or CFO as part of the periodic financial reports filed with the SEC.

search warrant. Orders from courts that empower law enforcement officials to seize evidence, including documents. The normal basis for the issuance of a search warrant is a probable-cause affidavit signed under oath by the official requesting the warrant. Unlike with subpoenas, search warrants must always be authorized by a court. Further, search warrants can be executed immediately, whereas the processes of issuing a subpoena and obtaining compliance can take weeks or months.

Section 341 hearings. The meeting of the creditors as provided by 11 U.S. Code Section 341.).

service of process. Delivery of a summons or document that tells a defendant he or she is being sued in a specific court that purportedly has jurisdiction. A complaint is served with the summons.

sgarrista. A soldier-level LCN member who generally runs his own rackets and gives a cut of his earnings to his immediate boss, the **capo**.

sham sales. Transactions that are intentionally represented (and recorded) as sales but that are, in substance, not sales.

short shipments. Involves the vendor shipping incomplete orders but billing as if the orders are complete. This scheme only works if the company doesn't carefully count goods in incoming orders and matches the counts against the original purchase order and vendor's invoice.

side agreements. Oral or written agreements between two or more parties to a transaction that alter the terms of a previous, usually written, agreement (this type of agreement is sometimes referred to as a *side letter*).

single-factor fraud indicators. Often called red flags, these indicators can be represented by any type of apparent error, internal control violation, or unusual transaction.

SKEET. Adequate skills, knowledge, education, experience, and training required to testify.

skimming. Defalcation; the unauthorized act of a person taking cash revenue prior to the recording of the revenue.

smurfing. A commonly used money laundering placement technique that involves splitting large amounts of money (currency) into individual deposits less than $10,000 each.

social network analysis. Relies on mapping relationships in social networks to identify fraudsters and assist in unwinding fraud schemes.

Special Publication 800-86. A publication of the U.S. National Institute of Standards and Technology (NIST) that defines four phases of the forensic process: collection, examination, analysis, and reporting.

spoliation. The accidental or intentional destruction or loss of evidence relevant to a potential or actual legal proceeding.

standard of value. The identification of the type of value being utilized in a specific engagement (for example, fair market value, fair value, investment value).*

standing. A legally protectable stake or interest a person has in a dispute to be able to bring a dispute before a court or challenge an alleged violation of a constitutional right.

standing trustees. Bankruptcy trustees that have standing appointments from the district's trustee to administer cases in their respective geographical areas.

Statement on Standards for Consulting Services (SSCS) No. 1 (CS section 100). An authoritative AICPA standard applicable to consulting services rendered by CPAs. The standard deals in part with the CPA's obligation to consider the client interest, establish an understanding with the client, communicate with the client, and exercise professional judgment.

Statement on Standards for Valuation Services (SSVS) No. 1 (VS section 100). An authoritative AICPA standard applicable to valuation services.

subject interest. A business, business ownership interest, security, or intangible asset that is the subject of a valuation engagement.**

subpoena. A formal document issued by a court, grand jury, legislative entity, or administrative agency that orders or compels a person to appear at a certain time to give testimony.

subpoenas duces tecum. Commonly referred to more simply as subpoenas. Attorneys in criminal and civil proceedings generally have the power to subpoena documents from both opposing parties and third parties, although discovery requests instead normally apply to opposing parties.

summons. A writ or process issued and served on a defendant in a civil action for the purpose of securing his appearance in the action.

surveillance. Surreptitious observation.

tangible assets. Physical assets (such as cash, accounts receivable, inventory, property, plant and equipment, etc.)*

testifying expert. A witness who normally provides a written report to the opposing side before the trial. He or she is then subject to depositions and at trial states his or her opinion in direct examination, which is then subject to cross-examination by the opposing party. Qualified testifying experts (expert witnesses) are permitted to give relevant opinions before the trier of fact. See also **expert witness services**.

