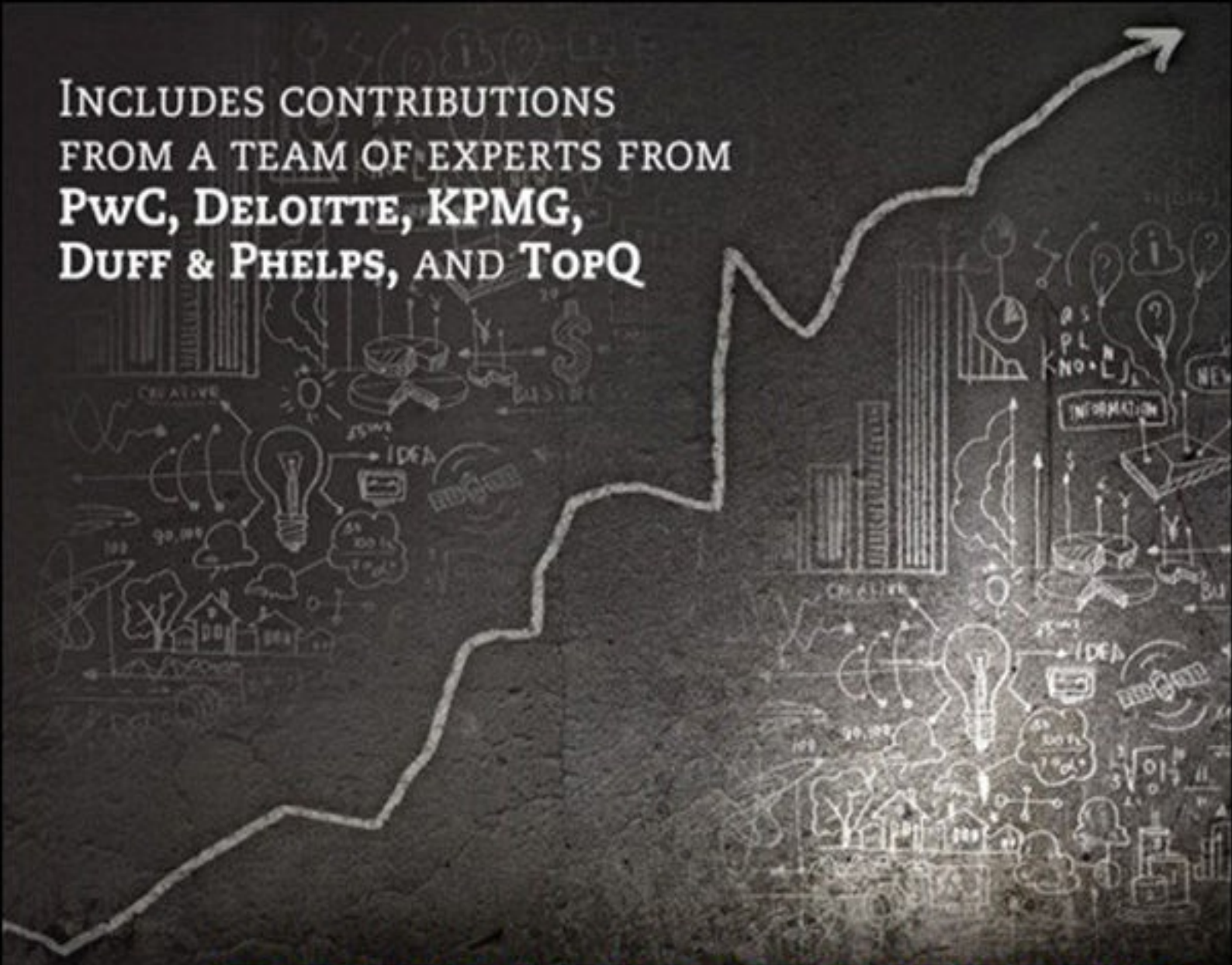

Includes contributions from a team of experts from **PwC, Deloitte, KPMG, Duff & Phelps,** and **TopQ**

PRIVATE EQUITY ACCOUNTING, INVESTOR REPORTING, AND BEYOND

MARIYA STEFANOVA

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Private Equity Accounting, Investor Reporting, and Beyond

Mariya Stefanova

**with Yasir Aziz, Stephanie Coxon,
Graeme Faulds, David L. Larsen, Ramon Louw,
Roland Mills, Henry Todd**

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To Lilly and Alex, who gave me a reason to do it;
and to my mom, without whose help I couldn't have done it.

As usual, I also dedicate my work to those who need it most—
the private equity accounting and investor reporting practitioners
whose task to provide adequate reporting for the Limited Partners
is very challenging, facing lack of detailed guidance and
having to make many judgment calls.

Contents-at-a-Glance

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About the Author

Mariya Stefanova is a founding partner of Private Equity Accounting Insights (PEAI), a private equity training and consultancy firm, providing specialist training and technical advice to GPs, LPs, and fund administrators. She has more than eleven years of experience in private equity accounting and investor reporting and more than seven years of experience in training, during which period she has trained over a thousand fund accountants and senior executives on the GP, LP, and fund administration side. PEAI Group is also providing specialist PE publications such as the *PEAI Private Equity Technical Journal*.

Mariya is also the author of the best seller *Private Equity Accounting: The Global Guide* (https://www.privateequityinternational.com/peaccounting/), published by PEI Media in October 2011.

Previously, Mariya worked in the technical department of Augentius Fund Administration LLP, a premium provider of fund administration services specialized in private equity and real estate funds. She was in charge of the technical training of the client services accountants and keeping them up-to-date with the industry and accounting developments. Mariya also provided advice to clients and client-services accountants in resolving complex technical issues, as well as performed technical reviews of accounts, quarterly investors' reports, and complex calculations.

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Part I: Private Equity Accounting, Investor Reporting, and Beyond

1. Private Equity Structures and Their Impact on Private Equity Accounting and Reporting

Mariya Stefanova, PEAI

In this chapter, we discuss:

- Structuring considerations in private equity
- Main building blocks of a private equity structure
- Domiciliation: whether to form the fund—onshore or offshore
- Plain-vanilla private equity structure
- Combination of structures, including master-feeder structures, structures involving blockers, and parallel structures
- How to treat private equity structures for accounting and reporting purposes
- Alternative private equity structures: fund lites

Any thorough discussion on private equity accounting and reporting should start by considering the relevant structure involved—whether at the fund level or at the underlying portfolio company's level.

This chapter is by no means a comprehensive guide to private equity (PE) structures; it sets the scene for the accounting and reporting to take place. Accountants do need a reasonable understanding of the fund structure in order to account for it properly.

For some sponsors, a plain-vanilla structure works perfectly. For others, even a complex structure based on a combination of vehicles involving a number of jurisdictions might not be enough. In such cases, lawyers and tax advisers can provide tailored solutions to suit the sponsor's specific requirements.

In the context of private equity accounting and reporting, when making decisions about the reporting of the fund, structure plays a part in how the information is channeled and then sliced and diced to come up with the most appropriate reporting. For instance, if you have a parallel structure, will you be reporting each parallel entity separately, or will you be reporting everything on an aggregated basis, as if the separate entities didn't even exist and you had only one fund? Or will you use both methods?

Structuring Considerations in Private Equity

To understand how and why a private equity fund is structured in a certain way, you need to understand what drives the main participants. First, there are two main questions to be asked:

1. **What do PE fund managers/general partners (GPs) want?**

   In a nutshell, what GPs want is:

   - Good tax results

- Simple structure—does not always work, but aim to use as simple a structure as possible with entities in as few different jurisdictions as possible
- Ease in operating/administering
- Moderate regulation/reporting
- Onshore access—unless good reason to be offshore (for example, VAT issues, creaming, avoid remittance)
- Familiar to LPs

2. What do investors/limited partners (LPs) want?

In a nutshell, what LPs want is:

- No tax at fund level
- Familiarity with the vehicle
- Limited liability
- No additional regulatory or reporting issues
- Good reputation (offshore / onshore / EU?)
- Avoidance of U.S. issues (for example, UBTI / ERISA / ECI / FIRPTA / FATCA if possible)

Based on the above drivers for the main participants, I think it's safe to say that most of the private equity structures are predominantly tax driven. Still, some other considerations deserve mentioning:

- Tax transparency of the fund—Limited partnerships, the most efficient and preferred legal form for PE funds, ticks that box.
- Limited liability for both manager and investors.
- Tax position (location and status) of the target investor base.
- Tax treatment of the fund's target assets.
- Tax efficiency of the management fee and carried interest.
- Regulatory issues (whether the manager and/or the fund need to be authorized or regulated).
- Commercial alignment of interests between managers and investors.
- Location of the management team.
- Investor and tax authority attitudes toward certain jurisdictions.
- Familiarity with and confidence in certain vehicles and jurisdictions.
- Cost (to maintain the structure) and time and resources (to handle the complexity of the structure).

Main Building Blocks and Vehicles of a PE Structure

Lawyers use three broad categories of vehicles as building blocks to create private equity structures:

1. **Limited partnerships** (and their equivalents in the relevant jurisdiction under consideration) and funds for joint account. Some of the most popular ones are listed here:
   - Delaware Limited Partnerships—Although it is most often preferred by U.S. managers, this vehicle is also a vehicle of choice for non-U.S. sponsors. This is due to the jurisdiction's well-developed case law and lack of obligation to disclose publicly the terms of the LPA, the identity of the LPs, and the partnership's accounts, among other important characteristics.
   - Cayman Exempted Limited Partnerships—Cayman Limited Partnerships are one of the most common vehicles if you want to go offshore. They represent quite a flexible alternative along the English model whereby the LPs have to be registered and gazetted with the Cayman Exempt Limited Partnership, which does not have many of the original limited partnership features and is more aligned with the Delaware model, also including a number of innovative features.
   - English Limited Partnerships—Tax transparent for UK-tax purposes (for capital gains distributed to LP, as well as carried interest distributed to carried interest holders), it is one of the most commonly used vehicles in Europe, even by non-UK sponsors, and is also used by non-EU sponsors. Additional benefit for carried interest holders is that, on top of the beneficial treatment of carried interest (taxed with capital gains tax instead of income tax), they also "inherit" part of the base cost of the LPs (called "base-cost shift"), thus further reducing the capital gains tax liability of these carried interest holders.
   - Scottish Limited Partnerships—While still tax transparent, unlike the English Limited Partnership, this vehicle has a separate legal personality, discussed in more detail in Chapter 11. That distinction makes it more suitable for fund of funds (FoFs) and carried interest vehicles.
   - Jersey & Guernsey Limited Partnerships—These vehicles are the offshore equivalent of the UK limited partnerships with flexibility around the separate legal personality mentioned above.
   - Luxembourg FCP *(fond commun de placements)*—As one of the few Luxembourg private equity regulatory regimes, this vehicle is a popular European fund vehicle, particularly for property funds. With no legal personality, represented by its management company, this vehicle is not a distinct corporate entity but a co-ownership of assets established by a contract.
   - Dutch CV *(commanditaire vennootschap)* Dutch Limited Partnership—This vehicle is often used alongside English Limited Partners or Luxembourg FCP, rather than as a primary fund vehicle. They can be used to accommodate Dutch LPs that sometimes require a separate parallel fund vehicle structured so as to avoid classification as a "corporation" for Dutch tax purposes, which would

potentially lead to adverse tax effect.

- Dutch FGR *(fonds voor gemene rekening)* Dutch mutual fund—An alternative way of structuring a fund (usually used for parallel or feeder vehicles), this vehicle is a set of agreements between the investors, the fund manager, and a depository.
- French FCPR *(fonds commun de placement à risques)*—Co-ownership of securities without a separate legal personality that is transparent for French tax purposes.
- German KG *(Kommanditgesellschaft)*—A vehicle often used, among others, by German institutional investors (such as pension funds and insurance companies) restricted from investing in non-OECD (Organization for Economic Co-operation and Development) partnerships.
- Spanish FCRs *(Fondos de Capital-Riesgo)*—Separate pools of assets that are legally and beneficially owned by investors but managed by a management company. The main characteristics of this vehicle are the lack of legal personality, limited liability, no tax transparency, and regulated status.

2. Taxable corporate fund vehicles. The most popular ones in Europe follow:

- Luxembourg taxable corporates—There are a number of Luxembourg corporate fund vehicles that qualify for the Lux 'Soparfi' investment regime:
  - SA *(société anonyme)*—Joint stock company or public limited company.
  - Luxembourg SarL *(société à responsabilité limitée)*—A private limited company that is not generally used as a fund vehicle, but more often used at the SPV level.
  - SCA *(société en commandite par actions)*—The closest Luxembourg corporate equivalent to the limited partnership.
  - SICAR *(société d'investissement en capital à risque)*—An investment regime rather than a legal form (unlike the aforementioned SA, SarL, and SCA, which are legal forms). SICARs may be set up in various legal forms.
- Dutch taxable entities:
  - BV (*besloten vennootschap met beperkte aansprakelijkheid*)—The BV is required by law to have a "blocking close" in their articles of association to restrict the transfer of shares; therefore, it is not suitable for listed funds.
  - NV *(naamloze vennootschap)*—The Dutch NV is very similar to the BV, except for the "blocking clause" that makes them more suitable for listed fund vehicles. The BV and the NV are treated in the same way for Dutch tax purposes.
  - Dutch cooperative *(coöperatie)*—This vehicle could be used for fund vehicles, holding companies, and structured finance vehicles. It is popular due to its favorable tax treatment.
- German GmbH—A limited liability company.

3. **Tax-exempt corporate fund vehicles.** Some are listed here:
   - Luxembourg SICAV (*société d'investissement à* capital variable, or "investment company with variable capital") and SICAF (*société d'investissement à capital fixe, or "investment company with fixed capital"*).
   - Dutch VBI *(vrijgestelde beleggingsinstelling)*—Exempt investment institution regime. These also may be set up in different legal forms (Dutch open mutual fund/open FGR, NV, or other similar European EU entity or entity from a Dutch tax treaty jurisdiction).

I will not elaborate on each of these vehicles. The purpose of this chapter is to put the private equity structures in the context of their accounting implication, not to explain the legal and tax implications. Some legal and tax aspects are mentioned, however, where relevant to the topic discussed.

This chapter focuses on the limited partnership as the preferred legal form for private equity funds, whether an English, Delaware, or Cayman limited partnership, or one set up in another jurisdiction. Therefore, unless stated otherwise, the discussions on accounting and reporting deal with a limited partnership structure in mind.

Domiciliation: Where to Form the Fund—Onshore or Offshore?

In addition to the legal form, the sponsor, with the help of legal and tax advisers, needs to decide on the jurisdiction where the fund will be domiciled. Of particular consideration is whether it will be in an onshore or offshore jurisdiction.

Simple or Complex?

Some lawyers say that it's best to keep it simple, with as few jurisdictions as possible, but that rarely works. Tailored solutions can be provided according to the specific circumstances of each sponsor, their investor base, and underlying assets.

A Plain-Vanilla Private Equity Structure

Starting with the basic private equity structure in its simplest form is the plain-vanilla private equity structure in Figure 1.1 and Figure 1.2. These structures form the basis for understanding private equity structures in general. Even if your structure is complex because of your specific circumstances and structuring considerations, as long as you understand these structures, you should be able to follow along with more complex structures covered later in the chapter that use a combination of vehicles.

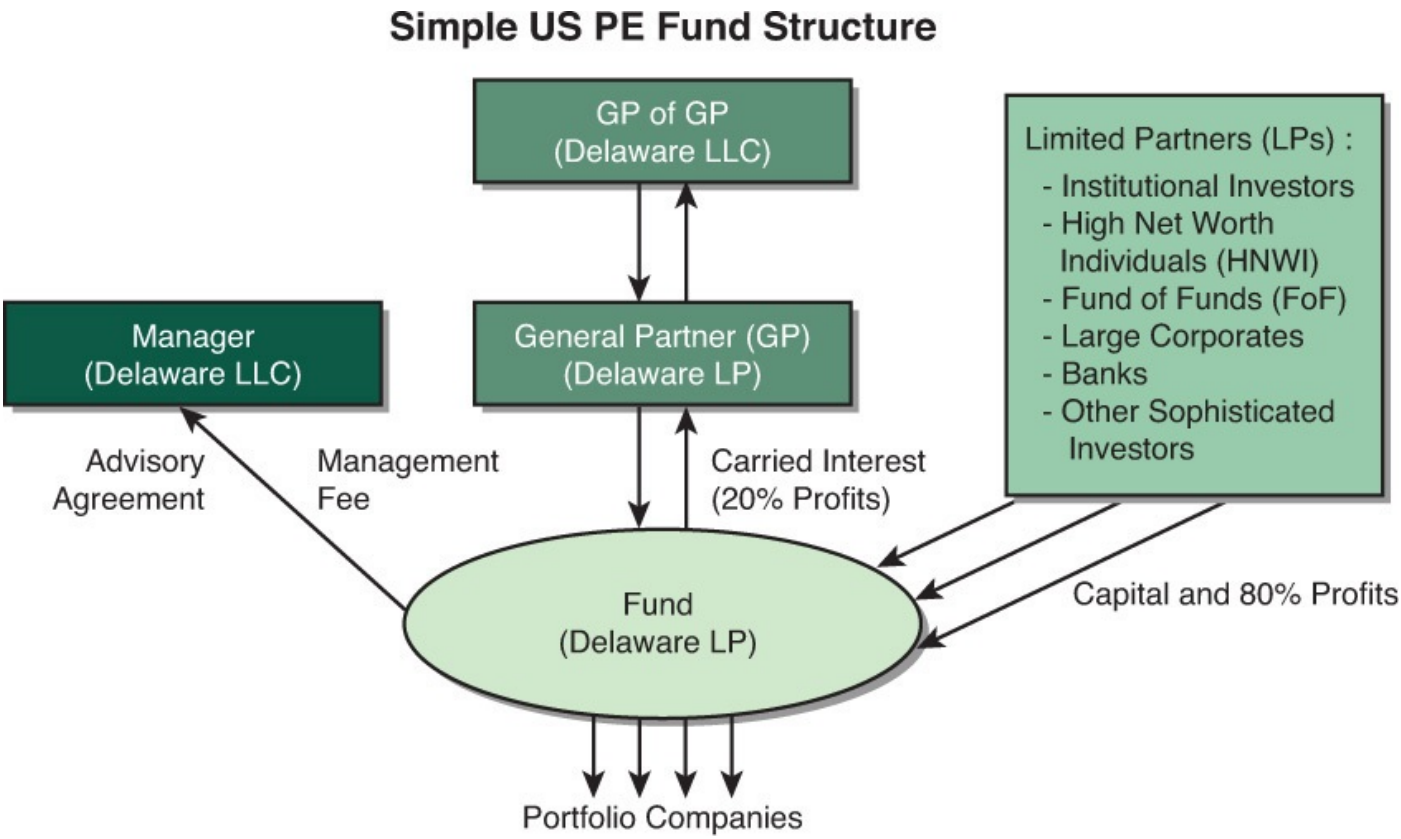


Figure 1.1 Simple U.S. PE fund structure

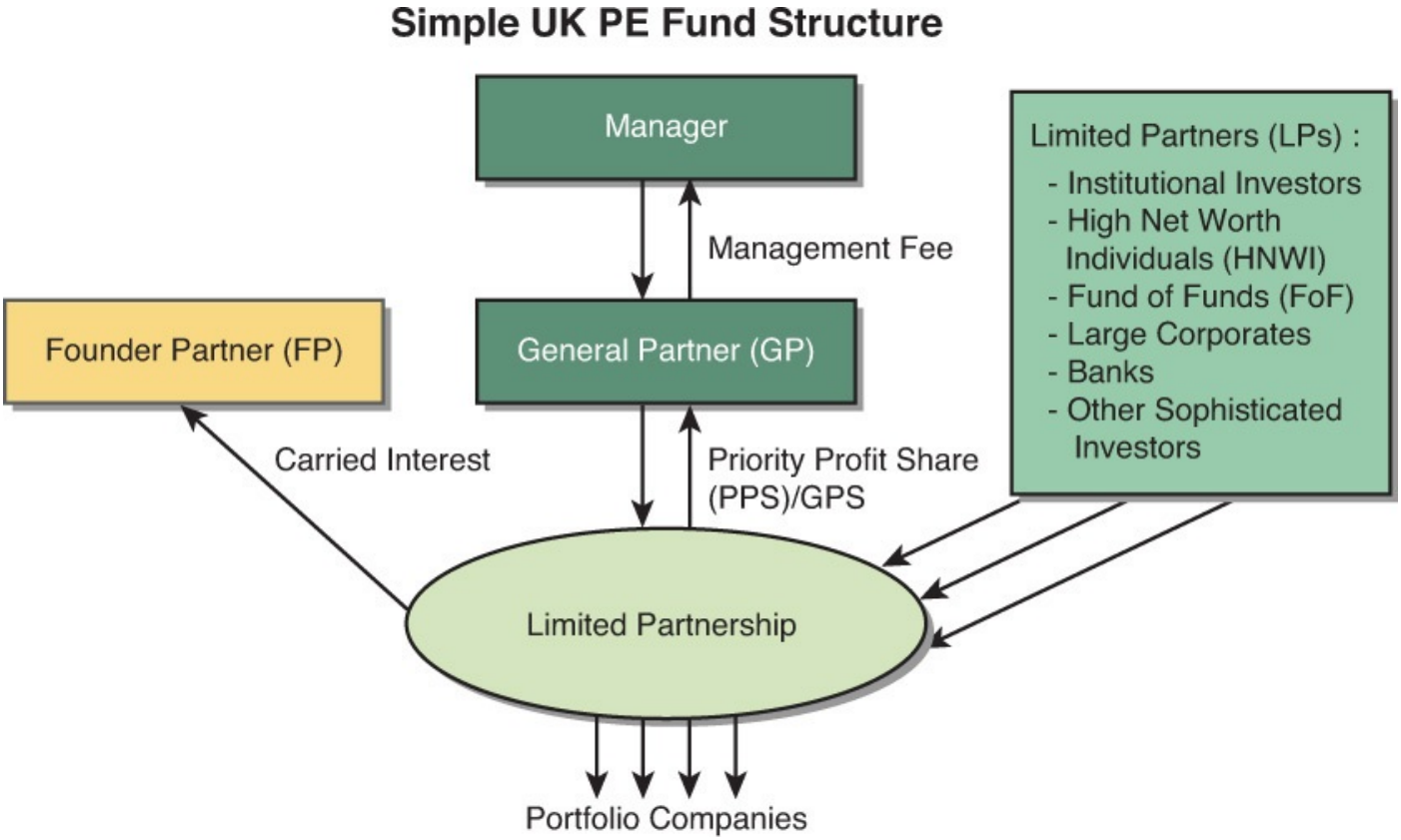


Figure 1.2 Simple UK PE fund structure

Using a Combination of Vehicles

Why would you want to use a complicated structure instead of having just one fund vehicle?

The reason for using a combination of vehicles is to cater to particular investor groups

with specific tax and/or regulatory requirements that cannot be accommodated through the main fund.

For instance, assume that for the majority of your investors a common low partnership (e.g., English Limited Partnership) would work perfectly—it is tax efficient, and the investors are familiar and comfortable with this vehicle. However, there are, for example, two groups of investors, each one facing similar (within the group, but different to the other group) challenges, for which the main fund—the English Limited Partnership—is not an efficient (for tax, regulatory, or other reasons) vehicle. What do we do?

In this case, in order to attract these investors, the sponsor will have to come up with a more desirable vehicle—in fact, two additional vehicles to deal with each group of investor needs, basically creating a combination of vehicles.

To summarize, using a combination of vehicles offers the following advantage:

- Allows the sponsor to cater for different investor requirements

However, it also represents the following challenges:

- Increased complexity, which would require additional resources and skills to understand and administer the structure
- Need to rebalance among the fund entities upon subsequent closings (valid for parallel funds)
- Need to divide costs between the fund entities (also valid for parallel funds)
- Additional cost—each legal entity would involve additional cost to set up and maintain the structure

There are basically two main ways to go about the more complex structure:

- Using a master-feeder structure; or
- Using a parallel structure

Master-Feeder Funds

A master-feeder structure is a subordinated structure in which investors invest through a feeder fund(s), which then invests in the master fund. (Often direct investors invest directly in the master fund as well, as in Figure 1.3). The master fund performs all the investment-related activities; the original drawdown and distribution activities take place at the feeder level and then are passed on to the master fund, except for any direct investors who invest directly in the master fund (see Figure 1.3).

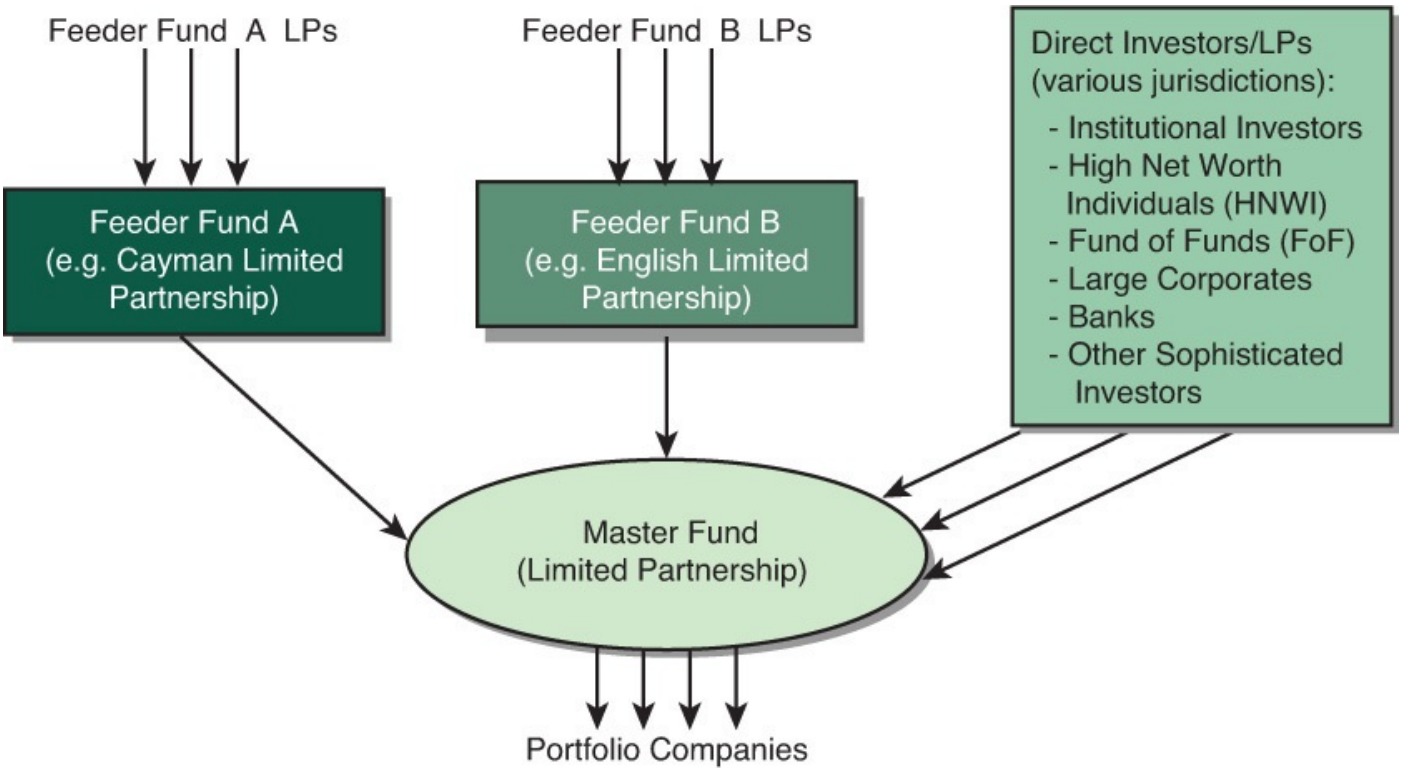


Figure 1.3 Master-feeder structure

Management fees typically are charged at the master fund level. At the feeder fund level, usually only a symbolic fixed absolute amount (e.g., US$1,000) is charged. The main expense for the management fee charged to the master fund is passed on to the feeder fund through the net asset value (NAV) allocated to the relevant feeder by the master fund.

For many investors, investing directly in a fund that is a common law partnership (such as an English Limited Partnership) might be tax-efficient (and regulatory-efficient). Let's call these investors "direct investors." However, for another group of investors, that might not be the most efficient way. To address the tax/regulatory issues specific to that group of investors (for example, Dutch investors), the sponsor might need to set up a feeder vehicle/fund (such as a Dutch CV). Doing so would make investing in the master fund through a feeder more attractive to that particular group of investors—in this case, Dutch investors who need to avoid classification as a "corporation" for Dutch tax purposes, which would lead to adverse tax consequences.

Some sponsors and lawyers organize funds with multiple partnerships for reasons other than tax. For instance, they might want to keep all U.S. investors or all Employee Retirement Income Security Act (ERISA) investors in a separate partnership, to insulate non-U.S. investors from perceived adverse U.S. taxation, ERISA, or litigation risks.

Bottom line: Reasons differ, and lawyers can come up with different solutions depending on your specific circumstances.

Another alternative (see Figure 1.3) is to organize a fund with a main fund vehicle being a common law partnership, for flexibility and familiarity to investors (and sponsors), and to form feeders (as many as you need) or parallel vehicles to cater to major investor groups with specific tax or regulatory (or any other) requirements that investment in the common law partnership cannot accommodate.

You also might have one onshore feeder (such as a Delaware Limited Partnership or an

English Limited Partnership) and another offshore feeder (such as a Cayman Exempt Limited Partnership or a Guernsey/Jersey Limited Partnership, respectively).

A master-feeder structure, as described by the International Accounting Standards Board (IASB), is often a common way for both foreign and domestic investors to invest in one central portfolio of underlying investments with different tax benefits, depending on whether an investor is invested in an onshore or offshore feeder fund. As IASB continues, from an accounting perspective, *the master fund and the feeder funds together could be viewed economically as one investment company.*

From an accounting perspective, the feeders are just another LP investing in the main/master fund. Therefore, the accounting for the feeder should be similar to an FoF—that is, taking an allocation of the NAV of the main/master fund.

From the master fund's perspective, the feeder is just another LP. Therefore, they should be treated like the other direct investors/LP by providing them with a quarterly report and capital account that includes their relevant allocation of the master fund's NAV. However, depending on the accounting framework/GAAP (Generally Accepted Accounting Principles), some specific requirements might apply.

For instance, under U.S. GAAP, a feeder fund is required to separately present its allocated share of the master fund's net investment income and realized and unrealized gains and losses in its financial statements. In addition, for investment companies regulated by the 1940 Act, each feeder fund is required to present a complete set of the master's financial statements along with its financial statements. This requirement is optional for unregulated investment companies.

Under International Financial Reporting Standards (IRFS), IASB has taken a slightly different view on that.

Structures Involving Blockers

Another type of structure that can also be viewed as an FoF structure for accounting purposes. In this case, an investment company invests in a blocker entity.

Some sponsors insert a "blocker" or "stopper" fund to change the character of the underlying income or asset (or both), primarily to address entity qualification criteria under tax, regulatory, or legal guidelines. Inserting a blocker fund converts "bad" assets and income into "good" assets and income (a dividend instead of a distribution from a limited partnership), allowing the investment company to maintain its status or to achieve a more beneficial tax outcome.

Parallel Structures

A number of different situations might give rise to the need to use parallel structures. One of the most common situations, for example, is where taxpaying and tax-exempt U.S. investors require the partnership through which they invest to make different elections for U.S. tax purposes. U.S. tax-exempt investors who do not want to have unrelated business taxable income (UBTI)—as they might be liable for tax on its UBTI and required to file certain tax returns—would typically require that their partnership elects to be treated as a corporation or hold investments through a corporation, and U.S. taxpaying investors would typically want their partnership to be treated as a tax transparent entity/partnership.

Although parallel structures are used most often for tax reasons, sometimes sponsors also use them to place different categories of investors into different vehicles for other than tax reasons. For instance, large investors paying reduced management fee/priority profit share (PPS) might be placed in one partnership while all the other investors who pay headline management fee rates are placed in a separate one.

Many examples (and as many reasons) prompt a sponsor to use a different parallel structure, and the aforementioned ones are just a few of them.

For reporting purposes, all parallel partnerships can be viewed as one partnership/entity because, if these reasons did not apply, the sponsor would have simply set up just one fund or vehicle. The reporting for parallel funds often reflects that by presenting a set of aggregated accounts in addition to the individual sets of accounts for each parallel vehicle. Under U.S. GAAP that is acceptable, but bear in mind that some auditors may challenge this concept under IFRS.

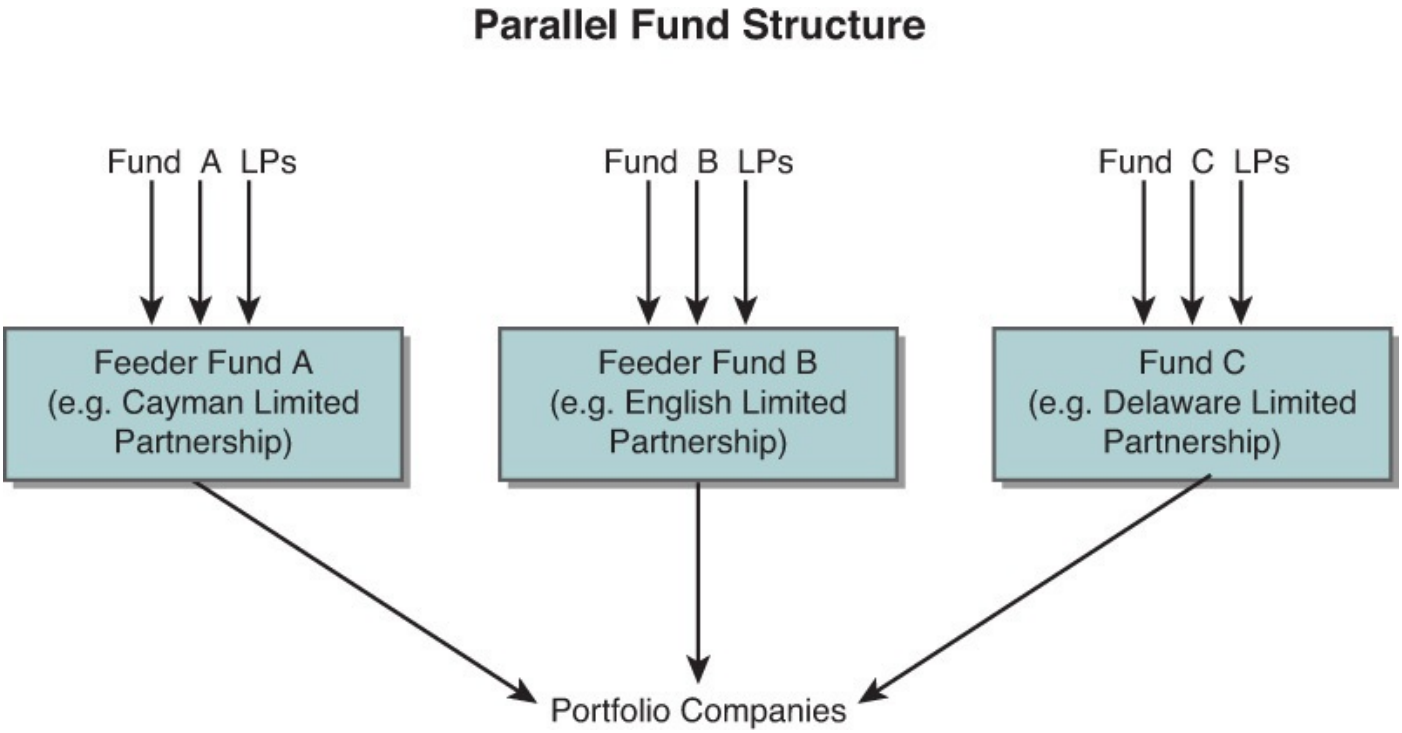


Figure 1.4 Parallel structure

Master-Feeder or Parallel Structure?

Although sometimes the same goals may be achieved by using either master-feeder or parallel structure—for example, to resolve the issue with the different tax elections mentioned earlier—sometimes there may be advantages to a master-feeder structure compared with a parallel structure.

For instance, a master-feeder structure can be used if an investor in the master fund cannot, due to internal rules or otherwise, make up more than a certain percentage (e.g., 5%) of the vehicle he is participating in due to the fact that all the investors participate (directly or indirectly) in the master fund. If you are to use a parallel fund instead, the percentage of that investor who participates through a feeder fund may go over the restricted percentage.

Another example is when you have U.S. ERISA investors and the sponsor is relying on the so-called "25% limit exemption" from the master fund constituting "plan assets," which requires that the aggregate amount of investment in the master fund subject to ERISA is less than 25%. Under a master-feeder structure, all the investors in the feeders count as investors in the master fund, which would not be the case with a parallel structure. In addition, if the business of the feeder fund is limited to investing in the master fund, you can claim that there is no investment discretion exercised by the manager/GP with respect to the feeder fund.

Alternative Private Equity Structures

Although they are still the norm, the traditional blind-pool/committed-capital fund structure has been challenged by the harsh fundraising climate. New alternative solutions and new fund terms are appearing. Some of these structures, such as the managed accounts and pledged funds, are not really new—they just haven't been traditionally used by private equity. Some lawyers refer to some new structures with significantly modified fund terms as fund-lite structures because they are significantly simpler/lighter than the typical traditional blind-pool fund. Investors who want more flexibility, more liquidity, shorter fund life, transparency, or a more hands-on approach to PE investments like these structures. Some of these fund-lite structures are briefly outlined here, in case you are having difficulties raising a traditional PE fund or if your LPs are challenging the traditional blind-pool fund structure:

- **Deal-by-deal structure—**The vehicle is set up for one or more specific deals, and a "sponsorless GP" raises money for each deal.
- **Pledged funds—**Investors have not contractually committed to invest but have "pledged" (through a participation agreement) certain money to invest in specific deals as they choose from time to time. A formal fund structure – separate limited partnership is set up for each investment, and every time a new investment is found, the manager offers to the investors the opportunity to invest in that deal.
- **Managed accounts—**This is not a formal fund structure, but rather a segregated portfolio of assets owned directly by the investor. It offers the investors greater liquidity, and the scope of the account could be tailored to meet individual investor requirements.

- **Combined ("combo") funds—**A combination of vehicles (for example, a traditional committed-capital fund and a pledged fund), i.e., partly committed and partly pledged.
- **Annual programs—**Investors commit capital on an annual basis, and they are free to recommit at the end of the term or pull their commitment.
- **Investment clubs—**They are more informal than structured funds, and the fees are for the "membership" of the club and on closing a transaction. It's more common in angel investing but is moving into other markets.
- **Co-investments—**They are becoming increasingly popular and are usually provided to special investors to sweeten their investment in the main fund by providing more beneficial conditions and/or allow investments on a deal-by-deal basis to boost investors' returns.
- **Fund lites—**It is usually a single-investment fund that retains the hallmark structure of a blind-pull fund, but with typically shorter term (5 to 7 years) and reduced fees; they usually have one or only a few limited investments held in them. They help first-time GPs gain a track record and help established managers bridge between fundraises or invest outside of their funds' policies.

Other key differences, compared to a traditional PE fund, are shorter life, reduced scope of investment objective, reduced fees (on committed capital only), deal-by-deal carry, and more transparency, among other solutions lawyers are trying to bring to PE clients.

Summary

The private equity world, as we know it, is changing as a result of the post-financial crisis. But regardless of the structure, fund accountants need to be able to understand it and see behind it so that they can provide accurate accounting and adequate reporting to suit the needs of the main users of the financial statements: the LPs.

2. The Importance of Allocations and Allocation Rules

Mariya Stefanova, PEAI

In this chapter, we discuss:

- Why it's important to start with allocations and allocation rules
- What an allocation rule is and why it is so important in private equity accounting
- Types of allocation rules:
  - By commitment (and closing date)
  - By remaining commitment
  - By drawn commitment
  - By sharing percentages
- Why different allocation rules are used
- How inaccurate allocations affect investors
- How to identify the allocation rules in a limited partnership agreement and what to do if the allocation rules stipulated in the LPA are flawed
- Whether Excel-based accounting is adequate
- The best way of doing allocations

Introduction: Why Start with Allocations and Allocation Rules?

Allocations and allocation rules distinguish private equity accounting from accounting for entities in other industries and other asset classes.

Through my extensive experience with training fund accountants and private equity executives, it became clear that there is still a surprising lack of appreciation and understanding of the following issues:

- The importance of accurate allocations to investors/limited partners (LPs)
- The variety of allocation rules stipulated in different limited partnership agreements (LPAs)
- The reason they exist in the first place
- The importance of using proper systems to arrive at the accurate net asset value (NAV) allocation to individual investors when applying more complex allocation rules

This chapter is aimed at getting the private equity accounting practitioners into the habit of always thinking of the impact of a certain transaction at the investor level, not just the fund level.

What Is an Allocation Rule, and Why Is It So Important in Private Equity Accounting?

Let's start with a reminder that the most common legal form for private equity funds is the limited partnership, with the investors set up as LPs (see Chapter 1, "Private Equity Structures and Their Impact on Private Equity Accounting and Reporting"). Each of these LPs owns an interest in the partnership—a certain percentage of it, which is usually calculated as a percentage of the total commitment. This ownership is expressed (in accounting terms) and reported to the LPs as owning a certain proportion of the fund's NAV. To arrive at the relevant proportion of the NAV, a proportion of all assets, liabilities, income, expenses, and gains/losses needs to be allocated to each LP. This means that every single general ledger (GL) account on the trial balance (TB) needs to be broken down by investor.

In all fairness, there is no requirement in any limited partnership law that the accounts are broken by partner/investor, apart from the capital accounts. However, breaking each GL account by investor has proven to be the most efficient method, as some investors require that the investments are allocated and reported in their capital account down to the investor. In that case, if you are allocating the investment as part of the assets, why not have all the other GL accounts allocated at the investor level?

Ideally, you should arrive at these allocations on a transaction-by-transaction basis instead of allocating the balances of the GL account using the by-commitment percentages, particularly in cases where different allocation rules are applied to different transactions.

Types of Allocation Rules

There are a number of allocations rules. Some rules are relatively standard/common (for example, "by-commitment"), and others are a slight modification of the standard rules (for example, "by-commitment-except-for-the-GP") or more significantly modified (for example, "by-remaining-commitment"). Occasionally, however, I come across allocation rules that are unique to the fund using them, and no other fund would have them.

Some of the most common allocation rules are:

- **By commitment (and closing date)—**This is the simplest and most common allocation rule, calculated as a simple ratio of each investor's commitment and the total fund commitment.
- **By remaining commitment—**This allocation rule, which is less common than the one based on commitment, has its own benefits. Instead of being based on the legal commitment and constant over the life of the fund, it is calculated, as its name indicates, as a ratio of each investor's remaining/outstanding commitments and the total remaining/outstanding commitment. Therefore, it potentially can be different after each drawdown. This rule is often used when there is an expectation of having excused investors. It basically accelerates the rate at which commitments are drawn down from excused investors after they have opted out of a particular investment. The rule also allows them to catch up with the non-excused investors, which is explained a bit later and illustrated in Figure 2.2.

- **By drawn commitment—**This less common allocation rule is also used in cases that deal with variations or exceptions. For example, it applies when there is a general partner (GP)/carried interest partner (CIP) commitment, and the GP/CIP is not bearing a share of the management fee/priority profit share (PPS) or when excused investors are involved.
- **By sharing percentages—**This allocation rule is also used in cases where there are excused investors, commonly to distribute proceeds from investments from which certain investors have opted out. These percentages are static and specific to each investment. Therefore, if you have different investors opting out of different investments, the allocation rule for each investment would be different.
- **Combination of allocation rules—**Often the previous allocation rules are used in combination. In complex LPAs, different allocation rules are used for drawdowns (even for different elements of drawdowns), distributions, net income, and capital gains or losses. For instance, assuming that you have opt outs, drawdowns for investments are often allocated by remaining commitment, drawdowns for partnership expenses are allocated by commitment—unless there is an expense that should be allocated to individual investor(s)—distributions related to specific investments are allocated by sharing percentages, expenses are allocated by commitment and investment-related income, and gains allocation rules are defaulting to the distribution allocation rule (i.e., by sharing percentages).

Why Are Different Allocation Rules Used? Is Excel-Based Accounting Adequate?

Making an investment in a specialist private equity system/platform is a complex decision involving many considerations, such as the size and experience of the PE manager, the number and the complexities of fund(s), the costs associated with buying, implementing, and using the platform, as well as a number of other factors. Whereas using Excel-based accounting and running Excel-based allocations might be acceptable if your LPA uses the by-commitment-only allocation and has no excused investors, everything becomes much more complicated the moment you get one excused investor. A by-commitment-only allocation rule then would no longer meet the needs of the fund. Generally, with excused investors, the by-commitment percentages become distorted, and mechanisms must be in place to compensate for that distortion. Some GPs would stick the excused investors in one or more separate vehicles, but I find it unnecessary if that is the only reason to create the vehicle(s). I find that simply using some of the modified (to the standard "by-commitment") aforementioned allocation rules is a much more elegant way to overcome that distortion, but let's elaborate on the reasons for using different rules (to the standard "by-commitment" allocation rule) first.

The first reason for using a different allocation rule is that if a by-commitment allocation rule is used for subsequent drawdowns, the excused investors who have opted out of some of the investments will never see their commitment completely drawn down; depending on the number and size of the investments subject to opt-outs, some proportion of their commitment will not be utilized (see Figure 2.1). One way to overcome this is to use a by-remaining-commitment allocation rule. As explained earlier, this rule automatically takes

care of the unutilized commitment by accelerating the rate at which commitments are drawn down from the excused investors, compared to non-excused investors and thus allowing the excused investor to catch up with the non-excused investors (see Figure 2.2).

	Commitment	Percentages by commitment	Adjusted (for the Excused Investor #5) by-commitment percentages	Drawdown (DD) #1 for Investment A	Remaining commitment after DD #1	Drawdown #2 for Investment B	Remaining commitment after DD #2	Drawdown #3 (Scenario 1) for Investment C	Remaining commitment after DD #3 (Scenario 1)	Drawdown #3 (Scenario 2) for Investment C	Remaining commitment after DD #3 (Scenario 2)
Investor #1	100	20.00%	25.00%	50	50	30	20	20	0	30	***-10
Investor #2	100	20.00%	25.00%	50	50	30	20	20	0	30	-10
Investor #3	100	20.00%	25.00%	50	50	30	20	20	0	30	-10
Investor #4	100	20.00%	25.00%	50	50	30	20	20	0	30	-10
Investor #5* (Excused Investor)	100	20.00%	0.00%	0	100	30	70	20	**50	30	40
Total	**500**	**100.00%**	**100.00%**	**200**	**300**	**150**	**150**	**100**	**50**	**150**	**0**

* Investor #5 is an Excused Investor opting out from Investment A.

** Investor #5 has an unutilized commitment at the end of the life of the fund.

*** If you try to draw down the total remaining commitment of £150 using by-commitment allocation rule, the non-excused investors will be overdrawn (thus, breaching the LPA) and the excused investor will still have unutilized commitment at the end of the life of the fund.

Figure 2.1 Drawdowns with opt-outs using by-commitment allocation rule only

	Commitment	Percentages by commitment	Adjusted (for the Excused Investor #5) by-commitment percentages	Drawdown (DD) #1 for Investment A	Remaining commitment after DD #1	Percentages by Remaining Commitment after DD #1	Drawdown #2 for Investment B	Remaining commitment after DD #2	Percentages by Remaining Commitment after DD #2	Drawdown #3 for Investment C	Remaining commitment after DD #3
Investor #1	100	20.00%	25.00%	50	50	16.67%	25	25	16.67%	25	**0
Investor #2	100	20.00%	25.00%	50	50	16.67%	25	25	16.67%	25	0
Investor #3	100	20.00%	25.00%	50	50	16.67%	25	25	16.67%	25	0
Investor #4	100	20.00%	25.00%	50	50	16.67%	25	25	16.67%	25	0
Investor #5* (Excused Investor)	100	20.00%	0.00%	0	100	33.33%	50	50	33.33%	50	0
Total	**500**	**100.00%**	**100.00%**	**200**	**300**	**100.00%**	**150**	**150**	**100.00%**	**150**	**0**

* Investor #5 is an Excused Investor opting out from Investment A.

** By using a by-remaining-commitment allocation rule, all investors' commitments have been completely utilized and there are no overdrawn commitments at the end of the life of the fund.

Figure 2.2 Drawdowns with opt-outs using by-remaining-commitment allocation rule

The second, and probably most important, reason for using a different allocation rule is that if excused investors are opting out of a particular investment, then when distributing the proceeds of that investment, giving a share of the distribution to the investors who have opted out of that investment wouldn't be fair. Therefore, a by-commitment allocation rule for that distribution wouldn't be an appropriate allocation rule. A much more appropriate allocation rule in this case would be a specific allocation rule, often called by-sharing-percentages. It basically involves using the percentages that have been used for the original drawdown for that specific investment. Figure 2.3 shows how the specific by-sharing-percentages allocation rule works.

	Commitment	Percentages by commitment	Adjusted (for the Excused Investor #5) by-commitment percentages	Drawdown (DD) #1 for Investment A	Remaining commitment after DD #1	Percentages by remaining commitment after DD #1	Drawdown #2 for Investment B	Remaining commitment after DD #2	Percentages by remaining commitment after DD #2
Investor #1	100	20.00%	25.00%	50	50	16.67%	25	25	16.67%
Investor #2	100	20.00%	25.00%	50	50	16.67%	25	25	16.67%
Investor #3	100	20.00%	25.00%	50	50	16.67%	25	25	16.67%
Investor #4	100	20.00%	25.00%	50	50	16.67%	25	25	16.67%
Investor #5* (Excused)	100	20.00%	0.00%	0	100	33.33%	50	50	33.33%
Total	**500**	**100.00%**	**100.00%**	**200**	**300**	**100.00%**	**150**	**150**	**100.00%**

* Investor #5 is an Excused Investor opting out from Investment A.

	Drawdown #3 for Investment C	Remaining commitment after DD #3	Specific sharing percentages for Investment A	Distribution of proceeds from Investment A	Specific sharing percentages for Investment B	Distribution of proceeds from Investment B	Specific sharing percentages for Investment C	Distribution of proceeds from Investment C
Investor #1								
Investor #2	25	0	25.00%	100	16.67%	50	16.67%	33
Investor #3	25	0	25.00%	100	16.67%	50	16.67%	33
Investor #4	25	0	25.00%	100	16.67%	50	16.67%	33
Investor #5*	25	0	25.00%	100	16.67%	50	16.67%	33
(Excused)	50	0	0.00%	0	33.33%	100	33.33%	67
Total	**150**	**0**	**100.00%**	**400**	**100.00%**	**300**	**100.00%**	**200**

* Investor #5 is an Excused Investor opting out from Investment A.

Figure 2.3 Drawdowns with opt-outs using by-remaining-commitment allocation rule and distributions by specific/sharing percentages

How Do Inaccurate Allocations Affect Investors?

If a GP does not get the allocations correctly as prescribed by the LPA, that GP can potentially end up with inaccurate allocations of the NAV to investors and might present the LPs with inaccurate capital accounts/partners statements. Clearly, this situation is highly undesirable.

Therefore, from the outset, review the LPA, if you haven't had a say in its drafting, and notice the applicable (to different transactions) allocation rules.

How Can You Identify the Allocation Rules in an LPA?

Just pick up the LPA and read it carefully. Unfortunately, the clauses involving allocation do not have a big red label reading "Allocation Rule." You'll have to spot all allocation rules scattered around the whole LPA. You need to pinpoint the allocation rules for roughly four groups of transactions:

1. **Allocation rules applicable to drawdowns—**Finding these allocation rules is relatively easy: You'll usually find them in the "Drawdowns/Capital Calls" section of the LP.
2. **Allocation rules applicable to distributions—**Look in a section called either "Distributions" or "Application of Cash" (the same one where you'll find the

waterfall clauses).

3. **Allocation rules applicable to net income—**Net income consists of expenses and income, and these you will possibly find in a section called "Allocation of Net Income (and Games/Losses)." Basically, you apply these to expenses- and income-related transactions/journals.
4. **Allocation rules applicable to gains and losses—**You will probably (but not necessarily) find these allocation rules in the same clause where you find the allocation rule applicable to net income. Often this allocation rule defaults to the allocation rule applied to the distributions.

What Do You Do If the Allocation Rules Stipulated in the LPA Are Flawed?

What if you spot the relevant allocation rules, but they are inadequate/flawed? For instance, what if your LPA uses the by-commitment-only rule for everything—drawdowns, distributions, net income, and gains/losses, and there are excused investors?

Let's say a first-time GP had an LPA drafted that stipulates using only the simple by-commitment (and closing date) allocation rule. That GP will likely realize this oversight when the first excused investors opt out of a certain investment, or perhaps later when distributing the proceeds from the disposal of that investment. In any case, if you want to correct that mistake, you have options:

1. If your LPA stipulates the use of by-commitment allocation rule only, you can choose to ignore this provision and use more reasonable allocation rules. The problem with this option is that you would technically be in a breach of your LPA and may potentially be challenged by some LPs, although the ones who understand the asset class would most likely be reasonable and wouldn't challenge your decision. Most likely this would go unnoticed; but then again, do you really want to test your LPs? On the other hand, wouldn't it be better if you slightly bent the rules of the LPA in the best interest of everybody—GP and LPs—and used allocation rules that are fair and make sense in this situation, despite the provisions of the LPA, which was apparently not well-written in the first place?
2. The second option, if you do not want to be in breach of your LPA, is to amend it. The tricky part here is that often you need the LPs' consent to do so. So the question is: Do you really want to go to your LPs, say, 5 years down the line and basically tell them that you were inexperienced and didn't envisage what would have happened in that scenario?
3. There is often a third option. Some experienced GPs/lawyers would include a clause in the LPA that is typically called "Variation of Fund's Accounting Structure" (or something along these lines). This might read: *"The GP may vary the accounting structure of the Fund and may determine or vary the allocation of any item as it determines appropriate to reflect the intention of the Partners, provided that no such variation shall adversely affect the Partners."* If you have this (or similar) clause, that should give you enough legal ground to vary your allocation rules as you deem appropriate, as long as you don't affect adversely the LPs. In this case, you don't

necessarily even need to draw the attention of the LPs to what you are doing—although it is always good to be open and transparent with them. I recommend that you disclose what you are doing and why you are doing it.

Picking the right (for you) option involves your own judgment.

To avoid such a potentially embarrassing (in the eyes of the LPs) situation altogether, it's best to prevent it by spotting the flaws in the LPA in the very early stages of drafting it and correct it before the final executed draft goes out to the LPs.

What Is the Best Way of Doing Allocations?

When you are facing a relevant justification of the costs involved, the best way to allocate share of the fund NAV to each investor is on a transaction-by-transaction basis using a proper private equity specialist platform/accounting system.

Imagine a fund with a complex structure of these allocation rules:

1. Using the by-remaining-commitment rule for investment drawdowns
2. Following the by-commitment rule for expenses drawdowns
3. Applying the by-commitment-except-for-GP/CIP rule for management fee/PPS drawdowns
4. Using the by-sharing-percentages for distributions and income and gains, and using the by-commitment rule for expenses

How would you do this if you were using an Excel-based accounting? By simply allocating the GL account balances? Do you think this would give you the desired result, with each investor receiving an accurate allocation of each item of assets, liabilities, net income, and capital gains/losses? Some investors would probably not undertake such detailed checking, but it is a potential risk you probably wouldn't want to take in the current fundraising environment. This is precisely why more investors make sure that a GP's systems and processes, including the accounting systems and methodologies, are reliable. Be prepared for some investors to ask challenging questions about your procedures, including ones about allocating fund NAV. If in doubt, now is the best time to look into your processes and consider using more sophisticated methods and systems. What's more, taking a detailed look is also a good move in the broader context of the Alternative Investment Fund Managers Directive's (AIFMD) requirements in Europe (effective July 2013), the increased scrutiny by the Securities and Exchange Commission (SEC) in the U.S., and the SEC's National Exam Program (NEP) division's upcoming examinations of registered advisers.

A Word of Caution for LPs

Also, if you are an LP and expect that accounts audited by one of the Big 4 auditing firms would guarantee the accurate allocation of the fund's NAV to you as an investor, you might be in for a surprise. Bear in mind that auditors typically don't sign on the investor-level allocations, although they might have looked into the GP's processes and even tested a few LPs. However, for risk and legal reasons, they don't formally sign on the investor-level allocation, so they do not rely entirely on the audit opinion in terms of the allocations.

A quick tip for reviewers of fund accounts is to ask the preparer of the accounts to run a report, provided that the preparer is using a proper specialist PE accounting platform, showing what allocation rules have been used for each transaction. The simplest action to take is to run a GL for the period under review and simply add an extra column showing the allocation rule used for each transaction on the GL. If the reviewer is aware of the allocation rules provided in the LPA, skimming through the GL to make sure that the preparer of the accounts used the right allocation rules should take just a few minutes. In the case of Excel-based accounting, for a complex allocation model, providing reliable proof would be hard even with good enough Excel modelling skills to be able to relatively accurately do the allocations. I again emphasize the benefits of having a proper specialist PE accounting platform.

Summary

Last Advice for LPs

Now that you are aware of this area that your GPs might be overlooking—and knowing that an audit opinion by a Big 4 auditing firm does not guarantee the accurate allocation of fund NAV to you as a minimum—make sure that during your initial investment due diligence process phase, the potential investee funds have adequate procedures and reliable tools (whether a specialist PE system or another sophisticated way) for allocating all the transactions /journals to each investor in the way prescribed by the LPA.