Title 11 of the U.S. Code. The portion of the U.S. Code that governs bankruptcy.

top-down risk assessment. The scope and quantity of evidence gathered in assessing internal control is based on assessed risks.

trace or tracing. Work performed to determine the character (that is, marital or non-marital) of assets or liabilities.

traditional accounting. A comprehensive system of recording, classifying, analyzing, and reporting financial data and information. Its emphasis is on converting raw financial data into information useful for decision makers.

trustees (bankruptcy). Individuals appointed by the U.S. Department of Justice or creditors to administer bankruptcy proceedings.

unified case file. All communications and documentation regarding a fraud investigation should be kept in a single file, and access should be granted to the file on a need-to-know basis.

unimpaired earnings. An injured party's actual earnings before an injury or hypothetical earnings after an injury in a but-for condition.

United States Trustee Program (USTP). A program that operates with the U.S. Department of Justice and is charged with the administration of most bankruptcy cases in the United States. The mission of the USTP also includes oversight of the bankruptcy system in order to insure the integrity of bankruptcies in the system.

United States v. Sullivan. A 1927 U.S. Supreme Court case in which the court ruled that gains (that is, income) from illicit traffic in liquor are subject to the income tax, the Fifth Amendment does not protect the recipient of illicit source income from prosecution for willful refusal to file a return under the income tax law, and if disclosures called for by the return are privileged by the Fifth Amendment, the privilege should be claimed in the return.

use value. See **value to the holder**.

valuation date. The specific point in time as of which the valuator's opinion of value applies (also referred to as *effective date* or *appraisal date*).*

valuation engagement. One of two types of valuation services specified by SSVS No. 1 in which a practitioner determines an estimate of the value of a subject interest by performing appropriate valuation procedures, as presented in the SSVS, and is permitted to apply the valuation approaches and methods he or she believes is appropriate under the circumstances. The result of the engagement is expressed as a conclusion of value, which may be either a single amount or a range.

value in exchange. An amount that can be obtained by exchanging an asset for another asset, such as money.

value to the holder. An amount of worth based on the usefulness of an asset to its present owner in its current form.

vectors of attack in electronic systems. The five vectors of attack are input manipulation, abuse of access privileges, unauthorized access, direct file alteration, program alteration, data theft, and sabotage.

venue. The place in which a civil cause of action accrues, the place of a crime, the designation in a pleading of the locale where a trial will be held, or the place where the jury is gathered and an action tried.

verdict. The decision made by a jury and reported to the court on the matters or questions submitted to it at trial. In some cases, it may be the judge who issues a verdict.

voir dire. The preliminary examination of prospective jurors to determine their qualifications, suitability, and impartiality to serve on a jury.

warrant. A written order issued by a judicial officer to arrest a suspect or conduct a search of property for evidence or fruits of a crime.

web log analyzers. Software that can not only sometimes do reverse lookups but also identify every web page viewed by a given visitor and also identify the user's Internet browser, type of device, operating system, time spent viewing each page, and so on.

Wells notice. A communication in which a party is notified that the SEC staff intends to commence enforcement proceedings.

Wells submission. A brief in which a party argues that it should not be sanctioned by the SEC for violations of the securities laws.

Whois services. Services provided by ARIN and others that make reverse IP lookups available to the public.

witness immunity. A general legal doctrine that protects adverse witnesses from lawsuits from adverse parties.

work product. Materials that are written or oral and which are prepared by or for an attorney during legal representation, particularly for litigation.

work product doctrine. A qualified immunity from discovery for work product of the lawyer, except on a substantial showing of necessity or justification of certain written statements and memoranda prepared by counsel in representation of a client, generally in preparation for trial.

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Congratulations on purchasing this book and making a commitment to learn more about forensic accounting! Forensic accounting is consistently one of the top growing service areas according to *Accounting Today—Top 100 Firms*, and the area is expected to grow four times more quickly than the accounting profession as a whole over the next five years. The foundation of this book is based on the body of knowledge for the Certified in Financial Forensics (CFF®) Credential. Offered by the AICPA Forensic and Valuation Services (FVS) Section and available exclusively to CPAs, the CFF® credential represents an unparalleled combination of experience, education, comprehensive testing, and a commitment to a code of professional ethics.

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