Last Advice for GPs

If you haven't had the chance to think about the consequences of inaccurate allocations, or if you weren't aware that this could be more than simply using by-commitment allocations, I recommend that you think about allocations in the context of your specific circumstances. Make sure you are allocating your journals accurately at the investor level according to the provisions in your LPA. You don't necessarily need to buy an expensive sophisticated specialist system to do that, although that would probably be the ideal solution. Whatever the tool, make sure that it works, and test it in different scenarios so that you can avoid potential embarrassment in front of the LPs.

3. Private Equity Accounting Processes: Some Neglected Processes That Could Expose GPs

Mariya Stefanova, PEAI

In this chapter, we discuss:

Introduction

Limited partners (LPs) trust general partners (GPs) with billions of dollars—but how much do they know about the processes GPs run? Do GPs allocate the right amount of the fund net asset value (NAV) to them? Do they "flip" the right amount of carried interest from what is supposed to be the LPs' interest in the partnership? And ultimately, how much do GPs themselves know about these processes? The latter might sound like an odd question, but I can assure you that it is a valid one. Over the past three years I have been training fund executives, CFOs, COOs, fund/financial controllers, and fund accountants worldwide, and I am astonished by the number of surprised faces on the mentioning of processes such as Rebalancing that they need to run on the top of the Equalization when multiple closings are involved. (Sadly, many GPs, and even some fund administrators, have not heard of Rebalancing.) To make things worse, a great number of GPs still believe that the Partner Transfers only involve a change of the name of the old investor with the name of the new investor. Not to mention the complete lack of knowledge about the flows of the internal rate of return (IRR) and the belief of some performance measurement experts that they probably should not even be used as a performance metric in private equity (covered in Chapter 7, "Performance Measurement: IRRs, Multiples, and Beyond).

I've been an accountant for many years, and I completely understand that accounting might not be a top agenda for PE managers/GPs. But these days, they cannot afford to get it wrong. Imperfections in accounting processes can expose a GP's competence and leave it vulnerable during a fundraising process, with LPs scrutinizing all aspects of the GP's operations and practices. GPs absolutely need to get their accounting processes right: Any imperfection could potentially result in inaccurate information provided to LPs, which would then lead to embarrassment, if not something worse.

The purpose of this chapter is not to explain in detail all the accounting processes that GPs run during the private equity (PE) fund life cycle, but only to highlight some of the most neglected ones.

Processes such as Drawdowns/Capital Calls and Distributions are hard to miss because their mechanics are usually well defined in the limited partnership agreement (LPA), but others are more easily missed or easy to get wrong. As you saw in Chapter 2, "The Importance of Allocations and Allocation Rules," people tend to overlook or oversimplify allocations and allocation rules. This is particularly the case with first-time GPs that haven't come across the practical implications of allocations. In addition to the allocation, a couple of other processes deserve to be mentioned as the neglected children of private equity.

Some Neglected Private Equity Accounting Processes

The two PE accounting process that GPs neglect most often are:

- Rebalancing
- Partner Transfers/Assignments

Let's see why and what the potential impact of neglecting these processes can be.

Rebalancing

The first process that a GP is most likely to neglect is the Rebalancing. Many fund accountants have even hardly heard of this process. Why? The Equalization is in the LPA, but the rebalancing is not—it is purely an accounting process, and since it is not on the LPA, accountants tend to overlook it.

What Is Rebalancing, and Why Do We Need It?

You learned in Chapter 1, "Private Equity Structures and Their Impact on Private Equity Accounting and Reporting," that the preferred form for PE funds is a LP. You also learned that what characterizes partnership accounting is that each partner is allocated a proportion of the NAV of the partnership. What better way to do that than to allocate a certain proportion of each element of the NAV, which can be calculated from either the top of the balance sheet (the net assets/(liabilities)) or the bottom (the equity)? Although there is no legal obligation to do so (apart from allocating the capital account at the investor level), because some investors may want to have the investments broken down on an investor-by-investor basis, it might be a good idea to break down all general ledger (GL) accounts to the investor. Ideally, to get the accurate balances (and movements for the P&L accounts), this allocation needs to be done on a transaction-by-transaction basis. This is particularly true for funds with more complex allocation rules—for example, not just using the by-commitment (and by-closing-date) allocation rule because each transaction (or group of transactions) can have different allocation rules (see Chapter 2).

Following this concept, rebalancing is the process by which the GL accounts need to be rebalanced at the investor level after a subsequent close, to reflect the new percentage allocation. This brings them in line with the assumption that all the investors need to be considered as if they all joined the fund on Day 1, as of the first close.

To achieve accuracy, rebalancing should be done on a transaction-by-transaction basis: Each transaction should be reallocated to investors using the new percentage allocations. Note, however, that some transactions should not be rebalanced. Usually these are transactions that have already been reallocated/equalized through the Equalization process (for example, the drawdown transactions/journals) and transactions with static or fixed allocation rules. Transactions with static or fixed allocation rules are those transactions allocated to a specific investor(s), and the subsequent close should not affect this allocation.

Accountants who are using spreadsheet-based accounting tend to think that they can achieve this by simply allocating the closing balances on the GP accounts using the new percentage allocation. This might be possible if you have only one allocation rule for all your transactions—usually by-commitment (and closing date)—but as Chapter 2 explains, that is not the case.

How Is Rebalancing Different from Equalization?

To better explain Rebalancing, we first need to compare it to Equalization as a process.

Figure 3.1 shows commonalities and differences between Rebalancing and Equalization. Both are triggered by a subsequent close. However, the equalization should have a second trigger. In other words, a Drawdown or a Distribution must take place between the two closings, or there wouldn't be anything to equalize. For Rebalancing, as long as one or more transactions take place between the two closings, the rebalancing should be carried out, even if there were no drawdowns or distributions.

	Equalization	Rebalancing
Triggers/Pre–conditions:		
– Subsequent close	Yes	Yes
– Drawdowns between the closings	Yes	No
Why?	To true up all investors as if they all joined the fund on Day 1	To true up all investors as if they all joined the fund on Day 1
What do we equalize/rebalance?	Cash/contributions/drawdowns between two closings	All GL accounts (assets, liabilities, and P&L)/Transactions

Figure 3.1 Comparisons between Equalization and Rebalancing

What Do We Rebalance?

With the Equalization process, we equalize to true up the cash from drawdowns and/or distributions that took place between the closings. With the rebalancing process, we rebalance/reallocate the GP accounts. That is best achieved through reallocating, at the investor level, the transactions that got us to the balances on these GL accounts.

Why Do We Rebalance?

We rebalance the GL account for the same reason we equalize the cash: to true up all the investors as if they all joined the fund on Day 1/as of the first close.

What Are the Implications on the LPs If a GP Fails to Run a Proper Rebalancing?

Ultimately, the GP will end up with inaccurate GL account balances at the investor level. As a result, the GP will provide LPs with inaccurate capital accounts.

Partner Transfers/Assignments

The second process GPs often neglect is the Partner Transfer (PT) process—or, as it is referred to in some LPAs, the Assignment process.

With this process, it is not a case of the GP failing to run the process: Partner Transfers are pretty hard to ignore because they are usually well-prescribed in the LPA, and the GP must take a number of actions following those provisions. The problem with the PT is that most of the GPs simply think that it merely involves replacing the name of the old investor (the transferor) with the name of the new one (the transferee). However, that's not the case—it involves much more than just a name change. You cannot wipe out the historical transactions with the transferor, despite the fact that this investor has left the partnership. Likewise, you cannot report that you have drawn down from, distributed money to, and allocated net income and gains or losses to the transferee because that investor simply wasn't there at that time (before the transfer date). So let's see what exactly needs to happen.

What Is a Partner Transfer/Assignment?

Partner Transfer is a transaction in which the transferor, a partner to the partnership, transfers (by way of sale, exchange, assignment, pledge, or any other disposition) part or all of that investor's interest in the partnership to one or more transferees. The transferee can be an existing partner or a new/substitute partner.

The PT is a mechanism that allows, under rather exceptional circumstances, an existing LP to leave the partnership. The LPA provides for the PT, to deal with potential situations when an existing LP needs to leave the partnership—for example, when the LP is having financial difficulties meeting its commitment. It involves more than just not being happy with the performance of the fund. Partner transfers are usually done with the prior written consent of the GP. Usually, the other LPs have pre-emptive rights before the transferor's interest in the partnership is offered to external investors.

Accounting Implication: Is It Just about Changing the Name of the Investor?

We have said that a Partner Transfer is not simply an issue of replacing the name of the transferor with the name of the transferee. What are the accounting implications?

1. **Transfer of commitment—**The transferor's commitment to the fund is transferred to the transferee(s) on a given transfer date, an important date in the whole transaction.
2. **Impact on asset and liabilities (top part of the balance sheet)—**The interest in

the assets and liabilities of the fund at the transfer date that the transferor previously owned is now (post the transfer date) held by the transferee(s), effective from that date. Therefore, a transfer of assets and liabilities (the accounts in the top half of the balance sheet) should take place on a given transfer date.

3. **Impact on P&L—**The P&L accounts allocated to the transferor for the period up to the transfer date explain how the transferor's personal assets and liabilities got to the balances they reached immediately before the transfer. The fact that the transferor has decided to transfer cash, investments, and so on to another party does not change the historic fact that this investor earned an income and/or gain or was allocated an expense while participating in the partnership. Therefore, we would not expect to transfer those historic income and expense accounts movement from the transferor to the transferee(s)—the P&L for both parties before and after the transfer remains unchanged.
4. **Impact on capital accounts (bottom part of the balance sheet)—**The sum of the transferor's capital accounts (which would typically include Capital Contributions Account, Loan Contributions Account, Retained Earnings—Income Account and Capital Account) that remain with the transferor will be offset by a new artificial account created only for the purposes of the Partner Transfer (that might be called "Partner Transfer Account") that should show an equivalent (to the sum of the transferor's total Capital Account), but with opposite sign (negative) amount—thus the total capital accounts for the transferor will net to zero. At the same time, the transferee, a secondary investor, will "inherit" a capital account equivalent to the total capital account (excluding the Partners Transfer Account) of the Transferor without allocating individual elements (Capital Contributions Account, Loan Contributions Account, Retained Earnings/Income Account, and Capital Account) for the reason mentioned in point 3—namely that the new/secondary investor wasn't there before the transfer date to be allocated historical drawdowns, distributions, and P&L, and allocating such would simply not reflect the reality accurately. The reality is that the transferee came into the picture on the transfer date, and that is exactly what needs to be reflected in its capital account.

Figure 3.2 illustrates these implications.

Partner Transfer Example				
	Before Transferor	After Transferee	Before Transferor	After Transferee
Balance Sheet				
Cash	50.00	–	–	50.00
Investments	1,000.00	–	–	1,000.00
Liabilities	(10.00)	–	–	(10.00)
Net assets	**1,040.00**	–	–	**1,040.00**
Capital accounts				
Contributions	1,000.00	1,000.00	–	–
Transfer in/out	–	(1,040.00)	–	1,040.00
Net income/gains	40.00	40.00	–	–
Net capital	**1,040.00**	–	–	**1,040.00**
Income statement				
Dividends	50.00	50.00	–	–
Admin	(5.00)	(5.00)	–	–
Legal	(5.00)	(5.00)	–	–

Figure 3.2 Example of the accounting implication in a Partner Transfer process

What Are the Implications for the LPs If a GP Fails to Adequately Reflect the Partner Transfer?

As with the Rebalancing process, the GP will end up with inaccurate GL account balances at the investor level, but this time only for the transferor and the transferee(s). Therefore, wrong capital accounts will be presented to the new LP(s) (the transferee[s]) and for the old investor/transferor that is skewing what really happened.

As mentioned previously, it would be inaccurate, if not wrong, to state that the GP has drawn contributions from the transferee(s) and both distributed cash and allocated P&L/retained earnings to the transferee(s) for the period before the transfer date. That simply did not happen. Transferees are simply secondary investors that have bought a secondary interest in the partnership, and that fact should be reflected accurately.

When I explain the mechanics of this process, I sometimes get asked this question: What about the IRRs for the new investors/transferee(s)? Think from the LP's perspective. If you are a secondary investor, what would you expect your IRR to reflect—would you expect it to be the same as the IRR for the other LPs that have a primary interest in the partnership? Because IRR reflects the dollar return (it's a cash-on-cash metric), you would expect the secondary investors' IRR to be very different from the primary investor's.

Summary

Rebalancing and Equalization are just two common examples of Accounting/Administration processes in which things can go wrong and have a significant potential impact on the LP/GP relationship. Although it might not have a material impact in terms of amounts, it may cause reputational damage to the GP and result in a lack of trust by the LPs.

The most likely scenario is that most of the LPs would never pick up on any of these mistakes, but this is not a reason to keep doing the wrong thing—particularly in an environment where LPs become more and more sophisticated by the day, and scrutinize more and more the GPs' internal processes. The question for the GPs to ask is how much longer it would take the LPs figuring out these and many other imperfections in their processes, and is it worth risking their reputation and the LPs' trust placed in them?

4. Investor Reporting: ILPA versus IPEV IRG

Mariya Stefanova, PEAI

In this chapter, we discuss:

Introduction

From an almost complete lack of guidance for an industry that has traditionally been very opaque to probably too much guidance to choose from, private equity is finally moving in the right direction under the increased pressure from regulators and limited partners (LPs) who worry that a new Madoff scam can jeopardize even the most sophisticated of them.

The industry is seeing a new era of shifting fund terms, tightened regulation, and alignment of interest between general partners (GPs) and LPs—all these buzzwords have perhaps become a cliché, but they have made an impact on the industry over the last few years. Part of this new order is the increased transparency embodied in improved investor reporting with various industry bodies (such as the Institutional Limited Partners Association [ILPA], the International Private Equity Valuation [IPEV] Board, and the European Venture Capital and Private Equity Association [EVCA]) that have released new reporting, valuation, and risk measurement guidelines.

Although having more guidelines is generally a good thing, the reporting framework still needs some fine tuning. LPs should be particularly careful with the variety of accounting and reporting frameworks to be sure they are comparing apples to apples. For example, unless GP's accounts are U.S. GAAP under which carried interest should be accrued for, LPs must determine whether carried interest actually has been accrued for, or at least disclosed in the financial statements. If not, they need to figure out themselves how much it should be so that they can reduce the net asset value (NAV) by that amount and have reliable fair value for their interest in that partnership.

GPs, on the other hand, should give thought in new fundraising rounds to what reporting guidelines they would like to follow. This depends on their investor base and the negotiating power LPs have. For example, should they opt for ILPA Reporting Best Practice or IPEV Investor Reporting Guidelines (IRG)?

To make sense of the existing accounting and reporting frameworks, let's see what the options are.

Existing Accounting Frameworks and GAAPs Used in Private Equity

The following are the most popular options for accounting frameworks/Generally Accepted Accounting Principles (GAAPs) available to private equity (PE):

- **Full International Financial Reporting Standards (IFRS)—**Until recently, most of the funds have been avoiding this framework because of the consolidation issue. However, the new consolidation exemption for investment entities, similar to U.S. GAAP–specific investment companies rules, has changed this.
- **IFRS except for consolidation (with audit qualification)—**Until recently, for funds that didn't want to adopt full IFRS because of the consolidation issue mentioned above, this framework was an acceptable alternative. The drawback of this alternative, though, was that it would have led to the auditors issuing a qualified opinion report. Certainly, no one likes to have a qualified audit opinion, but LPs understood the issue, and in most cases, this was not an issue. The new consolidation exemption, however, should remove this concern entirely (or almost entirely).
- **IFRS as adopted by the EU—**The consolidation exemption now endorsed by the EU wasn't adopted for some time (until November 2013) after IASB made the exemption available (in October 2012). In the meantime, in countries that used this version of IFRS as the official one, PE funds had a problem taking advantage of the consolidation exemption. This is no longer the case now, however.
- **U.S. GAAP—**U.S. GAAP was a viable alternative for not just U.S. funds. Even some European funds chose U.S. GAAP, with no consolidation issue and specific rules for investment companies by AICPA. Bear in mind that convergence between U.S. GAAP and IFRS is an ongoing process.
- **New private accounting rules within U.S. GAAP—**The Private Company Council (PCC) in the U.S. agreed to these rules for private companies (PE funds and portfolio companies) in 2013.
- **"Investor Defined Accounting Framework,"** or as fund accountants usually refer to it as **"LPA GAAP"—**An accounting framework also very often defined in LPAs as "Generally Accepted Accounting Principles as agreed from time to time with the auditors," this is the preferred GAAP for most UK and Channel Islands (Jersey and Guernsey) funds. LPs should be particularly careful with investee funds reporting under this accounting framework and should carefully read their accounting policies. The LPA GAAP is very flexible and might not provide a good basis for comparison between funds if it is not treated with care. In the UK, if the fund is a nonqualifying partnership, then according to the Partnerships (Accounts) Regulations 2008, it does not need to apply a recognized accounting framework (such as UK GAAP IFRS or any other). There were some changes to the definition of "qualifying partnership," applicable for financial periods beginning on or after October 1, 2013, but funds are restructuring to fall within the new definition (and there are also some other solutions), so LPs will probably continue to see this flexible accounting framework at least in the future.
- **UK GAAP—**Some UK and offshore Channel Islands funds chose UK GAAP

(usually “modified”), but that is gradually changing and generally moving toward IFRS.

- **Other local GAAPs—**These include Luxembourg, German, and Dutch GAAPs, among others, some of which still use the cost basis (or as usually defined, “the lower of cost or impairment”) as a basis that makes financial statements prepared under some of these frameworks impossible to compare to the modern marked-to-market basis.

What Is Investor Reporting?

As stated in the IPEV Investor Reporting Guidelines (IPEV IRG), investor reporting usually goes beyond GAAP financial and regulatory reporting. It covers the cumulative results for the fund over its lifetime, insights into the progress and current prospects of the fund’s portfolio companies, and other information unique to a particular fund and its investment process. Investor reporting expands upon information reported in the financial statement, providing important information to LPs, such as commitments, unfunded/outstanding commitments, drawn commitments/cumulative contributions, cumulative distributions, recallable/redrawable distributions, “capital at risk” and other risk measures useful to LPs, performance metrics (fund and portfolio levels), and other both quantitative and qualitative investment information.

GPs often provide integrated GAAP or non-GAAP (LPA GAAP) financial statements, typically appended at the back of the quarterly report, and include investment reporting in their reporting packages provided to LPs. Some of the information is already included in the financials, so it does not need to be duplicated in the investor reporting.

Existing Reporting Framework

Following is a brief outline of the broader existing reporting framework worldwide, with the most popular standards and guideline adopted by GPs and LPs:

- In Europe, **EVCA/BVCA (British Venture Capital and Private Equity Association) and other local reporting guidelines** are now superseded by IPEV Investor Reporting Guidelines (IPEV IRG).
- **ILPA Private Equity Principles V 2.0**, **ILPA Quarterly Reporting Standards Best Practices Guidelines** and **ILPA Standardized Capital Calls and Distribution Templates**.
- **IPEV Investor Reporting Guidelines**, released on October 29, 2012.
- **GIPS (Global Investment Performance Standards)** did not exactly manage to get endorsement within the private equity industry, so they are not very popular; but you can still use them as a reference point for performance measurement.
- **Portfolio-level reporting** for some countries (for example, Walker Guidelines—Good Practice Reporting by Poristfolio Companies in the UK).
- **ESG (Environmental, Social & Governance) Reporting** (currently a voluntary application). Chapter 5, “ESG Reporting and Responsible Investing,” discusses ESG reporting in detail.

- **INREV Guidelines (the European Association for Investors in Non-Listed RE Vehicles)** are applicable for property funds and adopted by most of the European property/real estate (RE) funds.
- **EVCA Risk Measurement Guidelines** (January 2013) for LPs.

Comparisons among ILPA, IPEV, and EVCA Reporting Guidelines

Table 4.1 compares the ILPA, IPEV, and EVCA reporting standards/guidelines.

Criteria	ILPA	IPEV IRG	EVCA RG (no longer in application)
Core content/ structure of the reporting package	1. Summary Management Discussion and Analysis Letter 2. Financial Package: ■ Balance Sheet ■ Period End Schedule of Investments ■ Statement of Operations ■ Statement of Cash Flows ■ Partners' Capital Account Statement ■ Appropriate Footnote Disclosures 3. Supplemental Management Reports ■ Executive Summary—Firm and Fund Level ■ Supplemental Schedule of Investments ■ Portfolio Company Update (one for each active portfolio company)	1. Fund Information: ■ Fund Overview ■ Executive Summary ■ Fund Status 2. Investor Information: ■ Cashflow and Net IRR calculation ■ Individual Capital Accounts ■ Capital Call Notices ■ Distribution Notices 3. Fees, Carried Interest an Related Party Transaction Information: ■ Management fee and related party transactions ■ Carried Interest 4. Investment Portfolio Information:	1. Fund Reporting: ■ Fund Overview ■ Executive Summary ■ Fund Summary ■ Cashflow Schedule and Net IRR Calculations Table 2. Portfolio Reporting: ■ Realization Summary ■ Current Portfolio Summary ■ Portfolio Companies 3. Capital Account: ■ Individual LP Account ■ Fund (All Investors) Account 4. Fees and Carried Interest

		■ Current/ Unrealized Portfolio Summary ■ Realized Portfolio Summary ■ Portfolio Company Detail ■ Movement in FV of the Portfolio	
Tiering (by importance of information)	No tiers—best practice.	Yes—'essential' and 'additional' disclosures.	Yes—requirements and recommendations.
Frequency of reporting	Quarterly.	Quarterly (there are different frequencies of reporting for different parts of the report).	Semiannually.
Audit	Audited accounts annually.	Out of scope—local/ GAAP requirements	Yes, if contractually agreed with the investors.
Timing	■ Quarterly (funds): 60 days after quarter end, with a targeted delivery of 45 days ■ Quarterly (FoFs): 90 days after quarter end, with a targeted delivery of 75 days	■ 45 to 60 calendar days for quarterly reporting ■ 75 to 90 calendar days for year-end reporting	Requirement : 60 calendar days (half year) and 90 days for y/e. Recommended : 45 calendar days (half year) and 60 days for y/e.

	■ Audited financials: More than 30 days for expected and targeted delivery deadlines outlined earlier	■ For LPs that require NAV on an estimated basis, NAV (based on an estimate of FV of underlying investments) should be provided as quickly as possible, but within 45 calendar days of quarter end	
Templates/ formats	Yes—only capital call and distribution notice templates, not quarterly report (best practice). Aiming for standardization for increased efficiencies and cost reduction—templates streamline the reporting process and facilitate better electronic comparison across funds.	No (sample reports to be provided later). Does not mandate a specific format. One size does *not* fit all—GPs and LPs should be free to agree on the process that works.	Yes—template provided.
Historic data	Yes.	No.	No.
GAAP requirement	Does not mandate any specific GAAP.		
Individual LP information	Yes, through capital accounts only. Potentially avoids duplication of information and presents a holistic approach.	Yes—through other statements, unless in GAAP information.	Per IPEV.

LP's Capital Account (PCAP)	■ Emphasizes that although the PCAP is subject to accounting standards, it is paramount to LPs. The PCAP should encompass the necessary components for an LP to assess the value of investments, as well as to reconcile the proper allocation of flows across the relevant periods. ■ Recommends current-period, year-to-date, and since-inception info.	Individual LP Capital Accounts, as part of Section II, point 2, "Investor Information."	Individual LP capital accounts required, along with fund (all investors).
GP information	Yes.	No—fund only.	No—fund only.
Portfolio reporting	Includes metrics for unrealized and realized investments.	No specific metrics required.	No specific metrics required.
Valuations	Technically silent on IPEV Valuation Guidelines, due to U.S. where IPEV is not widely adopted, but implicitly requires IPEV Valuation Guidelines.	Requires investments to be reported at fair value (FV). Explicitly requires compliance with IPEV Valuation Guidelines.	Explicitly requires IPEV.
Management fee disclosure requirements	Recommended to include information in the footnotes of the financial statements.	Recommended to include information on management fee calculation in Section 3, "Fees, Carried Interest, and Related Party Transactions," for the LPs to be able to verify compliance with the LPA.	Clear statement on related party transactions, benefits, and fees, broken down into these principal categories required: ■ Underwriting fees ■ Director/monitoring fees ■ Broken deal fees ■ Gross management fees ■ Net management fees
Carried interest requirements	Recommended to include information in the footnotes of the financial statements, as well as the individual LP's capital statement.	Recommended to include information on carried interest calculation in Section 3, "Fees, Carried Interest, and Related Party Transactions," to allow LPs to analyze the carry deducted from, allocated to, or deemed allocated to the carried interest partner (CIP).	Required information on: ■ Carried interest paid since inception ■ Current period carried interest paid ■ Current period carried interest earned ■ Current period carried interest accrued

Guidance on performance measurement	No separate section dealing with performance in detail: ■ Net (of management fees and carried interest) IRR at the fund level (using LP's cash flows) ■ Since-inception investment/gross IRR (all security types)/security-type gross IRR Key valuation metrics: ■ TVPI ■ RVPI ■ DPI Historical fund performance: ■ TVPI over time in a graphical depiction. Alternatives include both TVPI and net IRR over time.	Separate section (Section II) on portfolio measurement and reporting, with information on: 1. IRR 2. Two levels of IRR (net and gross) advocated by IPEV: a. Gross Portfolio IRR b. Fund Net IRR to LPs 3. Principles of calculating return, including: a. Timing of cash flows (daily cash flows using the actual date of the cash flow, or monthly) b. Taxation c. Net returns to investors, carried interest and the unrealized portfolio, and so on	Separate section (Section 5) on performance measurement: 1. Three levels of IRR required: a. Gross return on all investments b. Gross return on realized and unrealized investments c. Net return to the investor 2. Principles of calculating return, including: a. Timing of cash flows (daily cash flows using the actual date of the cash flow—if monthly, same day of each month) b. Taxation c. Net returns to investors, carried interest and the unrealized portfolio, and so on
Responsible investing (RI)/ESG reporting	Mentioned twice: ■ Summary Letter ■ Portfolio Company Update (in the Risk Assessment Update), as part of the extra-financial risks	Yes—in conjunction with quarterly investment reporting.	Yes—2010 version (embedded).
Compliance	Best practice—not a requirement.	Principle of compliance and voluntary self-regulation. Best practice—guidance provided.	Best practice—not a requirement.

Table 4.1 Comparison of ILPA Quarterly Reporting Standards Best Practices, IPEV Investor Reporting Guidelines, and EVCA Reporting Guidelines

Transition from EVCA RG and Other Local Reporting Guidelines to IPEV IRG

If you have been reporting under EVCA, BVCA, or other local reporting guidelines to IPEV IRG, what did you do?

1. Continue using the old EVCA/BVCA/other local reporting guidelines for your old

funds and only adopt a new reporting framework for your new vintages.

2. Transition by amending the LPA through negotiation with your LPs.
3. Automatically transition from EVCA, BVCA, or other local reporting guidelines to IPEV IRG without telling your LPs.
4. Automatically transition from EVCA, BVCA, or other local reporting guidelines to IPEV IRG, but notified your LPs in a separate letter, a separate notification, or somewhere in the notes to the financial statements or quarterly reports.

To a certain extent, your choice depends on the exact wording of your governing document (the LPA), assuming that it mentions the reporting guidelines you should adhere to. Some LPA wording refers to a specific version of the guidelines; other documents reference "EVCA reporting guidelines Version XXXX and subsequent versions as adopted by EVCA" or "reporting guidelines published by EVCA from time to time." In any case, you shouldn't continue using the old EVCA—they are simply no longer in existence.

Most GPs have chosen an automatic transition, but whatever your choice, do not forget about transparency. And what better way to show your investors that transparency is dear to your heart but to demonstrate it at any given opportunity—and this is a perfect one. The best way is to do it through a polite announcement or notification sent to all your investors telling them about this change in the reporting guidelines and explain openly exactly what (and why) you have done.

ILPA or IPEV IRG Compliant?

Many GPs have been asking about which set of reporting guidelines they should be adopting for their new vintages—IPEV IRG, ILPA Reporting Standards Best Practices, or continue using EVCA Reporting Guidelines?

EVCA Reporting Guidelines are apparently out the window, with IPEV IRG superseding them. The choice is really between ILPA Quarterly Reporting Standards Best Practices and the IPEV IRG. In addressing that decision, we must consider just how powerful ILPA is and evaluate the likelihood of LPs *en masse* imposing the ILPA Reporting Standards.

In the wake of the global economic downturn that unfolded in 2008, ILPA has been representing its 250-plus members[1] as the balance of power has steadily shifted away from GPs in favor of LPs. This has strengthened the relative position of ILPA. The ILPA Private Equity Principles, which are now embodied in the terms and conditions of many private equity funds (particularly new ones), are also increasingly being implemented in the limited partnership agreements (LPA) of new fund offerings, spurred on by many LPs' newfound bargaining power in the current tough fundraising environment. According to Preqin data,[2] 57% of LPs have previously decided not to invest in an otherwise appealing fund because of the proposed terms and conditions, which is clear evidence to support this argument.

So if you are a first-time GP raising your debut fund, you might need to concede to the ILPA-advocated fund terms and conditions and the ILPA Reporting Guidelines. However, if you are an established successful top-quartile GP with an oversubscribed subsequent fund (some of these we have been fortunate enough to have seen lately), you might not

need to comply with all the ILPA-promoted fund terms and conditions and the ILPA Reporting Guidelines. Even if you are one of the most successful GPs and count among your fund investors some of the most prominent and powerful LPs, such as CalPERS (The California Public Employees' Retirement System), that have endorsed the ILPA Reporting Guidelines and have adopted a new standardized reporting system, I am sure you would have accommodated their requirements/requests, or at least some of them. If you work with prominent world-class LPs, either as direct investors or through a fund of funds, you will no doubt have received requests from them to use the ILPA Capital Call & Distribution Notices Standardized Templates. The next step might be implementing the ILPA Quarterly Reporting Standards with other institutional LPs to follow suit. Surprisingly, in my wide client basis, the proportion of fully ILPA-compliant funds is still quite small, although individual requirements have been added to GPs' existing reporting.

Summary

Whether you would go for ILPA or IPEV IRG depends to a great extent on your individual circumstances. If the majority of your potential investor base during your next fundraising run consists of strong ILPA supporters, then why not go for ILPA?

At the end of the day, there is a significant overlap between the two sets of standards/guidelines in terms of the required/recommended information, so does it really matter if you chose ILPA or IPEV IRG in the context of the quality of the reports you are producing, or is it rather a political/marketing decision?

Endnotes

1. ILPA's 250-plus members comprise public pensions, corporate pensions, endowments, foundations, family offices, and insurance companies representing over U.S. $1 trillion of private assets globally.
2. The 2012 Preqin Limited Partners Universe.

5. ESG Reporting and Responsible Investing

Mariya Stefanova, PEAI

In this chapter, we discuss:

- Why ESG and RI
- Potential material impacts of ESG factors and value creation
- The challenges of ESG
- Some ESG issues
- Sample procedure for RI and ESG implementation
- Sample structure for an ESG report

Introduction

ESG stands for *environmental, social, and governance*, but the truth is, nobody quite knows yet what ESG reporting is and what exactly should go into an ESG report. Of course, some companies (usually listed companies that have an obligation to produce ESG reports as part of their annual reports) and large private equity (PE) firms, such as KKR, have accumulated significant experience with ESG, but this area is relatively new and is still developing.

ESG usually pairs with responsible investing (RI). Many PE firms—again, typically large ones—have also adopted responsible investing (RI) polices as a part of their investment programs. These policies often include a focus on ESG factors, including risks and opportunities, affecting both fund and portfolio companies.

Approaches to ESG continue to evolve and have not yet reached a level of consensus to be included formally in any of the industry reporting guidelines discussed in Chapter 4, "Investor Reporting: ILPA versuss IPEV IRG." ESG is vaguely mentioned (twice) in ILPA Quarterly Reporting Standard Best Practices, and a half-page section on it appears in IPEV Investor Reporting Guidelines (IPEV IRG), but that's pretty much all the industry guidance on ESG reporting.

According to the IPEV IRG, if a fund manager wants to report on ESG matters, such reporting can be done in conjunction with quarterly investment reporting and might cover some or all of the following items:

- Description of compliance with fund-level ESG parameters, as agreed upon with investors
- Method for establishing and communicating ESG performance criteria for individual portfolio companies
- Portfolio company ESG performance measurement
- Impact of the fund manager on portfolio company ESG risks and opportunities

That's all the guidance we have in an official set of private equity reporting guidelines. In

the lack of industry guidance, let’s next look at some current practices.

Why ESG and RI?

One reason to incorporate responsible investment strategies is that ESG-related risks and opportunities (and corresponding innovation and competitive advantages) are not usually captured by traditional financial analysis. PE managers are missing out on the benefits or are overlooking the risks associated with them. Analyzing ESG factors for a company, sector, and geography level can help investors identify valuable investment opportunities and improve their understanding of potential risks in an investment.

Some of the drivers behind a potential RI and ESG implementation are listed here:

Increasing regulation/legislation:

- EU Green House Gas (GHG) emissions reduction policy
- Carbon legislation (for example, EU Emissions Trading Systems (EU ETS), Carbon Reduction Commitment (CRC), and so forth)
- Pollution Prevention and Control (PPC)

International and local standards and guidelines:

- UN Principles for Responsible Investment (UN PRI)
- PEGCC Guidelines for Responsible Investment
- UN Global Compact
- Equator Principles
- Walker Guidelines (UK)

Stakeholders pressure:

- Investors/limited partners (LPs)
- Nongovernmental organizations (NGOs)
- Employees
- Media
- General public

Some investors, such as large institutional investors (for example, large public pension funds, particularly state pension plans), are more sensitive to the RI and ESG aspects than others, but generally there has been increased interest from LPs in this area.

Accountability, transparency, and disclosure:

- Improved reliability and robustness of information
- Reputation risk/opportunity
- Financial security

New opportunities:

- Resource use efficiency
- Opportunities in emerging markets and sectors (for example, green products and services)

Potential Material Impacts of ESG Factors and Value Creation

Investors should consider both the potential negative effects of the lack or poor ESG management and the positive effects of a well-implemented ESG program.

Potential negative effects of poor or nonexistent ESG management include the following:

- Reputational risk
- Litigation costs
- Share price depreciation (more for public companies)
- Local community or employee actions (such as strikes)
- Consumer concerns

Potential positive effects of good ESG management include these:

- Cost reduction (through energy savings, recycling, resource efficiency, and so on)
- Revenue generation
- Increased brand loyalty
- Increased shareholder value
- Better working environment, which potentially leads to more efficiencies, ultimately leading to revenue generation
- Strong employee morale and loyalty
- Ability to attract and retain employees, customers, and suppliers
- Risk and opportunity management across the portfolio
- Market leadership

As you can see, both negative and positive effects can have a significant impact on the portfolio companies a PE firm owns and, ultimately, can impact the value of the investment.

What Are the Implementation Challenges?

Implementing an ESG policy and designing a method of ESG reporting involve a number of challenges:

- The subject matter is broad, and knowing what matters and what doesn’t can be difficult.
- People want to report, but they don’t necessarily have the right information or processes.
- Implementation might be costly, and the benefits are typically stripped after years.

Some ESG Issues

There are some ESG issues that exist:

Environmental:

- Climate change
- Air and water pollution
- Waste management
- Carbon and CO_2 emissions
- Energy efficiency and resource use
- Biodiversity loss
- Use of toxic chemicals

Social:

- Human rights
- Labor rights and employee relations
- Work/life balance
- Health and safety
- Talent attraction and retention
- Corporate philanthropy
- Community relations
- Consumer protection

Governance:

- Transparency
- Business ethics and independence management
- Executive remuneration
- Corporate structure
- Anti-fraud and corruption
- Board effectiveness
- Remunerations strategy

Sample Procedure for RI and ESG Implementation

If you are now convinced that you need an IR and ESG policy and that you should be doing ESG reporting, you will have to consider how to implement a plan. This section offers a sample IR and ESG implementation procedure.

Stage 1: Developing an RI Policy

First, you need to define a broader framework you will be operating in. A well-defined RI policy provides guidance on and support for ESG decision making in investment processes and portfolio management. It also serves as a basis for reporting to LPs and other stakeholders.

Formulating the RI policy is the first step toward RI and ESG. Examples of questions to ask when formulating the RI policy are provided in Table 5.1.

No.	Questions to Ask in Formulating RI Policy
1	Why do we believe ESG is important?
2	Will we focus on all aspects of ESG or just a subset?
3	What ESG attention do the industries in which we invest require?
4	What do our key stakeholders require?
5	What are our typical investments?
6	Do our goals match our resources?

Table 5.1 Formulating RI Policy

As part of this process, you must outline an approach to ESG management.

Stage 2: Identifying Specific ESG Factors and Risks

After the broader RI and ESG policy has been established, it needs to be put in practice and integrated into a formal system.

Systems and processes need to be put in place to consider and monitor a range of ESG issues within the investment process.

Identifying ESG Factors and Risks for Each Industry or Sector the GP Is Involved In

First, a general partner (GP) needs to outline the more specific scope of its ESG policy. A good way of doing this is to put together a sector-by-sector checklist outlining all the important issues specific for each industry/sector in which its portfolio companies operate (see Figure 5.1).

ESG Area	General ESG Issue	Specific ESG Issue	Industry			
			Telecommunications	Pharmaceutical	Manufacturing	Financial Services
Environmental	Waste Management	Chemical waste disposal	X	X	X	
		Paper or plastic general disposal	X	X	X	
		Organic waste contamination		X	X	
	Emissions	Toxic materials emissions		X	X	
		Dust			X	
	Climate Change	Carbon-intensive industry			X	
	Water Pollution	Contaminated water		X	X	
	Biodiversity					
Social	Labor and Working Conditions	Discrimination	X	X	X	X
		Minimum wages			X	
	Health & Safety	Work safety risks	X	X	X	
		Poor sanitation			X	
		Unsafe chemicals use and storage		X	X	
Governance	Corporate Governance	Board construction and shareholders rights	X	X	X	X
	Business Integrity	Transparency, bribery, money laundering				X

Figure 5.1 Example of identifying main ESG risks, by industry

Link ESG Factors with Financial Performance

Simply put, for an ESG program to be effective, the benefits should outweigh the costs. This should be clearly demonstrated to justify the implementation of an ESG program. The challenge is that many of the ESG goals and impact are hard to quantify, so an attempt to link these ESG factors with financial performance should be made. Project appraisal techniques can come in handy here, taking into consideration all cash inflows and outflows to and from this project.

Stage 3: Implementing ESG Objectives and Putting ESG Systems and Processes in Place

After you have proven the benefits of a potential RI and ESG project, putting systems and processes in place is an important part of the implementation stage. Drafting detailed procedures is also part of the process. Bear in mind that this phase could be costly and time-consuming. You will probably need to allocate extra resources, hire ESG experts, and potentially buy or develop an in-house system to help you with the process. Remember that you are taking a long-term perspective, so do not despair if immediate gratification is not available.

Stage 4: Assessing Existing Portfolio Companies for ESG Factors and Identifying ESG Factors and Risks

After you have drafted and put in place all the procedures, a formal assessment of the existing portfolio companies needs to be undergone to establish the ESG risks for each portfolio company (see Figure 5.2).

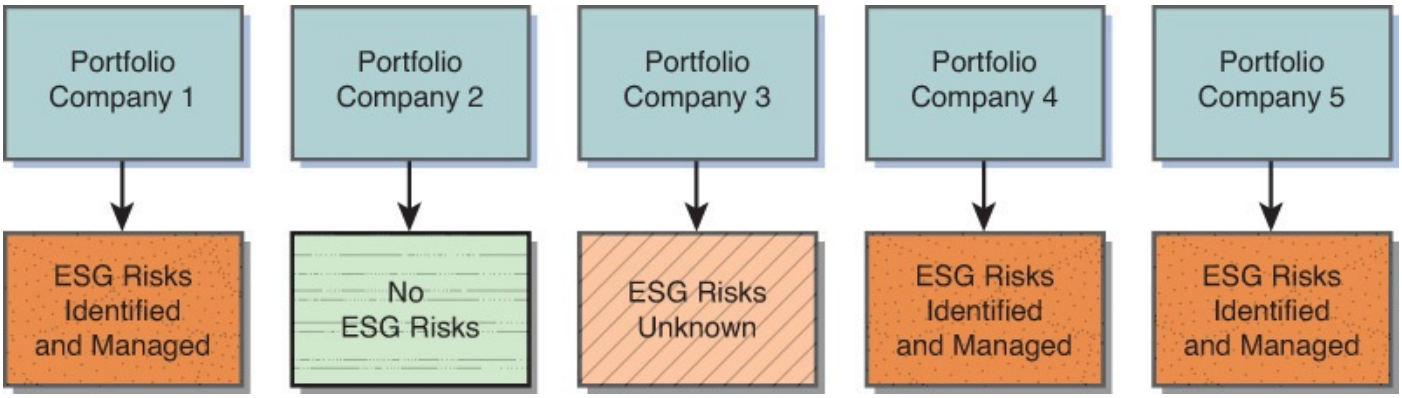


Figure 5.2 Assessing existing portfolio companies for ESG factors/risks

Stage 5: Integrating ESG Management into the Future PE Investment Process: Brief Study on KKR's RI and ESG Management

The best way to implement RI and ESG management is to weave it into the very fabric of your investment process. Likewise, an important part of the ESG strategy is to integrate ESG management into the investment process.

I recently looked into a KKR ESG report as a good example of RI and ESG and studied their RI and ESG practices. I think what they have done could serve as a blueprint in this area to be used by other private equity managers. From their ESG report, it is clear they believe that in the current environment unlocking value often includes thoughtful management of ESG-related issues. What they do is look at the portfolio companies' operations and how they can improve efficiencies and drive positive change, whether through environmental impact, in their supply chain, or among their employees.

KKR follows an effective two-phase process, outlined next.

Phase 1: Considering ESG Issues During the Preinvestment Phase

ESG issues are considered during the preinvestment phase by incorporating them into KKR's rigorous due diligence process on key business drivers, such as macroeconomic trends, customer preferences, and raw materials prices. Investment professionals and the ESG due diligence team consider how these factors provide opportunities and pose risks to the long-term growth and success of the portfolio companies. The due diligence process also includes a review of how potential portfolio companies manage or are affected by ESG issues. A team of internal subject matter experts reviews prospective investments to identify material ESG factors and works with investment teams and external consultants to gather the appropriate information to make informed recommendations about potential risks and opportunities. ESG considerations discovered during the due diligence phase can potentially have an impact on the investment decision. In certain cases, an ESG issue might pose a risk to the investment; in others, it might present significant opportunities.

Phase 2: Considering ESG Issues During the Investment Process

When the investment is made, a close partnership with the portfolio company's management is established to achieve agreed-upon performance goals. Material ESG issues identified during the due diligence process might be included in the plans.

Bottom line: The ESG management process must be followed, from the initial due diligence on an investment to the realization of that investment.

Stage 6: Implementing Specific ESG Programs for Each Portfolio Company

To put everything into practice, ESG programs need to be implemented for each portfolio company, based on the ESG risks identified in Stage 4 discussed earlier.

KKR serves as an excellent example of the successful implementation of a great variety of ESG programs, including their Green Portfolio Program, Responsible Sourcing Initiative, KKR Wellness Works, Integrity and Engagement, and Vets @ Work.

Stage 7: Set Key Performance Indicators (KPIs) and Start Measuring against Them

Having an ESG program is good, but it does not mean much without some tangible way to measure the success of the program. You must set some key performance indicators (KPIs) and start measuring against them.

Consider this suggested abbreviated procedure for implementing KPIs:

- Select appropriate KPIs.
- Establish metrics and a baseline.
- Develop goals and an action plan.
- Measure and report the results.

This process is not without its challenges. Just bear in mind that the ESG initiatives can be measured financially, but they should also be measured in terms of ESG terms because some are hard to quantify in financial terms. In any case, KPIs should be defined.

As indicators of performance, ESG KPIs can be used to monitor improvements within the portfolio companies. They are also a good indicator of how well a policy is being implemented within a portfolio company. It is worth analyzing KPI data in the long run to establish trends and areas of poor performance.

Table 5.2 shows an example of ESG KPIs.

ESG Aspect	ESG KPI
Environmental	Emissions of carbon dioxide (tons CO_2 per year) Amount of waste recycled (in tons)
Social	Staff turnover figure Number of reportable health and safety incidents Minimum wage Number of sick days per person
Governance	Number of staff trained in anticorruption Number of board meetings attended by PE firm staff

Table 5.2 Example of ESG KPIs

Stage 8: ESG Reporting

As a final stage of implementing your RI and ESG program, you need to think about how to communicate to your stakeholders.

Increased transparency is at the heart of ESG reporting. Therefore, as part of the overall RI program of a GP, sufficient attention should be given to the ESG reporting and the information shared with shareholders, including LPs and the general public.

The goal is to increase the information flow but not overwhelm stakeholders with information, so the ESG report needs to be tailored depending on their needs.

Portfolio-Level Information Flow Process Implementation

GPs should ensure that they establish a process of information flow from the portfolio companies so that they can monitor and improve ESG performance.

Monitoring ESG performance allows data to be tracked and then communicated back to the relevant stakeholders, so it is important to have adequate procedures and systems in place to ensure an effective and timely information flow.

Fund-Level ESG Report Template Design

A template ESG report should be created at the company level. Consider the following example of structure for an ESG report to give you an idea of what can go into it. Bear in mind, however, that nothing is set in stone: You can customize your report as needed.

- **Address/Letter from Management—**It's always nice to directly address your stakeholders (including LPs).
- **ESG Progress and Highlights—**Include a brief one-page report with all the important highlights for the period.
- **Commitment and Approach to ESG—**Explain your RI and ESG policy.
- **ESG Management in the Investment Process—**Explain how ESG management is woven into the fabric of the investment process.
- **ESG Programs—**Provide information on all or part of your most impressive ESG

programs.

- **Impact on Local Communities and Employees—**Outline the impact of your ESG activities on local communities and employees. If possible, include photos for illustration.
- **ESG Key Performance Indicators—**Provide your KPIs and a progress report on them, and state the next period's goals.

If you don't have enough information for a separate dedicated sustainability/ESG report, consider incorporating the information into the portfolio information on each portfolio company in the annual or quarterly (although that might be too much) investor reports. Alternatively, you might incorporate the information into the portfolio companies' own annual reports and upload them to the investor area of your website. Whatever way you decide to do it, give thorough consideration to your presentation.

Summary

Some people who are not familiar with ESG and RE investing think that it is just a bunch of useless policies designed to make PE funds look good to investors and to the general public. It's much more than that. There are benefits in ESG for even the most profit-driven GPs. It's about knowing your risks—negative and positive—and managing those risks to minimize negative risks and take advantage of the positive risks by implementing different ESG/RE programs, and quantifying the effect of those programs. And at the end of the day, what is so bad about looking after the environment, improving the lives of the employees of your portfolio companies, and helping local communities along with making profits?

6. Private Equity Valuation: Taking Valuation to a Level Higher

David L. Larsen, Duff & Phelps

In this chapter, we discuss:

- Why we use fair value
- Fair value history and evolution
- Fair value guidelines and accounting standards
- Basic private equity valuation concepts
- Calibration
- Marketability
- Unit of Account
- Valuing noncontrolling interest
- Mathematical models for valuing noncontrolling interest
- Option pricing models (OPM)
- Probability-weighted expected return models (PWERM) accompanied by a backsolve
- Valuing investments in private, nontraded debt
- Valuing fund interests

Why Fair Value? A Fair Value History Lesson

No treatise on private equity accounting would be complete without a robust discussion on valuation. Because of a historical accounting framework that encouraged conservatism and therefore accepted cost as an approximation of fair value, many industry participants (both general partners [GPs] and limited partners [LPs]) came to believe that accounting standards allowed cost as the reporting basis for private equity investments. Some GPs and LPs have even argued that cost is a preferred basis of reporting because all that matters to investors is the ultimate proceeds they earn from an investment. Such logic is flawed from several different perspectives. LPs don't always articulate why they need fair value reporting, yet fair value reporting is critical for LPs for a number of reasons, including these:

- For compliance with their own financial reporting requirements, which necessitates that all investments be reported at fair value
- To provide interim results to assist with manager selection decisions
- To provide a common basis for LPs to make asset allocation decisions (all asset classes are reported consistently on a like-like basis, fair value)

- To provide information to assist investors/LPs, who are the main users of the financial statements in exercising fiduciary duties to diligently monitor investments
- To support incentive compensation decisions
- To satisfy third-party or regulatory requirements (such as ERISA regulation)
- To eliminate the need to consolidate underlying portfolio company financial statements

In the United States, the use of fair value as the reporting basis for private equity investments dates to the 1940s, as dictated by the Investment Company Act. However, because the private equity market was relatively small then, conservatism was deemed beneficial,[1] and commitments were often considered immaterial in the context of an investor's overall portfolio, cost was deemed the best approximation of fair value in most cases. However, in the early 2000s, the crash of the technology bubble raised questions of the appropriateness of reporting investments at cost when their value might have decreased below cost. Furthermore, as the industry expanded and assets under management significantly increased, private equity investments could no longer be considered immaterial.

Valuation Guidelines

Even before the turbulence of the 2000s, valuation questions began to surface with some degree of frequency. As a result, in 1989–1990, a task force of primarily venture capital fund managers was established and developed a set of draft valuation guidelines. Contrary to persistence rumors, these draft guidelines, which advocated using the lower of cost or market value, were never endorsed by the National Venture Capital Association (NVCA) in the U.S. and were neither published nor formally finalized. Yet lower of cost or market became a default valuation premise for private equity and venture capital fund managers throughout the 1990s. As noted earlier, though, since the 1940s, U.S. Generally Accepted Accounting Principles (GAAP) have always required investments be reported at "fair value." From a pragmatic perspective, because of lack of materiality and conservatism, cost was deemed the best approximation of fair value.

Concerns following the burst of the technology bubble during 2002–2003 prompted a self-appointed group of private equity practitioners, fund managers, fund-of-fund (FoF) managers, and service providers to form the Private Equity Industry Guidelines Groups (PEIGG). PEIGG produced valuation guidelines in December 2003, with slight modifications made in September 2004. The PEIGG Valuation Guidelines were created with the goal to be consistent with U.S. GAAP, underscoring once again the GAAP requirement that all investments be reported at fair value. To some extent, the PEIGG guidelines provided a wake-up call to the industry by directly stating that "cost" might not represent the best estimate of fair value, especially after the passage of time.

Globally, the PEIGG Valuation Guidelines provided a clear statement of fact to the international private equity community that existing valuation guidelines were not compliant with relevant accounting standards. As a result, three Europe-based venture capital associations (AFIC, BVCA, EVCA) created the International Private Equity and Venture Capital (IPEV) Valuations Board. IPEV was tasked with creating valuation

guidelines compliant with international accounting rules; the IPEV guidelines ended up being conceptually consistent with PEIGG's Valuation Guidelines. Because of the legal convention in Europe to include in fund formation agreements a requirement that the fund use specific valuation guidelines, the IPEV guidelines quickly obtained acceptance for funds formed outside the United States both in practice and in legal agreements. In the United States, fund agreements generally continued to mandate the use of U.S. GAAP as a basis of reporting.

In late 2013, the Private Equity Growth Capital Council (PEGCC, representing large buyout firms) and the U.S. National Venture Capital Association (NVCA) both endorsed the IPEV Valuation Guidelines, giving the IPEV guidelines greater traction in the United States. The endorsements came about in part because of increasing concern that the application and interpretation of U.S. GAAP, as driven by U.S. auditors, might not provide a valuation framework that is consistent with the needs of limited partners.

As of 2014, more than 40 private equity and venture capital associations, including the Institutional Limited Partners Association (ILPA), have endorsed the IPEV Valuation Guidelines (www.privateequityvaluation.com). The IPEV Valuation Guidelines are updated periodically; the latest version was released in December 2012.

Why Valuation Guidelines Matter

In 2003, when the PEIGG Valuation Guidelines were issued, the U.S. Congress also enacted Sarbanes-Oxley legislation, which among other provisions, created the Public Company Accounting Oversight Board (PCAOB). The PCOAB regulates auditors of public companies. The Dodd-Frank Act, enacted in 2011, required certain investment managers to register with the Security Exchange Commission (SEC) and brought them under SEC oversight. Auditors of Funds also faced additional PCAOB scrutiny as a result.

In its annual inspection reports of audit firms, the PCAOB has noted a number of deficiencies relating to auditing fair value. Although venture capital managers generally are not subject to SEC regulation and PCAOB oversight, it is difficult—if not impossible—for auditors to audit nonregulated investment companies differently than they audit regulated investment companies. Therefore, the SEC and the PCAOB directly impact the audits of venture capital funds and auditors' interpretation and application of GAAP because of PCAOB and SEC pressure on other similar entities. Interestingly, although the PCAOB has identified a number of audit "deficiencies" that theoretically could cause an audit failure, few, if any, publicized venture capital or private equity fund audit missteps have arisen in recent history.

Given the recent economic dislocation related to financial instruments, it is understandable that the PCAOB seeks to note audit failures relating to financial instruments and loan portfolios. However, superimposing such findings on venture capital and private equity indirectly through pressure on auditors seems vastly unjustified. The PCAOB has identified the following shortcomings with respect to financial instruments that have indirectly impacted the interpretation of fair value GAAP and the application of audit procedures to private equity and venture capital:

- Failure to perform appropriate diligence on pricing services, to the extent of not understanding the pricing services methodology and/or not knowing the key underlying assumptions
- Price confirmation performed with the same pricing agent the audit client utilized
- Failure to consider (challenge and understand) material pricing differences among various sources or from the same provider over time
- Lack of documentation in support of differences between the recorded/reported price and the price the external pricing agent provided
- Haphazard extrapolation of fair value between calculation and reporting dates, or the extension of interim fair value conclusions without performing procedures to determine the appropriateness of prior conclusions to the current reporting period
- Failure to assess the comparability of valuation inputs derived from market data to the subject security
- Failure to test inputs and assumptions utilized by an external valuation specialist
- Lack of sensitivity testing of key variables, including projected results and discount rate assumptions to determine potential misstatements
- Failure to assess the appropriateness of the valuation model
- No demonstrated working knowledge of the valuation model, with insufficient inquiries about the model that cannot reveal any modeling weaknesses
- Lack of appropriate testing of key assumptions and inputs, and unconfirmed appropriateness of sources to determine the reasonability of inputs

Auditors' desire to get the PCAOB and SEC off their back has forced them to increasingly expand their requests for documentation and has limited their tolerance for judgment. Yet ASC Topic 820 and IFRS 13 are principle based and require the use of market participant assumptions, which are inherently judgmental. Therefore, industry-created guidelines that incorporate the views of LPs, GPs, and valuation specialists provide a GAAP-consistent basis for exercising judgment in estimating fair value.

Fair Value Accounting Standards

As previously noted, GAAP has always mandated that investment companies report their investments at fair value. Historically, “fair value” has been defined and applied inconsistently (especially given the accommodation to use cost as an estimate of fair value). Before 2006, *fair value* was defined as the exchange price between a willing buyer and a willing seller. With a clear focus on all uses of *fair value* (not specifically for private equity), in September 2006, the U.S. Financial Accounting Standards Board (FASB) issued SFAS 157 Fair Value Measurements (subsequently renamed ASC Topic 820) to harmonize the definition of *fair value* and to expand disclosures about fair value in all situations when *fair value* is required to be used in the accounting literature. SFAS 157 did not mandate the use of fair value (other accounting standards mandated its use). Instead, SFAS harmonized a new definition of *fair value*: the amount that would be received in an orderly transaction using market participant assumptions at the measurement date.[2] The new definition of fair value is conceptually congruent with the old “willing buyer/willing seller” definition.

In 2011, the International Accounting Standards Board (IASB) issued IFRS 13, creating a fair value measurement standard equivalent to FASB ASC Topic 820. As previously stated, neither IFRS 13 nor ASC Topic 820 requires private equity assets to be reported at fair value. Only when other accounting standards mandate the use of fair value do IFRS 13 and ASC 820 provide the definition of *fair value*, the general framework for estimating fair value, and the disclosures about how fair value was derived.

Basic Private Equity Valuation Concepts

Most private equity investments are in illiquid and infrequently traded debt or equity securities of private companies. Accounting standards encourage the use of multiple methodologies for valuing such investments.

Two primary macro methodologies are used to determine the fair value of private equity investments:

- The market approach
- The income approach

A third methodology, cost, is not particularly relevant for most private equity investments and is therefore not discussed here.

Using the market approach, fair value is determined based on market indications of value, such as multiples of EBIDTA (earnings before interest, taxes, depreciation, and amortization).

Under the income approach, fair value is determined based on estimated future cash flows discounted at an appropriate risk adjusted rate of return.

Both approaches are used in combination with the required calibration concept. In this context, calibration means evaluating the inputs used at acquisition, using appropriate valuation methodologies, and incorporating the results into future valuation estimates. To illustrate both valuation methodologies and the calibration concept, consider the following

simplified example.

Basic Facts

- Buyout Fund XYZ (XYZ) purchases 100 percent of Portfolio Company A (PCA) for consideration of $1,000, financed by:
  - $500 equity
  - $500 debt (variable market interest rate; repayable upon a change in control)
- The transaction is considered to have taken place at fair value (orderly transaction; no compulsion to sell or buy).
- The fair value of the enterprise is therefore $1,000, the purchase price.
- LTM EBITDA at the date of acquisition is $100, indicating an implied EBITDA multiple of 10 at acquisition.
- Expected future cash flows discounted at a 12 percent rate indicate a value of $1,000.

Calibration

- A basket of comparable companies trades at an EBITDA multiple of 11.
- Calculating a discount incorporating the risk-free rate of return, country/size factors, comparable company levered beta, and so on indicates a discount rate of 11 percent.
- Calibration therefore indicates:
  - PCA's fair value using a market methodology is based on an EBITDA multiple that is 9.1 percent less than the comparable company multiples ($11 \times (1 - 0.091) = 10$)
  - PCA's fair value using an income methodology uses a discount rate, 12 percent, which is 100 basis points higher than comparable companies' rate of 11 percent (likely because of company-specific risks).

Determining Enterprise Value at a Future Valuation Date

At future valuation dates, the concept of calibration is used to consider adjustments to inputs based on the current market factors and assumptions that market participants would make to determine the value of an investment. Calibration is used at future valuation dates, as described in the following sections.

Market Approach

- LTM EBITDA is now 110.
- Comparable company multiples have increased to 12.
- Judgment is required to understand what, if anything, has changed that would indicate that PCA's discount to the comparable companies would be more, less, or the same as the calibrated 9.1 percent at entry.
- Assuming that PCA is 50 percent along the way to achieving expected operational

improvements, the difference to comparable companies' multiples is now deemed to be 5 percent. PCA's enterprise value would be estimated as 12 (market comps) × (.95 [5 percent calibration adjustment]) × 110 (current LTM EBITDA), resulting in the fair value of the enterprise of $1,254.

Income Approach

- Calculated discount rates using comparable companies have decreased to 10.5 percent.
- Judgment is required to understand whether the calibrated company-specific risk factor of 100 basis points remains.
- The PCA is determined to be 50 percent along the way to the achieving expected operational improvements. Therefore, the calibration adjustment is reduced from 100 basis points to 50 basis points, resulting in a discount rate of 11 percent.
- Applying the 11 percent discount rate to most likely future cash flows results in an enterprise value of $1,250.

This simplified example highlights both the market and income valuation methodologies and shows how calibration can be utilized. The IPEV guidelines provide further details on how the income and market approaches are best used in the industry.

Figure 6.1 further articulates how valuation methodologies can be selected.

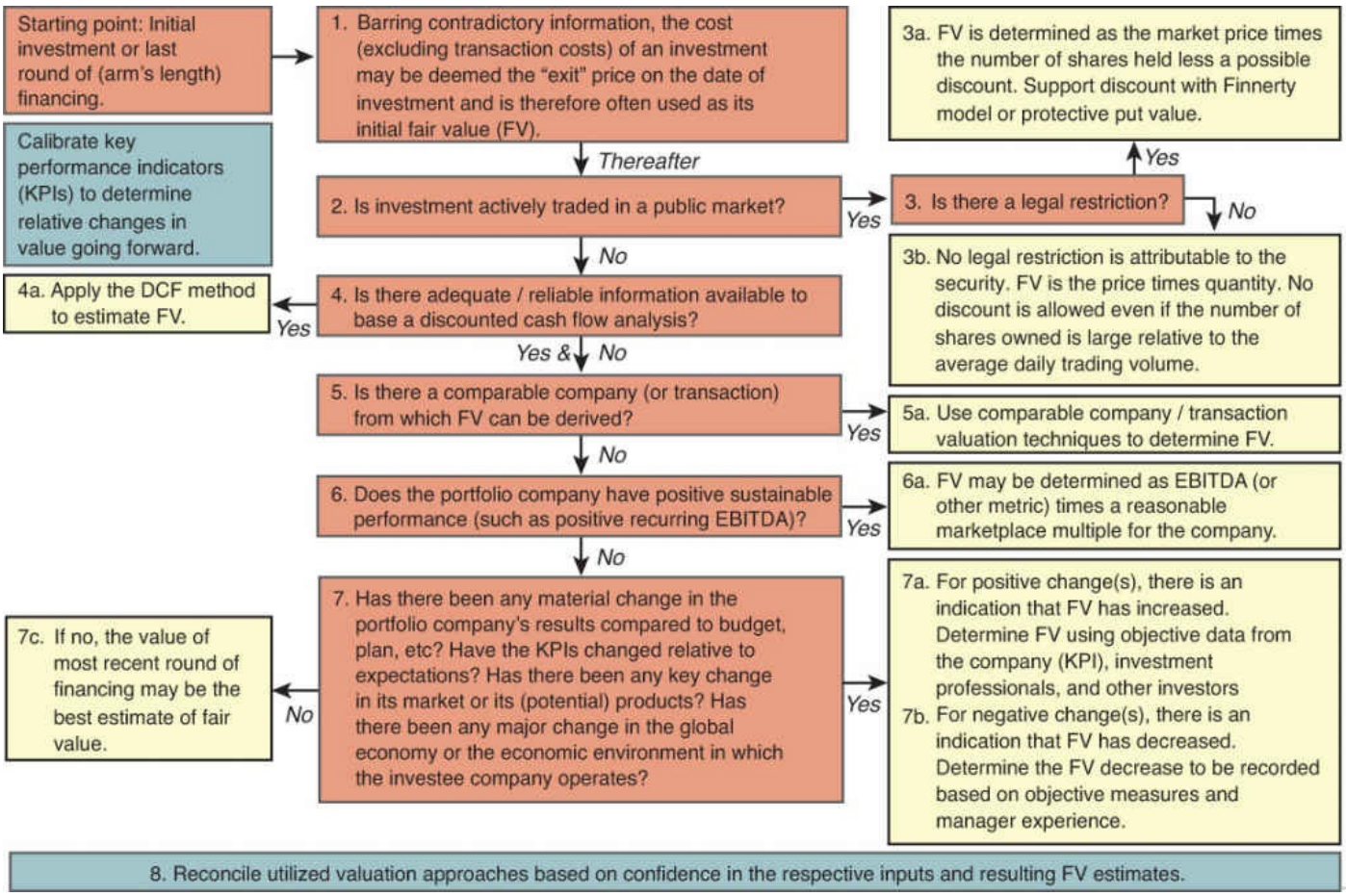


Figure 6.1 Direct investment valuation decision tree

Levels 1, 2, and 3

Accounting standards also require disclosures concerning the "level" of inputs used to estimate fair value.

Level 1 inputs refer to valuing actively traded public securities at their observable price. When shares or debts are actively traded (sufficient volume and frequency of trades to determine a price), fair value is determined as price times quantity (P × Q).

Level 2 inputs refer to determining fair value using observable inputs, which are not actively traded.

Inputs to valuation that are not observable are considered Level 3. Most private equity investments are valued using Level 3 inputs.

The input level (1, 2, or 3) has nothing to do with the quality of the asset; it is simply an indication of the observability of the inputs used in valuation.

Selected Private Equity Valuation Nuances

Although the definition of fair value is straightforward—the amount that would be received in an orderly transaction using market participant assumptions—there are several nuances that impact how fair value is estimated.

Marketability

Historically, some confusion has surrounded the term *marketability*. Valuation professionals often consider it appropriate to include a "discount for marketability" with respect to valuing investments that trade infrequently, if at all. However, if *marketability* is understood to mean the time required to market an investment, then no adjustment or discount for marketability is allowed under accounting standards. This is because the accounting standards assume that the hypothetical transaction process that determines fair value began sufficiently in advance of the measurement date so that the sales process culminates with a transaction on the measurement date. Therefore, time-based discounts for *marketability* are not allowed.

Sometimes *marketability* is used in the context of an asset that does not trade frequently. Most private equity investments are illiquid, meaning that they do not trade frequently. The fact that an investment might not be marketable (or, stated better, might be illiquid) should be taken into account when determining fair value. However, as described earlier, calibration generally captures the value impacts of illiquidity. Therefore, an additional on-top "discount" for marketability/illiquidity would not be appropriate.

Unit of Account

When U.S. and international fair value accounting standards were revised through FASB 157 (now ASC 820) and IFRS 13, the concept of unit of account was introduced. The fair value accounting standards dictate how to estimate fair value and what to disclose related to fair value, but they do not dictate what should be reported at fair value. Other accounting standards drive when to use fair value. In the United States, ASC Topic 946, "Investment Companies," and, internationally, IFRS 9 and 10 and International Accounting Standard (IAS) 27, 28, 39, and 40 dictate the use of fair value for the private equity industry. Unit of account is the concept accounting standards use to describe the level of aggregation considered when estimating fair value.

Unit of account is intended to provide the premise under which an investment is owned and how the capital structure is considered. Fair value measurement accounting rules include: "An entity shall measure the Fair Value of an asset or liability using the assumptions that Market Participants would use when pricing the asset or liability, assuming that Market Participants act in their economic best interest."[3]

Confusion sometimes arises over how *unit of account* should be interpreted. Sometimes a single share is considered the unit of account. Other times, the entire interest owned would be considered the unit of account. Because fair value accounting standards do not dictate the unit of account, and because other accounting standards that dictate the use of fair value do not always fully articulate how to determine the unit of account, judgment must be applied. Generally, for the private equity industry, the way in which a market participant would transact dictates how the unit of account should be considered. If market participants would buy or sell an entire holding, then generally the holding is the unit of account.

One clear exception exists to considering the entire holding as the unit of account. If the investment is considered actively traded—generally on an exchange with sufficient volume and frequency to determine a price—then, by rule, it is considered Level 1 and is valued at the public market price, P × Q (price times quantity). In the actively traded case, fair value judgment and principles are effectively overridden by the accounting rule dictating the unit of account as a single share with fair value equal to P × Q.

Most private equity investments are not in actively traded shares, and transactions typically do not take place for individual shares. Therefore, the private equity industry does not generally consider how to value single shares. In the absence of specific unit of account guidance, fair value measurements should be consistent with how market participants would transact in their economic best interest.

Consider the IPEV Valuation Guidelines:

> Generally it is appropriate to use the value of an entire Enterprise (business) as a starting point for measuring Fair Value if Market Participants would use such an approach regardless of the accounting Unit of Account. This is because private equity investors often invest in-concert with one another and realize value only when the entire Enterprise is sold. Further, private equity returns are usually proportionate to the equity position held. Therefore, the hypothetical sale of an Enterprise is a fundamental premise used by Market Participants to determine Fair

> Value. Common adjustments necessary to allocate Enterprise Value on a Unit of Account basis to measure Fair Value are discussed in these Valuation Guidelines.[4]

Valuing Noncontrolling Interest

One of the more difficult challenges in estimating fair value relates to valuing minority positions. Calibration is an important tool that helps, but assessing individual facts and circumstances is exceedingly important when determining the value of investments when a controlling interest is not held.

Accounting Background

Accounting standards require the use of judgment in estimating fair value. As discussed, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.[5]

Two additional paragraphs from the accounting guidance help put the discussion of noncontrolling interests in context. Fair value is a market-based measurement, not an entity-specific measurement. For some assets and liabilities, observable market transactions or market information might be available. For other assets and liabilities, observable market transactions and market information might not be available. However, the objective of a fair value measurement in both cases is the same: to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions (that is, an exit price at the measurement date from the perspective of a market participant who holds the asset or owes the liability).[6]

When a price for an identical asset or liability is not observable, an entity measures fair value using another valuation technique that maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs. *Because fair value is a market-based measurement, it is measured using the assumptions that market participants would use when pricing the asset or liability,* including assumptions about risk. As a result, an entity's intention to hold an asset or to settle or otherwise fulfill a liability is not relevant when measuring fair value.

"Unit of Account" for Noncontrolling Interests

As articulated in the IPEV Valuation Guidelines, U.S. and international financial reporting standards require that the fair value of an asset be measured consistently with the level of aggregation (unit of account) dictated by the accounting standard requiring or permitting its measurement at fair value (for example, ASC Topic 946, "Investment Companies," in the United States; or, internationally, IFRS 9 and 10, and International Accounting Standard [IAS] 27, 28, 39, and 40).[7]

Sometimes a conflict arises between interpreting the unit of account and using market participant assumptions to estimate the fair value of a particular financial instrument. Again, consider the IPEV Valuation Guidelines:

> Because financial reporting is meant to portray economic phenomena, the Unit of Account attempts to describe the specific way that an investment is owned,

including the legal rights and obligations of ownership and its relationship to other ownership rights in a complex capital structure. However, actual transactions may not and do not actually have to take place at the Unit of Account level specified by accounting standards.[8]

Mathematical Models

Because of regulatory pressure and questions about how *unit of account* should be interpreted, some auditors have begun to focus on valuing minority interests from a mathematical model perspective rather than from a market participant perspective. Although mathematical models might be appropriate in certain circumstances, for the private equity industry, the question must be asked whether the use of mathematical models is consistent with market participant assumptions. On the surface, the use of mathematical models might seem reasonable; after all, options, warrants, and Black-Scholes models somehow seem synonymous with early-stage and noncontrolling investments. However, unlike derivatives and debt markets, mathematical models have not seen wide usage in the private equity marketplace. Some auditors have concluded that, for certain noncontrolled investments, option pricing models (OPMs) PWERM accompanied by a backsolve[9] allocation of value provide a reliable indication of fair value. *Yet when using a market participant perspective, the use of OPM for valuing noncontrolled investments might be fundamentally flawed.*

From a purely mathematical standpoint, the OPM has a tendency to overstate the value of securities reliant on upside conditions (common equity) and understate securities with downside protection (preferred/senior equity) because the OPM framework requires investment returns to follow a statistical normal distribution curve. In many cases, private equity investment returns are not normally distributed.

It can be argued that many PE investments have more binary outcomes; either the investment is successful and returns cash to the investor or the investment fails and limited cash or no cash is returned. *Therefore, if the underlying expected return data is not normally distributed from a statistical perspective, OPM would not provide a mathematically supportable result.*

Additionally, the most compelling argument against the use of OPM for noncontrolled investments is the fact that *market participants generally don't use OPM*.

PWERM Methods

A simplified probability-weighted expected return model (PWERM) is arguably more theoretically supportable than OPM. A PWERM method *tends to be very subjective and highly dependent on selecting appropriate probability judgments*. Implicitly, some investors might use a simplified probability assessment as they consider the amount they are willing to invest in an early-stage company or noncontrolled investment. *Therefore, PWERM might be applicable as a double-check in estimating fair value, but given the significant judgment involved, it likely would not be used in isolation to estimate fair value.*

PWERM techniques would more appropriately be used as a guide to provide a data point

in allocating enterprise value to individual securities or to estimate enterprise value from transaction data provided by a recent round of financing (known as the backsolve method)—with the understanding that the backsolve method will likely depress the estimate of value for an enterprise when the benchmark transaction (the most recent round of financing) includes significant downside protection rights.

Conclusion on Using Mathematical Models

Generally, OPM and PWERM are not tools market participants explicitly use to price transactions.

Furthermore, accounting standards do not require the use of OPM or PWERM.

Additional Noncontrolling Interest Valuation Questions

The IPEV Valuation Guidelines use the value of a business (enterprise value) as the starting point for estimating fair value when market participants would take such an approach. When a private equity fund invests alongside other fund investors, it is generally appropriate to use enterprise value as a starting point for measuring fair value.

Some auditors question this approach. They argue that because the unit of account is the minority position, and because the minority shareholder cannot force a transaction to sell, the sale of the enterprise cannot be used to estimate fair value. This is one of the reasons mathematical models have entered the valuation discussion.

However, the thought process behind the minority shareholder not being able to use the sale of the enterprise as the basis for valuation *deviates* from market participant perspectives where transactions normally occur with all shareholders exiting together. Because most private equity transactions involve investors working in concert with other investors, and because accounting standards require the assessment of the price that would be received in a transaction at the measurement date, it is illogical not to use the sale of the enterprise as the starting point for determining the value of a noncontrolling interest. Most often, minority shareholders pay the same price controlling shareholders do when making the initial investment. This is because both controlling and noncontrolling investors have similar investment objectives and investment horizons. So when acting in concert, noncontrolling shareholders appropriately value their investments as a pro-rata share of the enterprise value.

Furthermore, some believe that a noncontrolling interest automatically means a discount to the control value. Yet as was just noted, the controlling shareholder normally does not pay a premium to the price the other (minority) investors pay. That is because *private equity investors do not price investments in terms of premiums and discounts; they determine the price they are willing to pay, and often the terms of the investment do not allow for disproportionate returns among the investors.* Therefore, for the PE industry in particular, *the use of terms such as* discounts *and* premiums *is both confusing and misleading. If valuation inputs are properly calibrated to market transactions, the issues of discounts and premiums are appropriately addressed in the private equity context.*

An additional twist on using the inconsistent logic described earlier focuses on whether the face value or fair value of debt should be subtracted from enterprise value to determine

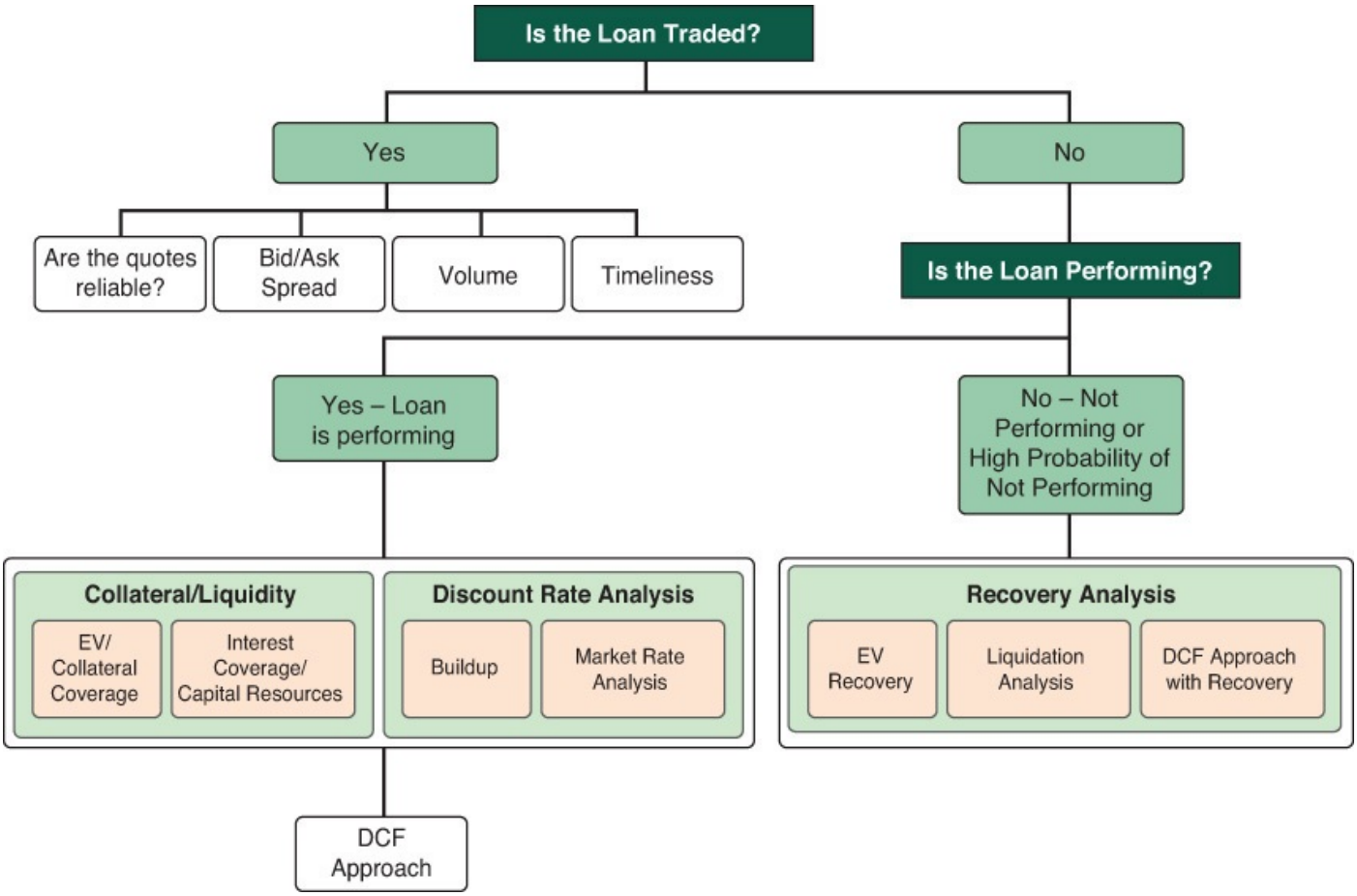
the fair value of equity. In most PE transaction situations, debt must be repaid upon a change of control. If the enterprise is being sold—which, conceptually, it is for fair value determination purposes—then debt would be repaid at its face or par value amount. Fair value of debt as a standalone instrument might not equal face value because of nuances associated with yield and term. However, for the purpose of determining the value of equity, *if a market participant would assume that the debt would be repaid at face value, which is most often the case, then the face value of debt (the amount that would be repaid) would be subtracted from the enterprise value to estimate the fair value of equity*. Finally, if the minority shareholder receives a proportionate share of the proceeds from the sale of the business, then the noncontrolling minority interest would be valued proportionately consistent with the controlling shareholder's investment.

Valuing Investments in Private, Nontraded Debt

Historically, investments in private or nontraded debt were valued at PAR (the contractual amount that would be repaid) if the enterprise value of the company exceeded PAR, or at an amount less than PAR if the enterprise value was less than the contractual amount of the loan. Under this approach, the priority of various claims on equity flowed through a "waterfall," or legal hierarchy of repayment. As a result, in most cases, when the underlying company was not distressed, the fair value of debt was deemed to be PAR.

One unexpected consequence that resulted from the new fair value accounting guidance (SFAS 157) in 2006 was that the waterfall approach to valuing debt was no longer considered to be consistent with interpretations of unit of account and, more important, the perspectives of market participants. If the term, risk, and/or return associated with a debt instrument changes, then from a market participant perspective, the value might also change. When interest rates rise, the value of a bond decreases. When interest rates decrease, the value of a bond increases. Under the revised fair value rules, the same economic phenomenon that previously determined fair value using a waterfall approach, resulting in PAR as the fair value estimate, changed to utilizing "bondlike" considerations for determining fair value.

Figure 6.2 helps describe the thought process used to determine the fair value of debt.



Source: Duff & Phelps LLC

Figure 6.2 Private debt valuation decision tree

Actively traded positions would be valued at P × Q.

For private, nontraded debt investments, in most cases, an income approach (discounted cash flow, or DCF) would be used as follows.

Income approach (DCF): When an enterprise value or an asset collateral analysis indicates adequate coverage (the enterprise value exceeds the value of the subject security and other more senior securities), the income approach is generally considered the most appropriate method to estimate fair value. The following steps summarize the income approach procedures:

1. Project expected cash flows to be received from the investment (most likely the contractual cash flows).
2. Estimate an appropriate discount rate.
3. Calculate the present value of projected cash flows at the concluded discount rate.

Net recovery approach: When a preliminary analysis indicates that a security is no longer performing or otherwise might not be fully recovered under its legal terms of repayment, a modified version of the income approach, known as the net recovery approach, can be used to estimate fair value. The following steps summarize the net recovery approach procedures:

1. Estimate the expected cash flow to be realized under the payment terms of the security.

2. Estimate the timing and amount of the recovery value, net of costs incurred, to monetize underlying collateral.
3. Calculate the present value of expected cash flows at a discount rate commensurate with the risks associated with the security.
4. Sum the present value of expected cash flows to arrive at an estimate of fair value.

The determination of an appropriate discount rate includes factors such as market yields for debt instruments with similar maturity and risk. Often a shadow bond rating is undertaken to estimate appropriate market yields for a specific investment, which is typically based on asset and interest coverage and leverage ratios. Ultimately, informed judgment is applied to determine the discount rate a market participant would use.

Some believe that variable-rate instruments would have a fair value equal to PAR. Again, this is not necessarily the case. Even for variable-rate instruments, market spreads change over time, indicating that all facts and circumstances need to be taken into account in determining an appropriate market participant discount rate.

Human nature often drives the selection of a discount rate that takes into account the riskiness of cash flows. However, as noted earlier, the most likely cash flows should be utilized when performing the DCF calculation. Therefore, care must be taken not to "double-dip" by increasing the discount rate to reflect risk while at the same time reducing expected cash flows to an amount deemed most likely.

Valuing Fund Interests

One of the first questions that arose upon the issuance of new fair value accounting standards in 2006 was how to determine the fair value of a limited partnership interest in a private equity fund.

Background

One of the least well understood private equity valuation concepts is understanding the fair value of limited partnership interests. Both LPs who invest directly in private equity funds and FoF investors must estimate the fair value of an interest in an underlying fund at regular intervals to support their financial reporting.

Historically, net asset value (NAV), as reported by the fund manager or GP, has been the basis for estimating the fair value of an interest in an underlying fund.[10]

In 2007, after SFAS No. 157 (now known as FASB ASC TOPIC 820), "Fair Value Measurements," became effective, some auditors and accountants started to question whether LPs and FoF investors could use NAV to estimate the fair value of underlying fund interests. This is because the definition of fair value is the price that would be received *to sell* an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Because of the *exit market* concept embedded in this accounting definition, some people started to believe that the secondary market was the only market that could be used to estimate the fair value of a fund interest. Because the secondary market is opaque, transaction information is not readily observable, and because many transactions might not be deemed orderly, it became clear that *using*

secondary market pricing to value fund interests was not in the best interest of the industry, nor was it representative of an orderly transaction.

At a very basic level, fair value for an underlying fund interest can be seen as equivalent to the summation of the fair value of underlying investments as of the measurement date. Conceptually, the proceeds that would be received if the underlying investments were sold would flow through to the investor in an amount equal to NAV. Most private equity funds operate using a structure in which realized cash returns from the sale of the underlying portfolio companies flow through to the LP investor. Therefore, when rigorously determined in accordance with the principles of fair value, NAV can provide the best basis for estimating the fair value of a fund interest.

In 2009, the U.S. FASB provided specific guidance on when NAV may be used as an LP's fair value estimate. Requirements for using NAV as the fair value estimate for a fund interest are more fully described shortly. Surprisingly, many LPs and their auditors have not fully integrated the requirements for using NAV in the LP reporting process. As LPs receive pressure from their auditors or seek to improve their own internal controls, LPs are increasingly reevaluating or updating their own internal valuation policies and processes. As part of this review, proactive LPs demonstrate the following:

- They have pre-investment/commitment due diligence procedures in place that focus on the GPs' valuation policy and process.
- They have established a process using internal and external resources to qualify or validate the GPs' valuation policy, process, and results.
- They undertake ongoing monitoring to identify and follow up on valuation red flags.
- They encourage their GPs to use industry valuation standards (IPEV Valuation Guidelines).
- They request that GPs validate their fair value estimates through a third-party expert, as appropriate.
- They establish a process to test the significance of NAV that is not reported timely and, therefore, is not "in phase" (as of the LPs' reporting date).
- They establish a process using internal or external resources to rehabilitate NAV, where necessary, if it is not based on the fair value of underlying investments.

Prerequisites for Using NAV to Estimate the Fair Value of a Fund Interest

An investor is permitted to estimate the fair value of an interest by using NAV per share if the LPs are satisfied that the following conditions have been met[11]:

- The fund has the attributes of an investment company. (The attributes of an investment company under U.S. accounting principles are outlined in FASB ASC Topic 946; investment entities are defined for International Accounting Standards in IFRS 10.)
- The fund reported NAV has been calculated consistent with the measurement principles of FASB ASC Topic 820 (meaning that all underlying investments are reported at fair value).

- Fund-reported NAV is as of the same date as the investor's measurement date (meaning that if the LP reports financial information on September 30, it needs GP-reported NAV as of September 30).

On the surface, these requirements seem fairly straightforward. However, it quickly becomes evident that the amount of effort to comply with these conditions is subject to significant judgment. It's easy to imagine an underlying fund with numerous investments in underlying companies. How, then, should an LP conclude that the three previous conditions have been met? Or should the LP consider a method other than using NAV to estimate fair value?

If an LP decides not to use NAV to estimate fair value, these primary valuation methods are available:

- **Observable secondary market pricing—**This is generally not available, so it is not really an option for estimating fair value.
- **Cash flow model—**This method involves discounting all historic and future cash flows for the fund. It is judgmental and time intensive, so it is not a realistic option for estimating fair value.

Satisfying the Conditions for Using NAV

NAV is not required for estimating fair value. However, from a practical perspective, NAV is the only cost-effective method for estimating the fair value of an LP fund interest. How, then, can an LP be sure that the three conditions are met?

The first condition is relatively straightforward. If the fund states that it is compliant with FASB ASC Topic 946 or is an investment entity as defined by IFRS 10, and if all underlying investments are reported at fair value, the LP can generally conclude that it has invested in a "fund."

More important, and more difficult, is determining how an LP can be sure that all underlying investments are reported at fair value, compliant with FASB ASC 820 and IFRS 13, "Fair Value Measurements," and are "in-phase" (that is, as of the same reporting/measurement date).

Figure 6.3 outlines what an LP should consider when determining how to estimate fair value for a fund interest, based on whether the reported NAV is fair value based and whether NAV is in-phase.

NAV	FV Based	Non-FV Based
In-Phase	Qualitative Assessment	Adjust NAV or Use Another Method
Not In-Phase	Bring In-Phase or Use Another Method	Adjust NAV and Bring In-Phase or Use Another Method

Figure 6.3 When can NAV be used to measure fair value?

Qualify or Validate NAV

As noted earlier, the LP must be sure that the GP-reported NAV is based on the fair value of underlying investments. This qualitative assessment requires judgment. No checklist dictates which items an LP should perform. However, fairly clear guidance does point to the items an LP should consider. An LP obtains information about the rigor or robustness of the GP's valuation process by considering the following:

- **Initial due diligence** (procedures performed before the initial investment/commitment), to understand the GP's valuation process
- **Ongoing monitoring** (procedures performed after the initial investment/commitment), to identify potential red flags indicating that the GP is not following the process described during due diligence
- **Financial reporting controls** (procedures related to the accounting for and reporting of NAV) that support the conclusion that the GP is reporting fair value–based NAV

To assist in these judgments, some or all of the following key factors relating to the valuation information received from the investee fund manager should be considered:[12]

- Has the GP reported any information that presents a "red flag"? For example, if the GP's policy is to report all underlying investments each quarter at fair value, yet reported values do not move quarter to quarter, the LP has reason to question the GP's valuation process. Although it is possible, having a fair value of investments that does not move quarter to quarter is not logical, given diverse investments and markets.
- What are the GP's policies and procedures for estimating the fair value of underlying investments? Has the GP adopted the IPEV Valuation Guidelines and continued to follow them?
- Does the GP use an independent third-party valuation expert to augment and validate the GP's fair value estimates?
- What is the professional reputation and standing of the investee fund's auditor?

(This is not intended to suggest that the auditor is an element of the investee fund's internal control system, but this consideration is a general risk factor in evaluating the integrity of the data obtained from the investee fund manager.)

- What are the qualifications, if any, of the auditor's report on the investee fund's financial statements? (However, an unqualified audit opinion might not be helpful if other red flags exist, such as those described earlier.)
- Is there a history of significant adjustments to the NAV reported by the investee fund manager as a result of the annual financial statement audit or otherwise?
- How do historical realizations compare to the last reported fair value?

Further Adjustments

When the LP has determined that the reported NAV is an appropriate starting point for determining fair value, adjustments still might be necessary. Although the LP does not need to value underlying investments directly, if NAV is not derived from the fair value of underlying investments or is not of the same measurement date as that used by the LP, then the LP needs to assess whether such differences are significant. If they are, the reported NAV will have to be adjusted.

Factors Indicating the Need for Adjustments

The following factors might result in an adjustment to the reported NAV:[13]

- Significant time between the measurement date of the fund NAV and the LP's measurement date. This would be further exacerbated by:
  - The fund making subsequent investments or accomplishing realizations
  - The LP becoming aware of subsequent changes in the fair value of underlying investee companies
  - Subsequent market changes or other economic conditions changing to impact the value of the fund's portfolio
- The appropriate recognition of potential performance fees or carried interest in the fund NAV.
- Waived management fees included in NAV.
- Impact of clawback provisions.
- Any features of the fund agreement that might affect distributions but are not captured in NAV.
- Underlying assets not reported at fair value.
- Earn-outs (contingent consideration) not reported at fair value.
- Off–balance sheet liabilities that have not been considered in determining fair value.
- Materially different valuations by GPs for common companies and identical securities.

- Any other facts and circumstances that might impact underlying fund value.

The Future of PE Valuation

Fair value, as defined by FASB and the IASB, and as promulgated in the private equity industry initially through the PEIGG Valuation Guidelines and now through the IPEV Valuation Guidelines, is the reasonable and consistent basis of reporting investments to LPs. LPs need fair value to exercise their fiduciary duty, make investment decisions, and prepare financial statements. Regulatory pressure on auditors has the potential to derail the FASB's/IASB's intent and LPs' fair value needs.

Estimating fair value requires judgment on a case-by-case basis. Individual facts and circumstances must be taken into account. Although regulatory pressure on auditors might seem to push for a one-size-fits-all approach to estimating fair value, it is in the best interest of the PE industry, auditors, and even regulators to withstand such pressure; they should follow the guidance given by the FASB and the IASB to use market participant perspectives in determining fair value.

The industry, including both GP and LPs, can rally around the best practices such as the IPEV Valuation Guidelines. Estimating fair value will always require the exercise of judgment based on objective evidence. Oversimplification by using mathematical models without corroborating market participant evidence deviates from the framework established by the accounting standard setters, economic reality, and the needs of users of fair value information. If the industry does not continue to provide input to regulators, valuation advisers, and auditors, regulatory interpretation could increase costs and reduce correlation to market-based results, adversely impacting both LPs and GPs.

About the Author

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Endnotes

1. After the accounting scandals in the early 2000s, *conservative* came to mean "purposely understating." In an era when compliance with Sarbanes-Oxley internal controls is expected, accounting systems now are expected to provide the best answer, not a conservative or materially correct answer.
2. Paraphrased from ASC Topic 820.
3. IFRS 13 paragraph 22; ASC Topic 820 paragraph 820-10-35-9.
4. December 2012 IPEV Valuation Guidelines (www.privateequityvaluation.com), p.

10.

5. IFRS 13, paragraph 9, and FASB ASC TOPIC 820 definitions.

6. IFRS 13, paragraph 2; FASB ASC 820-10-05-1B.

7. The international accounting guidance for private equity investments is contained in IFRS 9, “Financial Instruments”; IFRS 10, “Consolidated Financial Statements”; IAS 27, “Consolidated and Separate Financial Statements”; IAS 28, “Investments in Associates”; and IAS 40, “Investment Property.” IFRS 9 replaced IAS 39, “Financial Instruments: Recognition and Measurement,” but because IFRS 9 is not yet effective, these valuation guidelines apply equally to IAS 39.

8. The December 2012 (IPEV) Valuation Guidelines, p. 8.

9. The backsolve method derives an entity’s enterprise value (and the value of other securities) from the transaction value of a specific security class or round of financing. The method uses option pricing theory (such as Black-Scholes), which requires highly subjective assumptions concerning relative volatility, expected returns, return horizon, and so on to solve for the value of all other securities in a company’s capital structure (including enterprise value), given the observed transaction price of a single class or security.

10. U.S. Accounting Standards (FASB ASC Topic 820 [820-10-15-4 and 820-10-35-59 to 62]) allow the use of NAV to measure fair value if certain conditions are met (this is more fully described in this chapter). International Financial Reporting Standards (IFRS) are silent on the use of NAV and provide no guidance on valuing a fund interest. Under IFRS, NAV generally is used as a starting point in estimating the fair value of a fund interest. The International Private Equity and Venture Capital (IPEV) Valuation Guidelines provide industry best-practice guidance on valuing both GP and LP investments.

11. NAV may not be used to estimate fair value if the fund interest is actively traded or if the LP has decided to sell a fund interest and the expected proceeds deviate from NAV.

12. Paraphrased from AICPA TIS section 2220.

13. Paraphrased from AICPA TIS section 2220.

7. Performance Measurement: IRRs, Multiples, and Beyond

Mariya Stefanova, PEAI

In this chapter, we discuss:

- Traditional performance measurement in private equity—what is the status quo?
- Some concerns about IRR
- What is IRR?
- Why IRR is a preferred performance measure in PE
- Manual IRR calculation vs. computer calculation
- The difference between IRR and XIRR in Excel
- Pitfalls of using IRR
- Levels and types of IRR advocated by professional bodies—gross and net IRR and multiples
- Alternative performance metrics—MIRR, PME, PME+, Peracs Alpha, and more

Introduction

If you use internal rate of return (IRR) to measure the performance of your private equity (PE) fund, you might be surprised to learn how inherently flawed this metric is and how it can potentially create skewed interpretations—not to mention the benchmarking issues. With many limited partners (LPs) drilling down on the precise details of fund performance to make their allocation decisions, private equity must adopt a broader palette of performance metrics that are more robust than the questionable IRR.

From the LPs' perspective, private equity is a good alternative to public equity and other mainstream investment strategies. This was even more so during the years of the credit crunch as public securities values plummeted. However, investing in private equity comes with conceptual difficulties in performance measurement and benchmarking. The problem is even aggravated by the lack of standardized and universally accepted methodology to measure PE returns and compare them to public markets.

The ultimate question investors in PE should ask is this: How good is the performance of a particular private equity investment really, and how does this performance compare to other asset classes (for example, the public market)?

Traditional Performance Measurement in Private Equity—What Is the Status Quo?

Traditionally, private equity investments are measured with IRRs, coupled with money multiples, and benchmarked by vintage year. But is this enough these days in an environment where sophisticated LPs use track record certification services to dissect IRRs, slice and dice them in all possible cross-sections, and look at them under the microscope?

What Is IRR?

Let's start with the basics before we dive into the deeper murky waters of IRR.

> **Definition 1 (generic)—**IRR (Internal Rate of Return) is the discount rate that makes the net present value (NPV) of all future cash flows (inflows and outflows) to and from a particular investment equal zero.
>
> **Definition 2 (as universally defined within the PE industry)—**IRR is the rate of discount that equates the present value of the cash outflows associated with an investment with the sum of the present value of the cash inflows accruing from it and the present value of the valuation of the unrealized portfolio/net asset value (NAV) of the fund.

The difference between the more generic IRR definition and the one put in private equity context is the final hypothetical cash flow representing the unrealized value of the portfolio/fund. As explained in Chapter 8, "Carried Interest and Carried Interest Modelling," both carry calculation and IRR calculation are based on the liquidation assumption.

The following formula is derived from the previous definitions:

$$NPV = \sum_{n=0} \frac{I_n}{(1+r)^n} = 0$$

where:

- *NPV* is the net present value.
- *I* is the income stream amount (these are the cash flows, which can be either positive or negative numbers) for each year or period.
- *n* is the number of years or periods, starting with 0, which is the current period/year
- *r* is the discount rate/IRR you are trying to calculate (assumed to be constant in the future)

Because the NPV of an income stream/cash flow is the sum of the NPVs of the individual amounts in the income stream, the same formula can be expressed as follows:

$$NPV = I_0 + \frac{I_1}{(1+r)} + \frac{I_2}{(1+r)^2} + \ldots + \frac{I_n}{(1+r)^n} = 0$$

From a mathematical standpoint, the IRR is a rate associated with each cash flow in a stream of cash flows and, therefore, is a factor that has to be solved for (in a more complex way). From the formula, because we have *n* number of cash flows, IRR can be calculated by simply solving this polynomial equation. However, the difficulty is that such a polynomial equation cannot be solved analytically—it can be solved only iteratively, or by a trial-and-error process. This is a rather mechanical method, not a consistent principle.

The most popular method for solving this equation is the Newton–Raphson technique, named after Isaac Newton and Joseph Raphson. This is a method for finding successively better approximations of the roots (or zeroes) of a real-valued function. In simplistic terms, for a defined function (in the IRR case, the function is described by the previous

formula), we begin with a first guess, r_0, for a root of the function above. Provided that the function satisfies all the assumptions made in the derivation of the formula, the next guess, r_1, should be a better approximation. The process is repeated until a sufficiently accurate value is reached.

From a financial standpoint, as it is clear from the formula, IRR is a discounted cash flow (DCF) approach based on one of the most important concepts in finance: the time value of money.

In addition, the IRR is a break-even rate of return/discount rate—the rate at which the value of cash outflows equals the value of cash inflows.

IRR for an investment can also be regarded as the annualized effective compounded return rate that can be earned on the invested capital—in other words, the yield on the investment.

IRR is a cash-on-cash measure, which is why it is also called cash- or dollar-weighted return.

Why IRR Is a Preferred Performance Measure in PE

IRR is a preferred performance measure for some of the following reasons:

- Some PE practitioners think that, because of the nature of the PE funds and PE fund lifecycle represented by the J-curve in Figure 7.1, in which the early years of a typical PE fund see mostly negative cash flows/return), annualized returns (year-on-year) cannot be used as a guide. That's why we need to use some compound (since inception) metric. IRR fits the bill.

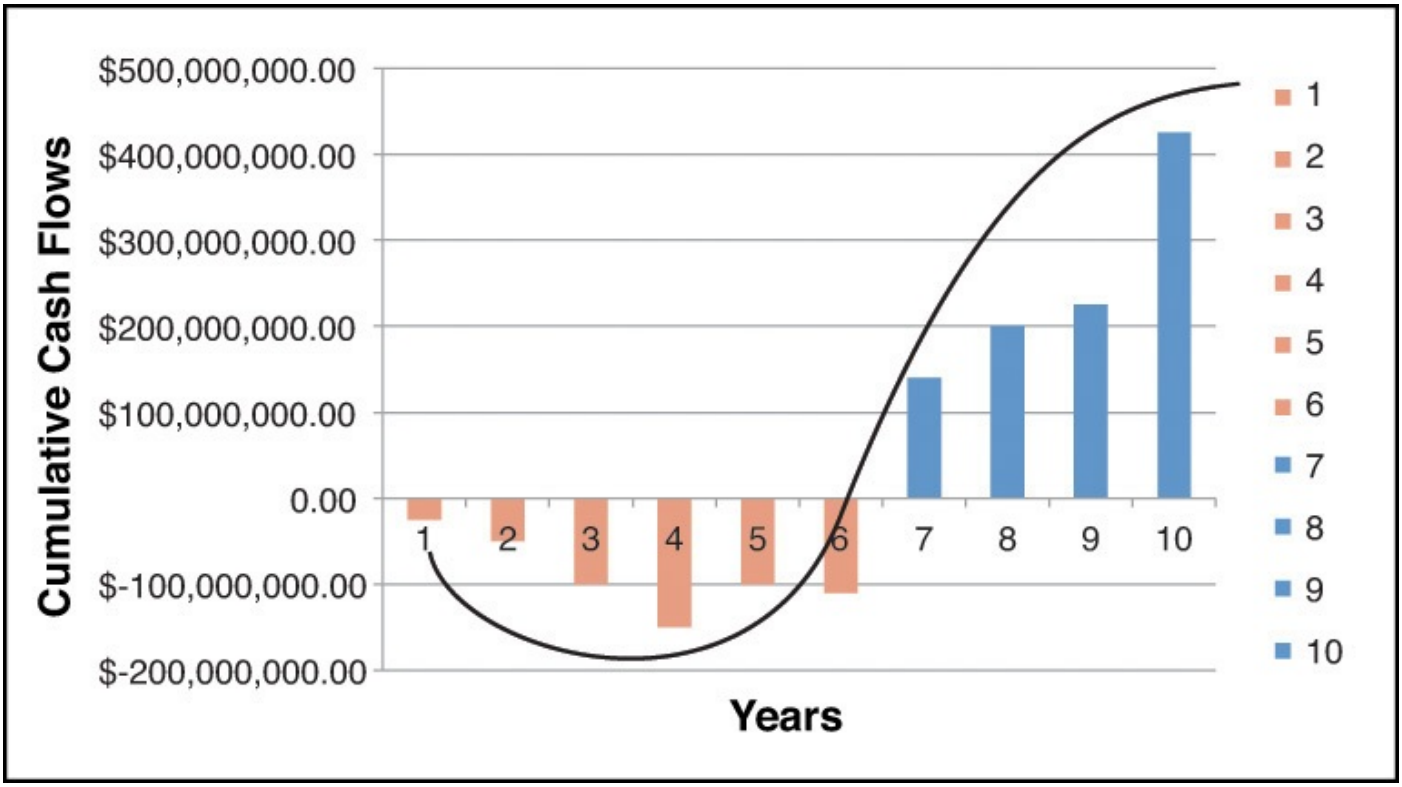


Figure 7.1 Generic J-curve representing returns in private equity

- Another reason why IRR fits the bill is that it is both a cash flow and a time-

weighted metric. Although money multiples, another metric private equity uses to measure performance, would give an investor an idea of the returns, it makes a big difference to also take into consideration the discretionary timing of these cash flows.

- IRR is useful because the cash flows (calls and distributions) in private equity are random. The amounts and timing of drawdowns and distributions are uncertain, and the IRR is very sensitive to both.
- IRR is relatively simple for computers to calculate.
- IRR is relatively easy to understand, interpret, and compare to other investments.

IRR Calculation: What Do We Need to Calculate It?

To calculate the IRR for a particular investment, you need only two variables:

- **All cash flows (income stream)—**This includes inflows and outflows from/to the investment.
- **The dates on which these cash flows occurred—**As a DCF approach, IRR takes into account the time value of money.

As long as you know these two variables, the computer can calculate IRR in just seconds.

Manual IRR Calculation

Following the Newton–Raphson technique explained previously in this chapter, this iterative process works this way for the IRR manual calculation:

1. Pick a discount rate *r* and calculate the NPV using that rate.
2. If the NPV is close to zero, then *r* is the IRR.
3. If the NPV is positive, *r* is increased.
4. If the NPV is negative, *r* is decreased.
5. Go back to step 1 and iterate again using the new rate.

Using a Computer to Calculate IRR

Calculating the IRR manually (without a financial calculator) is a laborious process. Although you can use the equation provided earlier in this chapter to solve for one, two, or even three cash flows, when you have more (for example, four cash flows create a third-order polynomial), it's probably time to use a computer. You can automate the process by simply using an off-the-shelf spreadsheet/Excel formula. And although the XIRR function in Excel uses exactly the same iterative guessing process and tolerances to arrive at the solution that you would use to solve it manually, the advantages of the computer are obvious: speed and accuracy. In most cases, the computer will return your IRR in just a fraction of a second.

The Difference between IRR and XIRR in Excel

Which function in Excel should you use: IRR or XIRR? What is the difference?

The IRR function assumes that your values are periodic, or paced at even intervals (monthly, quarterly, yearly). In reality, that's unlikely to happen in private equity because the cash flows (both inflows and outflows) are sporadic and unpredictable. Therefore, if the cash flows are not periodic, use the XIRR function that requires you to provide a date range associated with the cash flows. Using XIRR results in a daily weighted IRR, which is the industry standard.

Excel also has a third variation of the IRR: the MIRR. We discuss this later in the section "Modified IRR (MIRR)."

The Guess: Do We Really Need It?

Both the IRR and XIRR Excel functions enable you to optionally stipulate a third variable: the guess. But do we really know what the guess is? From my experience, most people are not aware of what the guess does and whether we need to provide one in Excel. In the context of what we have already discussed in the "Manual IRR Calculation" section, the guess is that first value Excel picks for the described iteration process to start from. The second question is: Do we really need a guess? As mentioned earlier in this section, the guess is optional. But what happens if no guess is stipulated? If no guess is stipulated, Excel assumes the default 10 percent IRR and starts the iterative process from 10 percent.

How is the guess useful? In many cases, it can facilitate the process. It is particularly useful when multiple/unstable IRRs arise. For more on the concept of multiple/unstable IRRs, see the next section, "Pitfalls of Using IRR."

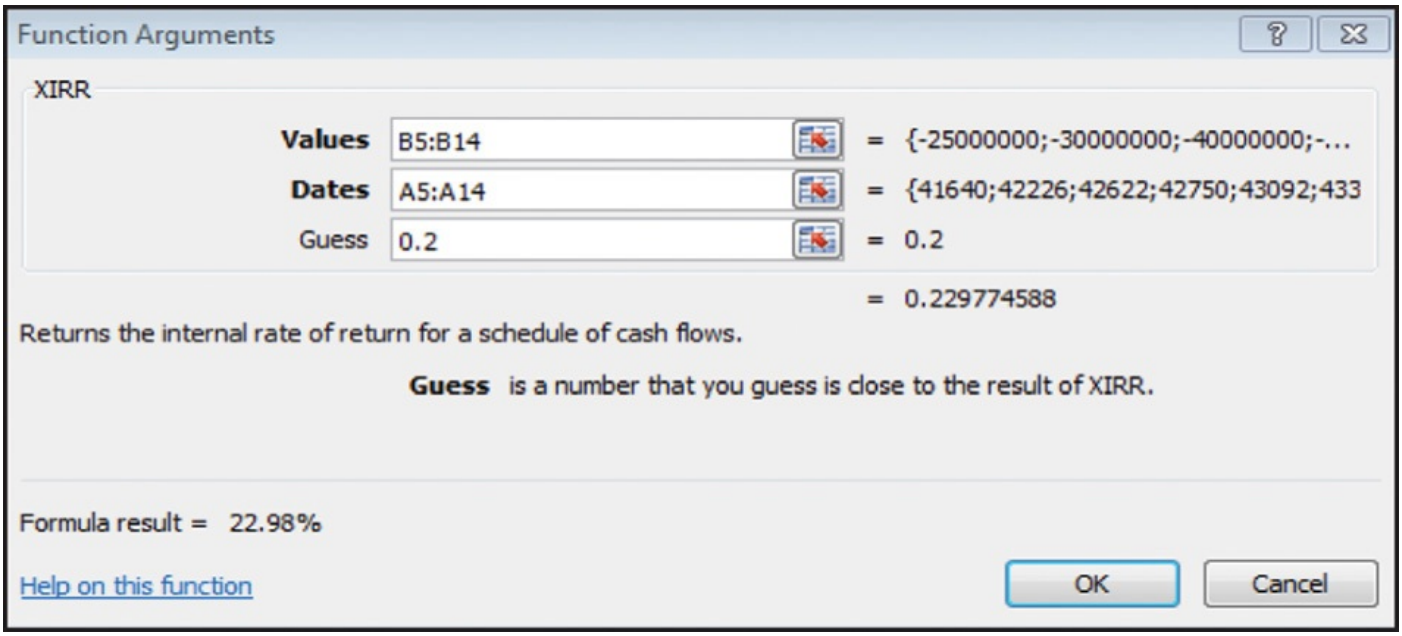


Figure 7.2 Sample IRR calculation in Excel

Pitfalls of Using IRR

Now that you understand why the IRR is considered to be an appropriate metric for private equity investments, let's find out whether it is flawless as well.

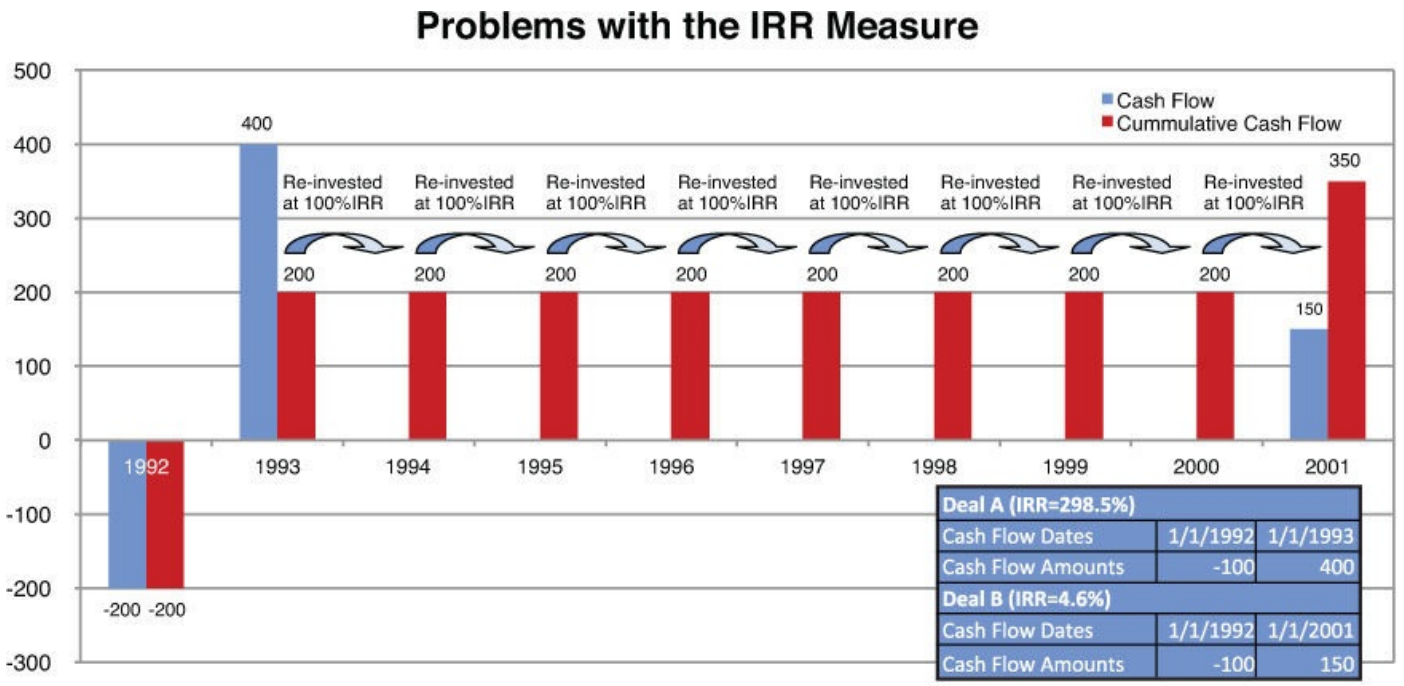
Some of the trickiest features/pitfalls of the IRR are:

Feature/Pitfall #1:

Each cash flow carries a weight inversely proportional to its time in the investment. That feature stems from the very formula we discussed earlier in this chapter. This is not so much a flaw, but rather a feature that the users of IRR need to bear in mind. This means that where the IRR is positive, the longer it takes to get cash in and out, the less overall effect it has on the IRR. The opposite is also true. If you put cash in and get it out quickly, it boosts the IRR. That's a powerful effect. Unfortunately, many managers use this feature to boost their IRR.

Pitfall #2:

The standard IRR formula always makes the implicit assumption that, at any given time, excess cash is reinvested at the IRR generated up to that point in time. (Pay attention—this is the really bad one.) In Figure 7.3, this feature is illustrated graphically by Peracs. When we refer to the "excess cash," assume that all this excess cash (distributions minus drawdowns—remember, you calculate IRRs from the LP's perspective) is deposited (by the LP) in a virtual bank account and invested at the IRR rate generated up to this point in time. In this example, with an "early winner" (Deal A, 100 invested in Year 1 [1992] and divested at 400 in Year 2 [1993]), a 100 percent IRR has been calculated as of Year 2 [1993], meaning that the standard IRR formula assumes that this "excess cash" of 200 is invested every year onward (assuming no other drawdowns or distributions) at this 100 percent IRR. Thus, it biases the standard IRR. In reality, if the LP invests this "excess cash," it will be hard to find an investment that generates that kind of return, which is why this assumption undermines the whole calculation.



A hypothetical fund with 2 investments generates the cash flow pattern above. Its IRR is 100% over a 9-year period. The standard IRR formula always makes the implicit assumption that at any given time, excess cash is re-invested at the IRR-rate generated up to this point in time. The 200M excess cash generated in 1993 are hence assumed to be re-invested at an IRR rate influenced by cash flows from 1992 and 1993: 100% IRR. This hypothetical re-investment would lead one to conclude that the original 200M investment generates a hypothetical value of excess cash in 2001 of over 100,000M. This drives overall pooled IRR to 100% over the 9-year period.

(Source: *Peracs)*

Figure 7.3 Reinvestment assumption

Later in this chapter, you'll see how this flaw can relatively easily be overcome by making a small correction to the standard IRR.

Pitfall #3:

"Multiple" or "unstable" IRRs. This is just a computational difficulty, but it's a pretty bad one because it could be used for manipulation.

What does "multiple" or "unstable" IRR mean? It means that the equation we discussed earlier in this chapter has more than one solution. For a given stream of cash flows, multiple discount rates could make the NPV of these cash flows equal zero. Alternatively, there could be no solution at all—the IRR for a given stream of cash flows might not be mathematically defined. As explained earlier, computing the IRR involves an iterative search process.

When is a multiple IRR likely to occur? A multiple/unstable IRR is likely to occur whenever changes in the direction of the cash flows take place—in other words, when the cash flows change from negative to positive and back again to negative. The more frequently cash flows change direction, the more likely they are to get a multiple IRR. That is why when you come across such a cash-flow pattern, you should use IRR with caution. If there are multiple IRRs, determining which one to use is difficult. This is another feature sometimes used by GP managers to manipulate performance. If you have multiple IRRs—say 10 percent and 20 percent—and if both are mathematically correct, which one would you report if you are a GP?

Other Pitfalls

A number of other pitfalls exist, such as the "lending versus borrowing" issue, the fact that the IRR does not rank projects correctly, and the fact that the IRR cannot be compared to a time-series average of the hurdle rate when the hurdle rate is time varying.

Aggregating or averaging IRRs at the fund level, portfolio level of across funds is quite dangerous. This is another issue with the IRR practices because *"the performance distortion becomes dramatic and renders the IRR performance measure quasi useless,"* as Professor Oliver Gottschalg stated at one of our master classes on performance measurement.

Finally, some questionable practices of "window dressing" (as some LPs and practitioners call it) or "boosting" GP IRRs—particularly during fundraising rounds—are "strategic grouping" of funds, extending the track record back to periods when the GP's performance was good, or selectively choosing periods. All these questionable practices make LPs doubt the GP IRRs and prompt them to look for track record certification and other similar services,

As Professor Oliver Gottschalg concluded at the same master class on performance measurement mentioned previously (quoting from *Brealey and Myers Principles, Corporate Finance,* Chapter 5), "PE fund investments violate most of the theoretical assumptions for the use of IRR." That's quite an astounding—but, unfortunately, true—finding.

Levels and Types of IRRs Advocated by Professional Bodies—Gross and Net IRR and Multiples

Guidelines issued by a number of professional bodies advocate two levels of IRRs. These include guidelines from entities such as the European Venture Capital and Private Equity Association (EVCA), the British Venture Capital and Private Equity Association (BVCA), the International Private Equity and Venture Capital Valuation (IPEV) Board, the Institutional Limited Partners Association (ILPA), and the CFA Institute's GIPS (Global Investment Performance Standards).

Gross IRR and Gross Multiples

Gross IRR represents the gross return on the investments (realized and unrealized, analyzed together and separately). The gross IRR is also referred to as the investment IRR, and it shows the private equity manager's ability to choose investment opportunities, manage them, and divest from them.

The Gross IRR is calculated on the actual cash inflows and outflows between the fund and all its investments and include the following:

- Initial investment—the acquisition costs
- Follow-on investment(s)
- Income from investments during the holding period (interest, dividends, rents, and so on)

- Disposal proceeds on exit/divestment
- An assumed cash flow—the valuation of the unrealized (wholly and partially) portfolio (based on the assumption that the unrealized investments have been disposed of on the reporting date at valuation, called “the liquidation assumption”)

Note that, for realized investments, partial write-offs or write-downs should not be included at this level; only full write-offs should be included here. For unrealized investments, partial write-offs or write-downs should be included.

To complete the picture and to try to capture some anomalies in the IRRs, we also look at the gross/investment multiples. Multiples are the simplest way to assess the performance of a private equity investment, by simply dividing the value of the returns from the investment by the amount of money the fund invested in a given deal, as shown in the following formula:

Gross/Investment Multiple = Investment Proceeds/Initial Investment

Money multiples are a useful metric because they are simple to calculate and easy to interpret. However, they neglect the time dimension. For example, a multiple of 2.0x doesn’t take into consideration whether the investor took 10 years or just 1 year to double the investment. Still, multiples are useful when examined in conjunction with the IRR for that same investment. By looking into both metrics, if massive discrepancies appear, red flags should be raised and the performance further analyzed.

Net IRR

The other level of IRRs is the net, also referred to as Investor IRR or Fund IRR. The Net IRR measures the return earned by the investors in the fund. It is called *net* because it is net of carried interest, management fees, and other fees.

Net IRR can be calculated individually on an investor-by-investor basis, or for the whole fund.

It shows the fund’s overall effectiveness by computing the return to investors/LPs net of the total cost of carrying out these tasks—or in other words, this is the return earned by the investors/LPs in the fund. The Net IRR is calculated on two types of cash flows:

- The actual cash inflows and outflows *between the fund and the investors*, net of the carried interest, management fees, and other applicable professional and ancillary charges
- An assumed cash flow—the valuation of the unrealized (wholly and partially) portfolio after deducting the implied carried interest, based on the assumption that the unrealized investments were disposed of on the reporting date at valuation (“the liquidation assumption” mentioned earlier in this chapter)

Don’t Forget to Strip Out Carried Interest!

This is a very important point. When calculating the net IRR, don’t overlook an important step: Appropriate provision must be made for the deduction of carried interest after taking account of any hurdle rates. Many GPs, and even more LPs shadowing the GP IRR calculation, forget to strip out the carried interest, which leads to inflated IRRs.

Money/Net Multiples to Investors

As with Gross/Investment Multiples, Net Multiples to Investors complete the picture. The most important ones follow:

- Paid-in Capital to Committed Capital (PIC) = Paid-in Capital (that is, Cumulative Contributions)/Committed capital

  PIC shows you how much of the Committed Capital has been drawn.

- Distributions to Paid-in Capital (DPI) = Distributions/Paid-in Capital

  DPI shows you how much of the LPs’ invested capital was actually returned (distributed) to them. Early in the life cycle, it tends to be zero until cash is distributed. When it is greater than 1, the fund has broken even.

- Residual Value to Paid-in Capital (RVPI) = NAV (Residual Value)/Paid-in capital

  This shows you how much of the fund’s value is currently unrealized. As the fund matures, it increases to a peak and then starts decreasing to reach zero toward the end of the fund life.

- Total value to paid-in capital (TVPI) = (NAV + Distributions)/Paid-in capital.

  TVPI is a combination of DPI and RVPI.

Alternative Performance Metrics

After discussing the shortfalls of the IRRs, we can look at some alternative performance metrics that academics, researchers, and practitioners have been advocating over the past years.

Time-Weighted Rate of Return (TWR): Is It an Appropriate Metric for Measuring Performance in PE?

Let’s start with the time-weighted rate of return (TWR) that is used as a performance metric in other asset classes, including for some open-ended funds.

TWR represents the return that an investor achieves over a certain period of time, where each time interval carries the same weight, regardless of the amount of money invested. As explained earlier in this chapter, the IRR is sensitive to both timing and cash flows. The timing of these cash flows in PE is both irregular and unpredictable.

TWR captures the actual rate of return the manager earns (in other words, from the manager’s perspective), whereas the IRR captures the actual rate of return the investor earns (in other words, from the LP’s perspective).

The IRR is not an appropriate metric to measure performance for an open-ended fund because of the nature of these funds, where the manager does not have any control over the timing and size of deposits and withdrawals/redemptions made by the investors. On the other hand, TWR, as a time-weighted metric, is suitable for open-ended funds because it measures the performance of the manager independent of the actions of the investors. In contrast, most PE funds are closed-end. With the manager fully controlling the commitment and timing of the investments associated with it, so the PE manager's timing of investments and divestments is a major factor in the value creations in PE.

TWR does not capture the exact timing of the cash flows and is not appropriate for performance measurement in PE. The dollar-weighted IRR, however, is sensitive to the timing of the cash flows, which makes it more appropriate for measuring the long-term performance in PE.

Based on all of this, TWR is not considered an appropriate metric for private equity investments.

Modified IRR (MIRR)

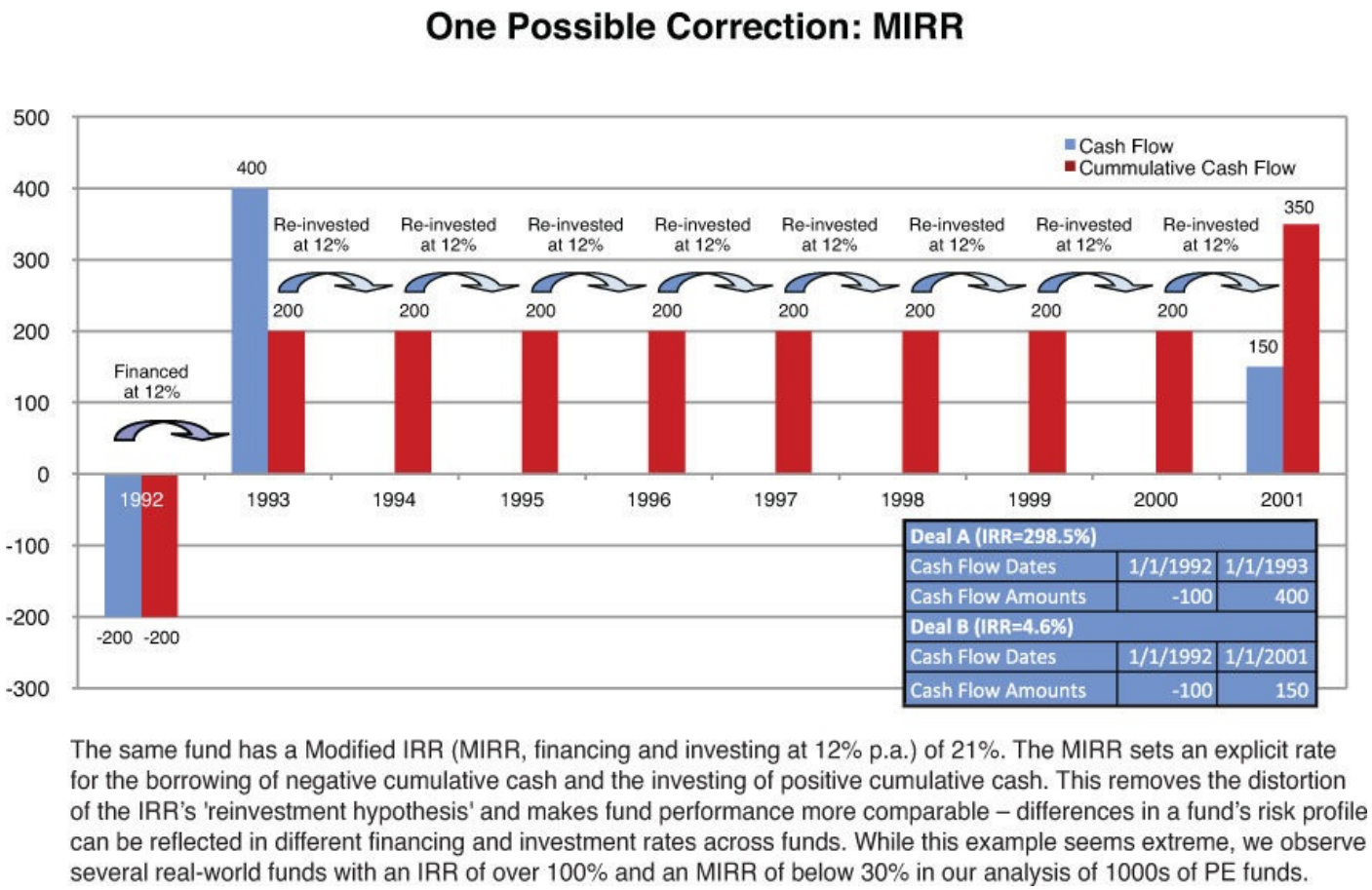
Despite its shortfalls, IRR is still considered the most appropriate performance metric for PE investments. Let's see if anything can help correct some of these shortfalls and make it more reliable.

First, we must return to the point about the biggest flaw of the IRR, the reinvestment assumption that I made earlier in this chapter. Unlike the multiple-IRRs pitfall that not much can be done about, this flaw can be overcome by using a modification of the IRR, called Modified IRR (MIRR).

What is MIRR, and how is it different from IRR?

The MIRR modifies (hence the name) the standard IRR by allowing you to stipulate an explicit rate for borrowing negative cumulative cash (in other words, drawdowns—remember, it's the LP's perspective) and investing positive cumulative cash (in other words, distributions). This removes the distortion of the simple IRR's inherent reinvestment assumption, discussed earlier in this chapter and illustrated in Figure 7.3.

In our example in Figure 7.4, assume that all the excess cash (distributions minus drawdowns) is deposited in a virtual bank account (that is 200), but this time, instead of "investing" it at the biased 100 percent IRR, as in Figure 7.3, we would be able to stipulate at what rate we'll assume to be "investing" it. This could be at the hurdle rate (8 percent), the cost of capital (for example, 12 percent) or anything else we deem appropriate for the industry, market, geography, and so on, thus removing the reinvestment bias.



The same fund has a Modified IRR (MIRR, financing and investing at 12% p.a.) of 21%. The MIRR sets an explicit rate for the borrowing of negative cumulative cash and the investing of positive cumulative cash. This removes the distortion of the IRR's 'reinvestment hypothesis' and makes fund performance more comparable – differences in a fund's risk profile can be reflected in different financing and investment rates across funds. While this example seems extreme, we observe several real-world funds with an IRR of over 100% and an MIRR of below 30% in our analysis of 1000s of PE funds.

**Source*: *Peracs*

Figure 7.4 Correction to remove the reinvestment assumption bias: MIRR

MIRR is not flawless; a fair amount of criticism on it circulates as well. Still, it is a much better metric than the standard IRR, and it can prevent at least some gaming.

Further refinements can be made to the IRR and MIRR, of course, so it is certainly not a case of throwing either of them out the window. Academics and practitioners are working on new methodologies to do that.

Benchmarking PE Performance to Public Market Returns

The large institutional LPs usually invest across a variety of asset classes, including public market instruments, but they ultimately want to know not only how certain PE funds compare to other PE funds, but also how the performance of PE funds compares to the public market. However, a major issue in doing that is the different return methodologies these two asset classes employ. Private equity measures performance with IRR (coupled with multiples) and other asset classes using time-weighted rates of return (TWR). The prices/valuations for public market instruments also are observable, compared to the unobservable PE valuations, which are also highly subjective and, to top that, typically done internally by the PE manager, making them potentially prone to manipulation.

Public Market Equivalent (PME)

As discussed earlier in this chapter, TWR and IRR are two very different metrics, and only the IRR is appropriate for private equity. If LPs want to directly compare the public market to private equity investments, would that be possible? Apparently not. The question then becomes: How can we make public market measures comparable to the PE measures—would it be helpful to somehow assign some IRR to public markets to allow for comparison? The answer is yes, and that is pretty much how the public market equivalent (PME) method works.

PME, also called the index method, was developed in the mid-1990s. It rests on the assumption that the opportunity cost of a private equity investment is equal to the rate of return of a public market benchmark. PME is an index return measure that is adjusted to reflect the irregular timing of cash flows characteristic of private equity. It corresponds to the money-weighted return (IRR) that would have been achieved by investing in an index at the time when a PE fund makes a drawdown and sells index shares whenever the fund makes a distribution. Thus, it facilitates a comparison between the public market performance replicating the timing irregularity of the cash flows from and to a PE fund.

PME is easy to understand and allows comparability between the public market and the IRR of a PE fund cash flow pattern. Comparison can also be quantified in terms of multiples.

Unfortunately, the PME method is not flawless. The benchmark index has to be carefully selected because only the total-return index makes sense for the analysis. The method also contains the bias of the unobservable NAV, which is why it is better used for mature funds in which the NAV has already crystalized. The so-called “negative index-tracking fund balance” could also pose a series of problems for PE investments outperforming the index because it is likely to yield a negative final value for the investment in the index-tracking fund. Finally, sometimes the method produces dubious returns—and sometimes even no benchmark at all, depending on the cash flow pattern (such as when the negative cash balance at the end of the period causes an undefined IRR), thus rendering itself unreliable on many occasions.

Other variations of the PME method also exist, such as the PME+, PME-multiple, levered PME, and static spread. All are relative performance measures.

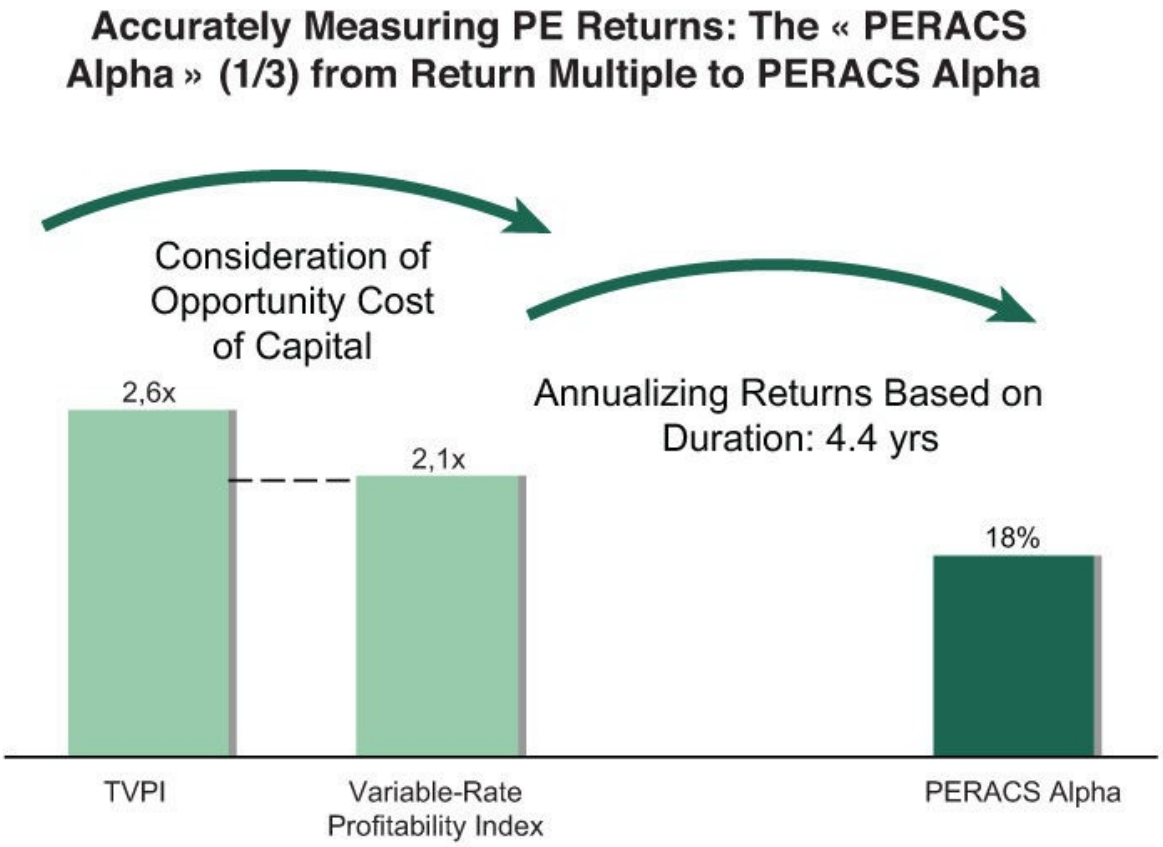
In support of the PME methods, David Robinson and Berk Sensoy have concluded that PMEs are the right way forward in PE benchmarking, as long as the examiner can sensibly assume that the benchmark index adequately reflects the true risk facing LPs in a given fund and that the correct beta has been used in the analysis.

Other Alternative Performance Metrics

Other alternative performance benchmarks are in use as well, including the Annualized Buy and Hold Public Market Returns, Public Market Benchmark, Public Peer Benchmark, Leveraged Public Peer Benchmark, and Entry-Time-Zero IRR and Exit-Time-Zero IRR.

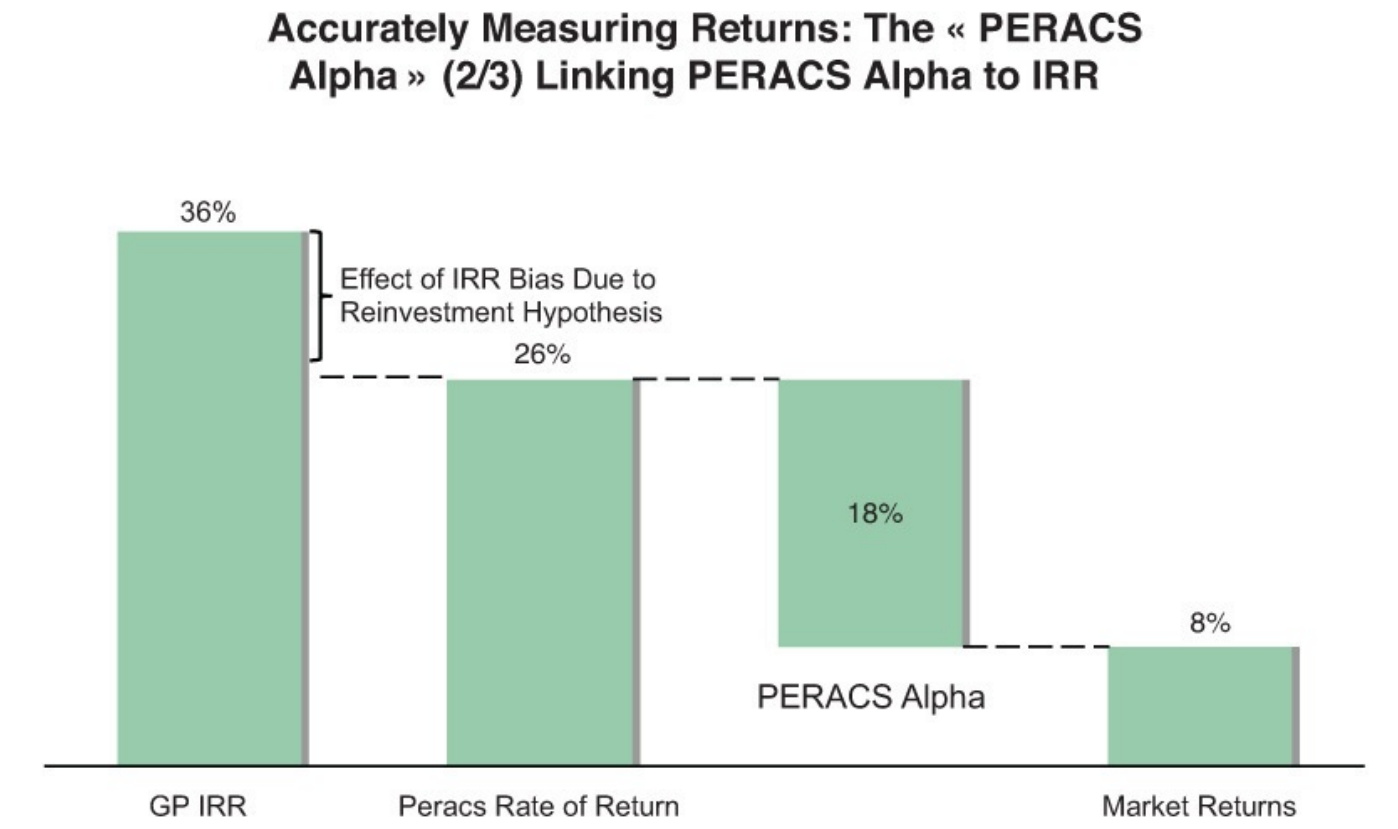
Academics and practitioners alike also are developing some unique benchmarks. As an example, I came across one that seems quite sensible: the PERACS Alpha, developed by

Peracs (see Figures 7.5a, 7.5b, and 7.5c).



The "PERACS Alpha" is a measure of pure value generation that is corrected for the biases of standard IRR and expresses returns relative to the 'opportunity cost' of not investing in the public market. Following Phalippou and Gottschalg (2009), we measure the 'Profitability Index' of each investment as the ratio of Present Value of Distributions (or NAV) over Present Value of Takedowns, using time-matched stock-market returns as discount rate for each Cash Flow. We then measure the PERACS Alpha as the corresponding annualized rate of value increase, given the investment duration (where duration is the difference between the value-weighted average Takedown date and the value-weighted average Distribution date. The PERACS Alpha of a fund corresponds to the aggregate PERACS Alpha of the underlying investments, using the product of (duration * Present Value of Takedowns) as weight in the aggregation (Phalippou and Gottschalg, *Review of Financial Studies*, 2009).

Figure 7.5a Return Multiple to PERACS Alpha



A GP's "PERACS Alpha" is a measures of pure value generation that is corrected for the biases of standard IRR and expresses returns relative to the 'opportunity cost' of not investing in the public market. It is based on a refinement of the method developed by Acharya, Gottschalg et al. (Forthcoming in the *Review of Financial Studies*)

Figure 7.5b PERACS Alpha Linking to IRR

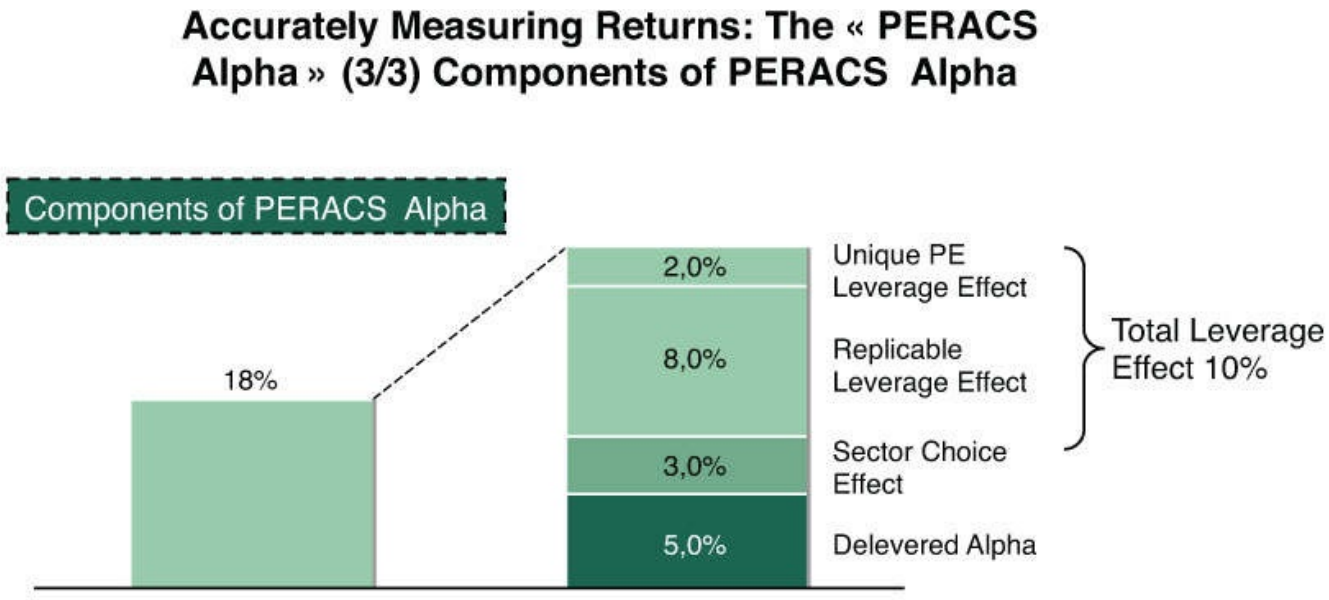


Figure 7.5c Components of PERACS Alpha

Without going into too much detail, the PERACS Alpha is a measure of pure value generation that is corrected for the biases of standard IRR and that expresses returns relative to the opportunity cost of not investing in the public market. It is based on a refinement of the method developed by Acharya, Gottschalg, et al. (forthcoming in the *Review of Financial Studies*).

Summary

This chapter ends on the same note it started with: The industry is evolving under the scrutiny of the LPs, and the GPs are facing many challenges. Considering the imperfections of the existing practice of using IRR coupled with money multiples, as well as the current harsh fundraising conditions, GPs should do a better job of convincing the LPs that private equity outperforms the other asset classes. This is best done by adopting a broader palette of performance metrics. By doing so, GPs also could better understand their own strengths and weaknesses so that they could then correct them in time for the next round of fundraising.

8. Carried Interest and Carried Interest Modelling

Mariya Stefanova, PEAI

In this chapter, we discuss:

- Why "carried interest"?
- Substance and legal form of carried interest
- What is a waterfall model?
- The cumulative "cash bucket" concept as a way to think of the waterfall
- Carry participants
- Types of carried interest arrangements
- Pure deal-by deal model
- European-style whole-of-fund model
- Hybrids
- Mechanics and examples of each type of carried interest arrangement
- What a preferred return is and how it works
- Clawbacks
- Carried interest from an accounting perspective
- Accounting treatment and presentation under U.S. GAAP, IFRS, and other GAAPs
- Notes on carry for limited partners

Why "Carried Interest"?

Let's start with why the performance/incentive fee in private equity (PE) is called *carried interest*. When I do training on carried interest, I always open the session with the question, "Why is it called *carried interest*?" Surprisingly, I rarely get an answer. The key to understanding the mechanism is in these two tiny words: *carried* and *interest*. What do they mean?

Interest refers to interest in a partnership, the most common and tax-efficient legal form for private equity funds. It is not the interest charge for lending or borrowing money.

Carried comes from the fact that the investors/limited partners (LPs) carry the interest in that partnership of the carried interest partner (CIP). Later in the life of the fund, as the fund matures and starts generating profits, these profits and the corresponding cash are flipped back from the LPs that carry the CIP's interest in the partnership to that same CIP.

To better understand the whole legal concept, let's explore some alternative ways of looking at carried interest.

Substance of Carried Interest

The substance of carried interest is similar to what other asset classes refer to as the performance fee or incentive fee. If the private equity manager generates returns over a certain threshold, called the *hurdle*, the carried interest partner will receive carry for doing a good job; if it doesn't, the CIP will be paid no carry.

However, ordinarily, if carry is structured as a performance or incentive fee, the carried interest holders, who ultimately receive the carried interest payments, are taxed with income tax. The rate of income tax in many (although not all) jurisdictions tends to be higher than the rate of capital gains tax (CGT).

To maximize the tax benefit, in private equity, the incentive payments are structured as a reallocation of profits (and corresponding cash) rather than a simple incentive or performance fee.

What exactly is the premise for this concept?

Think of the carried interest as a highly leveraged investment made by the CIP. The CIP puts a small amount of cash into the fund, and the rest is "leveraged" by the investors/LPs as they carry the CIP's interest in the partnership on its behalf. When the time for splitting the profits (and corresponding cash) comes, profits and gains are flipped from the investors/LPs to the CIP. Therefore, the CIP receives not an incentive or performance fee, but a return on the highly geared investments. In other worlds, carry is an allocation mechanism for reallocating profits/gains and corresponding cash from the LPs to the CIP.

Carried interest can also be seen as an incentive mechanism designed to incentivize the carried interest holders (CIHs). Therefore, it should be designed carefully to reflect the specifics and meet the needs of the investment team you are designing it for.

Carry Participants

A carry scheme has different participants, all with their own roles:

1. The limited partners (LPs) are simply passive fund providers in the partnership. Remember, if they were allowed to participate in the management or control of the fund, that would jeopardize their limited liability status.
2. The general partner (GP) manages the fund and the investments, respectively. The GP might or might not be the CIP, depending on the jurisdiction and the specific structure.
3. The carried interest partner (CIP) can be the GP or a separate legal entity, depending on the structure and jurisdiction. For example, as explained in Chapter 1, "Private Equity Structures and Their Impact on Private Equity Accounting and Reporting," in a typical U.S. Delaware fund, the GP typically is the CIP. In a UK structure, a separate legal entity (usually a partnership called the "founder partner") might be set up for tax efficiency as a CIP. In Mauritian or South African funds, the CIP is usually set up as a trust.
4. Carried interest holders (CIHs) are the individuals who share the carried interest. They are typically members of the investment team and the senior management

team. They are set up as partners (if the carried interest vehicle is a partnership) or beneficiaries (if the carried interest vehicle is a trust) at the CIP level.

What Is a Waterfall?

What we refer to as a *waterfall* in private equity jargon is the sequence in which proceeds from the sale of portfolio companies are distributed. In other words, this refers to the application of cash, the way the money "flows down" to the different classes of partners in a distribution (for example, LPs, GPs, and CIPs, if a separate class). This is why we use the analogy with a waterfall.

For a more graphical representation of the waterfall, imagine a bucket that you gradually fill with cash as you realize your investments. The contents of this bucket you pour down the waterfall cascade to satisfy the waterfall clauses of the limited partnership agreement. We return to that graphical representation later when we discuss the mechanics of the waterfall calculation.

Unfortunately, the waterfall clauses in your LPA don't have a label reading "waterfall clauses"—you need to identify them yourself. You will typically find them in a section that might be called "Distributions" or "Application of Cash."

Dual Nature of Carry

An important point is always to consider the dual nature of carry and think of it twofold:

- As allocation/reallocation of cash proceeds
- As allocation/reallocation of the corresponding profits/gains giving rise to the cash proceeds

Cumulative Basis of Calculation

The second important point is to always think of carry in terms of cumulative numbers, unless you are calculating the carry for a pure deal-by-deal arrangement.

For a hybrid/partial deal-by-deal arrangement, assuming that it is calculated on all the realized deals, to make sure that the distributions are still on track (meaning that the fund is not in a clawback situation), that cumulative number typically is only the cumulative actual cash—that is, cumulative distributions prior to the calculation point.

For a whole-of-fund/European arrangement, that is the cumulative actual cash (cumulative distributions prior to the calculation point) plus the final hypothetical cash flow, as of the calculation point that most often practitioners consider to be represented by the net asset value (NAV), with or without any adjustments to the NAV you might deem appropriate.

A simplified way to think of it is as a cumulative bucket of cash that you pour down the waterfall cascade. We return to this point later when we discuss the cumulative cash bucket concept in a whole-of-fund arrangement.

Types of Carried Interest Models/Arrangements

Carried interest arrangements are varied, but to summarize, I can group them into three general types of carried interest models or arrangements: pure deal-by-deal carry model, whole-fund carry arrangement, and hybrid models. We look at them here.

Pure Deal-by-Deal Model

The first carry arrangement, which sits on the lower end of the carried interest type spectrum in Figure 8.1, is the *deal-by-deal* carry model. When I say "deal-by-deal" in this chapter, I am referring to the pure deal-by-deal arrangement, which was common in the U.S. in the past but is rather rare now. When we talk about deal-by-deal arrangements these days, we usually refer to the more common hybrid models that we explain later. The pure deal-by-deal carry model is pretty aggressive. It is GP friendly but LP unfriendly because of the high risk of going into a clawback situation, particularly if there are early wins in the portfolio (that means deals realized at high multiples early in the life of the fund, followed by not-so-highly-successful deals later in the life of the fund). Clawbacks are explained in the later section "Clawback: What Is It, and Should We Recognize It in Financial Statements?"

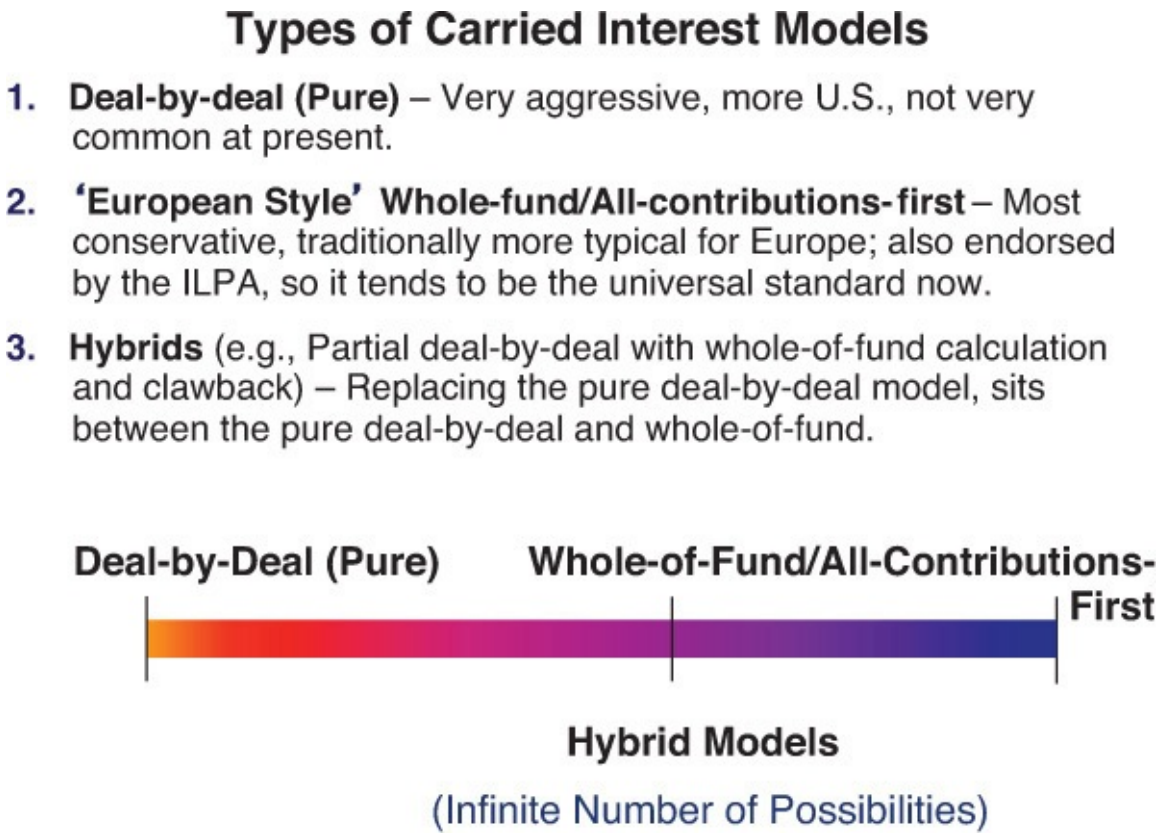


Figure 8.1 Carried interest type spectrum

Whole-of-Fund/Whole-Fund/All-Contributions-First European-Style Carry Model

On the upper end of the carry-type spectrum in Figure 8.1 sits the whole-fund or whole-of-fund carry arrangement. In the U.S., it is often referred to as "all-contributions-plus-preferred-return-back-first" or, for short, "all-contributions-first." It also is known simply as the European-style carry model because it is the predominant arrangement in most of the European funds. This is a much more conservative carry arrangement and a far more LP-friendly model because it has a much lower (although not entirely removed) probability of going into a clawback situation. This is the model the Institutional Limited Partners Association (ILPA) advocates in its ILPA Private Equity Principles.

Hybrids/Partial Deal-by-Deal/Deal-by-Deal with Whole-of-Fund Calculation

The third group of carry models consists of the hybrid models, which include elements of both pure deal-by-deal and whole-of-fund carry models. The risk of going into a clawback is lower than with the pure deal-by-deal model but higher than with the whole-fund arrangement. The hybrid models sit between the pure deal-by-deal and the whole-fund carry models on the carry-type spectrum. These models are very flexible—they can include more elements from and look more like a pure deal-by-deal model, or they can be geared more toward the whole-fund end of the carry-type spectrum. Infinite possibilities exist between the two ends of the spectrum in Figure 8.1 where the hybrids sit, which is why we should be more careful when we model a hybrid.

Mechanics of Pure Deal-by-Deal Carried Interest Model

How does a pure deal-by-deal carried interest model work?

Payments are made to the CIP out of the proceeds from a particular investment after investors have received the commitment drawn down for that investment (and that investment alone) plus a preferred return on that investment (and that investment alone).

Consider the example shown in Figure 8.2. Assume that on January 1, 2014, the GP has drawn down from LPs $100m for Investment #1. Three years later, on January 1, 2017, Investment #1 has been disposed of at $150m. Out of these proceeds, $100m goes to the LPs in return of their original drawdown for Investment #1. In addition, the LPs receive 8% (approximately $26m) in the form of preferred return on Investment #1.

Preferred return calculation for a pure deal-by-deal carried interest model

1/1/14	-100,000,000.00	Investment #1	**100,000,000.00**	**Cumulative Preferred Return (@8%)**	
1/1/17	100,000,000.00		8,000,000.00	8,000,000.00	Year 1
1/1/17	25,974,537.13	Preferred Return	8,640,000.00	16,640,000.00	Year 2
IRR	**8.0%**	calculated as an IRR	9,331,200.00	25,971,200.00	Year 3
			25,971,200.00		

Figure 8.2 Preferred return calculation on $100m investment held for three years

The remaining $24m (approximately) of the proceeds from Investment #1, in the form of capital gain, are split 80:20 – 80% (or $19.2 m) go to the LPs and 20% ($4.8 m) go to the CIP as carried interest on Investment #1.

As discussed previously, the pure deal-by-deal carry model is historically typical for U.S.

funds. It is more GP friendly and less LP friendly. This is because, compared to the whole-fund arrangement, whereby carry might not be due until, say, the fifth or sixth year, a pure deal-by-deal carried interest arrangement can bring forward the carry payments by many years. This model is a good motivational tool for the investment team and is designed to meet the requirements of ambitious young executives and fund managers. That is why it has historically been the preferred option in the U.S. However, this arrangement, along with the other hybrid arrangements, has been under scrutiny over the past few years. ILPA endorses the whole-fund model as a best practice because the deal-by-deal arrangement has a high probability of a clawback (also referred to as giveback, negative carry, or GP giveback). In such a situation, if carry is calculated at the end of the term, based on all the deals (realized), the CIP needs to return cash back to the LPs. This scenario, as briefly explained earlier, usually happens if there are early wins (deals that are realized early in the life of the fund at high multiples), but the performance on other deals later is not as high.

Mechanics of Whole-of-Fund/Whole-Fund/All-Contributions-First European-Style Carry Model and the Cumulative Cash Bucket Concept

Let’s go back to our earlier discussion with the bucket of cash flowing down the waterfall cascade. How does the waterfall for a whole-fund model and the cumulative cash bucket concept work?

Imagine a bucket that you gradually fill up with cash as you realize your investments. The contents of this bucket are poured down the waterfall cascade to satisfy the waterfall clauses of the limited partnership agreement.

Always think of this bucket of cash on a cumulative since inception basis. As you realize the first investment, the bucket gets filled up to the first measuring mark. If you now pour the cash from the bucket down the waterfall cascade, you most likely won’t have enough cash to satisfy all the waterfall clauses; most likely, it will simply stop at the first clause/measuring mark without flowing farther down the cascade—in other words, you won’t have enough cash to get to the very bottom of the waterfall cascade.

As the fund matures and the bucket fills up, on a cumulative basis, with more cash in it, there would be more cash to flow farther down the waterfall cascade. For example, with the realization of the sixth investment, you might have enough cash to flow down the second measuring mark/clause of the waterfall clauses—the preferred return.

Later, as you realize, say, the seventh investment, you might have enough cash to get you to the next measuring mark—the catch-up clause (if any catch-up exists).

Finally, any cash that gets into the bucket after that point would be split 80:20 (assuming that you have an 80:20 split), with 80 percent going to the LPs and 20 percent going to the CIP in the form of carried interest.

Now let’s look in more detail at how the waterfall for a European-style whole-fund model works, following some typical LPA waterfall clauses.

1. The first clause (some LPAs have this and others don’t) is usually designed to take care of the GP, to make sure that, before any distributions are made to any other

classes of partners, the GP has received the management fee/priority profit share (PPS) it is entitled to. Sometimes GPs that can afford not to draw their management fee/PPS entitlement on a regular basis waive it until the fund starts generating profits/cash. If the sponsor of the fund envisioned such a scenario, it typically includes that first clause in the waterfall to make sure that the GP receives the management fee/PPS it is entitled to as of the carry calculation point. If the GP draws its management fee/PPS entitlement on a regular basis, as prescribed by the LPA, usually the amount under this clause is nil. A typical clause would read, "First, to the GP, in payment of management fee/PPS (less any amounts already drawn down)."

2. The second step/clause (or, in many cases, the first step/clause) is to return to the LPs all the contributions originally drawn from them. A typical clause would read, "Second/(First, if there is no provision for management fee/PPS), 100 percent to the limited partners, until they have been repaid the outstanding contributions." This means that any cash proceeds to the fund would first go to the LPs until they were repaid the whole of their original investment in the fund, not just the original contribution for the deal cash proceeds from the sale that were distributed.

3. The third step/clause is to pay the preferred return or hurdle. It typically reads, "Third, 100% to the LPs, in payment of an amount equal to the preferred return." We explain the concept of preferred return and provide insights into the different ways of calculating it later in the "Preferred Return" section.

4. The fourth step/clause is to allow the carried interest partner to catch up with the limited partners, hence the term *catch-up*. Catch-up can vary. Sometimes it is 100 percent, thus allowing the CIP to catch up faster with the LPs; sometimes it is lower, depending on how fast you want the CIP to catch up with the LPs. The catch-up for an 80:20 carry split is 25 percent from the LPs' preferred return, which means that you are simply grossing up the CIP's 20 percent carry. Do not forget that the catch-up is part of the carried interest. Sometimes in calculations, people forget to add the two numbers (catch-up and the 20% from the carry split) together.

5. Finally, any cash that is received after this point typically is split 80:20 between LPs and the CIP, respectively. The LPs are distributed 80 percent, and the CIP is distributed 20 percent from any proceeds from disposal of investment that were received after the CIP has caught up with the LPs. This split might not necessarily be 80:20, or it can even be staged with a lower percentage for the CIP when it achieves a certain return measured with the internal rate of return (IRR) and then a higher percentage if the fund hits another higher IRR mark. For example, until the fund achieves a 20 percent IRR, the CIP would receive 15 percent from the proceeds (meaning an 85:15 carry split); then when the fund achieves 30 percent IRR or more, the CIP starts receiving, say, 25 percent from the proceeds thereafter (meaning a 75:25 carry split).

Example 1:

For example, if you had a fund with a total commitment of $1 billion that was fully drawn in year 5 and a 1 percent management fee on a commitment basis for the investment

period that the GP chose not to draw until later (or a $50m entitlement as of the end of year 5), the waterfall would look like this:

1. First, you need to pay $50m to the GP in payment of the management fee entitlement. (Alternatively, this could be nil, $50m minus $50m, if the GP draws their entitlement on a regular basis.)
2. Next, you need to pay $1b to the LPs in repayment of their original contribution to the fund.
3. Then you need to pay the LPs an amount equal to the preferred return, also called the hurdle. (We explain this in detail later, but for now, just assume that it is something like a guaranteed return to the LPs on their original investment.) Assume that it is a simple 8 percent on that original investment here (or $80m). (In reality, the calculation of the preferred return is much more complex.)
4. You need to pay a 100 percent catch-up to the CIP to catch up with the LPs on the preferred return. For an 80:20 carry split, that is 25 percent of the previously calculated preferred return. In this simplified example, that is 25 percent on $80m, or $20m.
5. Finally, any cash that comes to the fund after that point is split 80:20, with 80 percent going to the LPs and 20 percent going to the CIP. For example, if they dispose of an investment and receive $100m proceeds, $80m will go to the LPs and $20 will go to the CIP.

Example 2 follows a more detailed, although still simplified, example of a whole-of-fund waterfall calculation.

Example 2:

The second example, shown in Figure 8.3, is a more detailed example of how you can calculate carried interest for a whole-of-fund carry arrangement. It also has an easy-to-follow layout.

SAMPLE WATERFALL CALCULATION FOR A WHOLE-OF-FUND/EUROPEAN STYLE CARRY MODEL		
Total Commitment	**100,000,000.00**	
Drawdowns and Distributions		
1/3/14	-10,000,000.00	for Investment #1
6/4/14	-10,000,000.00	for Investment #2
12/1/14	10,000,000.00	from Investment #1 disposal
11/30/14	-20,000,000.00	for Investment #3
3/31/15	300,000.00	from Investment #2 (dividend)
5/1/16	-50,000,000.00	for Investment #4
6/15/16	29,000,000.00	from Investment #2 disposal
1/31/17	400,000.00	from Investment #3 (interest on loan notes)
1/10/19	-10,000,000.00	for Investment #5
4/3/19	30,000,000.00	from Investment #3 disposal
1/15/20	300,000.00	from Investment #4 (dividend)
12/31/20	100,000,000.00	NAV as of 31/12/2020
IRR	**16.78%**	
	-100,000,000.00	Total Contributions
	1,000,000.00	Total Income Distributions
	69,000,000.00	Total Capital Distributions
	-30,000,000.00	Total Net Contributions
	-30,000,000.00	**Total Net Contributions**

1/3/14	-10,000,000.00	for Investment #1
6/4/14	-10,000,000.00	for Investment #2
12/1/14	10,000,000.00	from Investment #1 disposal
11/30/14	-20,000,000.00	for Investment #3
3/31/15	300,000.00	from Investment #2 (dividend)
5/1/16	-50,000,000.00	for Investment #4
6/15/16	29,000,000.00	from Investment #2 disposal
1/31/17	400,000.00	from Investment #3 (interest on loan notes)
1/10/19	-10,000,000.00	for Investment #5
4/3/19	30,000,000.00	from Investment #3 disposal
1/15/20	300,000.00	from Investment #4 (dividend)
12/31/20	30,000,000.00	Outstanding Contributions on 31/12/2020
12/31/20	26,033,303.74	Preferred Return on 31/12/2012
IRR	**8.0%**	**IRR**
12/31/20	6,508,325.93	Catch-up
12/31/20	7,491,674.07	80:20 Carry split
Total Carry as of 31/12/2011	**14,000,000.00**	

Carry Calculation Date:	**12/31/20**				
Total Commitment	**100,000,000.00**				
Total Cumulative Distributions prior to this calculation point	70,000,000.00				
NAV	100,000,000.00				
	170,000,000.00				
LPA Clause			**LPs**	**CIP**	**Total**
	170,000,000.00				
6.3(a) Return of Contributions	100,000,000.00	100% to LP	100,000,000.00		**100,000,000.00**
					0.00
Cash available to distribute further down the cascade	70,000,000.00				**0.00**
6.3(b) Preferred Return	26,033,303.74	100% to LP	26,033,303.74		**26,033,303.74**
					0.00
Cash available to distribute further down the cascade	43,966,696.26				**0.00**
6.3(c) Catch up	6,508,325.93	100% to CIP		6,508,325.93	**6,508,325.93**
					0.00
Cash available to distribute further down the cascade	37,458,370.33				**0.00**
6.3(d) 80/20 Split					**0.00**
to LPs	29,966,696.26	80% to LPs	29,966,696.26		**29,966,696.26**
to CIP	7,491,674.07	20% to CIP		7,491,674.07	**7,491,674.07**
Cumulative Distributions			**156,000,000.00**	**14,000,000.00**	**170,000,000.00**
Cumulative Distributions prior to this calculation point/distribution			-70,000,000.00	0.00	
For this distribution			86,000,000.00	14,000,000.00	

Figure 8.3 Sample whole-of-fund waterfall calculation

If you are to calculate the carried interest for a whole-of-fund carry arrangement on December 31, 2020, based on the liquidations assumption, for a fund with total commitment of $100m that has been fully drawn in year 5, $70m cumulative distributions, and $100 m residual value (meaning NAV) left in the fund on this date, here is what happens, based on the cumulative cash bucket concept:

You have a cumulative cash bucket of $170m, made up of $70m cumulative distributions (actual cash distributed so far), plus $100m residual value/NAV (hypothetical cash that the fund would have had if liquidated on the calculation date). This $170m cash would flow down to each class of partners in the following order (ignoring the clause designed to protect the GP from not getting its management fee/PPs):

1. First, you need to pay $100m to the LPs in repayment of their original contribution to the fund.
2. Then you need to pay to the LPs an amount equal to the preferred return, also called the hurdle, calculated, as explained in the "Preferred Return" section, either as interest on the daily outstanding contribution balances or, for simplicity, as an IRR on all the cash flows. In this calculation, using the shorter IRR method, on December 31, 2020, that is approximately $26m.
3. Next, you need to pay 100 percent catch-up to the CIP so that it can catch up with the LPs on the preferred return they have been paid. For an 80:20 carry split, that is 25 percent on the LPs' preferred return—or, in this example, $6.5m. That amount gets the CIP on the same page as the LPs.
4. Finally, any cash that is left after that gets split 80:20, with 80 percent going to the LPs and 20 percent going to the CIP. In this example, $30m goes to the LPs and $7.5m goes to the CIP in the form of 80:20 carry split.

The total carried interest that would go to the CIP is $14m, made up of $6.5m catch-up and $7.5m 80:20 split.

Preferred Return

Going back to the mechanics explained earlier, let's elaborate on the preferred return.

What is a preferred return? Think of it as of a "guaranteed" return to the LPs on their investment in the fund, in the sense that they will receive their original investment plus this preferred return before the CIP starts getting any carried interest (not that it is really guaranteed).

The preferred return is also referred to as the hurdle, for the same fact that the CIP will receive carried interest only if it passes this hurdle, which is typically 8 percent.

This 8 percent preferred return/hurdle is not calculated as a simple 8 percent on the LPs' original investment/contributions, however.

LPAs define the preferred return in two ways. To a certain extent, that defines how you can calculate it:

1. Some LPAs define the preferred return as calculated "as an interest at an annual rate of x percent (for example, the typical 8 percent), compounded annually on XX/XX/XXXX date (for example, December 31), calculated on a daily basis on the outstanding contributions." However, not all the LPAs explicitly mention the date of the compounding, nor do they specify that it is a daily calculation, which leaves room for interpretations. The best practice is for the preferred return to be calculated on the daily balances of the outstanding/net contributions on each date and to have the compounding done on the anniversary of the first drawdown. This gives you a full first year before compounding.
2. Other LPAs stipulate that the preferred return is calculated as an IRR on the in- and out-cash flows between the fund and the LPs.

Whichever method you use, you will probably not end up with massively different results (as a percentage of the commitment tolerance, not as absolute amounts, the absolute amounts might look massive for a large fund). Still, the first method is better, and it allows more transparency into the calculation.

Keep in mind that the bridged investments (these are usually investments up to 12 months) are typically excluded from the preferred return calculation.

In Figure 8.4 we provide an example of a preferred return calculation.

Sample Preferred Return Daily Calculation

Cash Flows (Drawdown & Distributions)		Daily change in outstanding/ cumulative net contributions	Annual compounding of preferred return*	Basis for daily preferred return calculation	Daily preferred return (@8%)	Date Sequence	Outstanding/ cumulative contributions at date	Cumulative preferred return
Date	Drawdowns/ (Distributions)	USD	USD	USD	USD		USD	
						12/31/13		
1/1/14	10,000,000	10,000,000.00	-	10,000,000.00	2,191.78	1/1/14	**10,000,000.00**	2,191.78
1/4/14	10,000,000	-	-	10,000,000.00	2,191.78	1/2/14	**10,000,000.00**	4,383.56
1/7/14	(10,000,000)	-	-	10,000,000.00	2,191.78	1/3/14	**10,000,000.00**	6,575.34
		10,000,000.00	-	20,000,000.00	4,383.56	1/4/14	**20,000,000.00**	10,958.90
		-	-	20,000,000.00	4,383.56	1/5/14	**20,000,000.00**	15,342.47
		-	-	20,000,000.00	4,383.56	1/6/14	**20,000,000.00**	19,726.03
		(10,000,000.00)	-	10,000,000.00	2,191.78	1/7/14	**10,000,000.00**	21,917.81
		-	-	10,000,000.00	2,191.78	1/8/14	**10,000,000.00**	24,109.59
		-	-	10,000,000.00	2,191.78	1/9/14	**10,000,000.00**	26,301.37
		-	26,301.37	10,026,301.37	2,197.55	1/10/14	**10,000,000.00**	28,498.92
		-	-	10,026,301.37	2,197.55	1/11/14	**10,000,000.00**	30,696.46
		-	-	10,026,301.37	2,197.55	1/12/14	**10,000,000.00**	32,894.01

* Assume daily preferred return (@8%) calculation and annual compounding on 10th January.

Figure 8.4 Sample preferred return daily calculation

Hybrid Models

Now that you know how the pure deal-by-deal and the whole-of-fund carry arrangements work, let's take a look at the hybrid models.

These models are called hybrids because they have elements from both the deal-by-deal and the whole-of-fund arrangements.

They are also referred to as partial deal-by-deal models or deal-by-deal with a whole-of-fund calculation models.

In fact, what we usually refer to as *deal-by-deal* these days are typically the hybrid models, not the pure deal-by-deal arrangements, which are pretty rare because of the high

probability of a clawback.

The hybrid models are flexible, but how do they generally work?

As we discussed earlier, hybrid models vary. Some are geared more toward the pure deal-by-deal end of the carry type spectrum in Figure 8.1. Others are geared more toward the whole-of-fund end of the carry type spectrum. However, based on the most common arrangements, carry is paid out of the returns of a particular investment similarly to the pure deal-by-deal arrangement. What differs from the pure deal-by-deal model and is similar to the whole-of-fund arrangement is that a calculation based on all the realized (as of the time of the calculation) deals is performed to make sure that we are still on track—that is, that we have returned the drawn-down capital and paid a preferred return on the fund's realized investments (for that investment plus any outstanding amounts for previously realized investments). In addition to that, pro rata share of the acquisition costs, fund expenses, and management fee/GPS of the fund's realized investments often are returned before the preferred return.

In Figure 8.5a and 8.5b, we provide an example of a waterfall calculation for a hybrid/partial deal-by-deal carried interest arrangement.

SAMPLE WATERFALL CALCULATION FOR A HYBRID/PARTIAL DEAL-BY-DEAL CARRY MODEL

Total Commitment		**100,000,000.00**	
Drawdowns and Distributions			
1/3/14		-10,000,000.00	for Investment #1
6/4/14		-10,000,000.00	for Investment #2
12/1/14		10,000,000.00	from Investment #1 disposal
11/30/14		-20,000,000.00	for Investment #3
3/31/15		300,000.00	from Investment #2 (dividend)
6/15/16		29,000,000.00	from Investment #2 disposal
1/31/17		400,000.00	from Investment #3 (interest on loan notes)
12/31/20		30,000,000.00	from Investment #3 disposal
12/31/20		-22,353,647.78	Preferred Return Only on Realised Investments #1, 2 & 3
	IRR	**8%**	
		-40,000,000.00	Total Contributions Only for Realised Investments #1, 2 & 3
		700,000.00	Total Income Distributions from Realised Investments #1, 2 & 3
		69,000,000.00	Total Capital Distributions
		29,700,000.00	Total Net Contributions
		29,700,000.00	**Total Net Contributions**

Figure 8.5a Sample preferred return calculation for a hybrid/partial deal-by-deal carried interest model

Carry Calculation Date:	**12/31/20**				
Total Commitment	**100,000,000.00**				
Total Cumulative Distributions prior to this calculation point (31/12/2011):	39,700,000.00				
Amount for this distribution	30,000,000.00				
	69,700,000.00				
LPA Clause			**LPs**	**CIP**	**Total**
	69,700,000.00				
6.3(a) Return of Contributions for All Realized Investments	40,000,000.00	100% to LP	40,000,000.00		**40,000,000.00**
					0.00
Cash available to distribute further down the cascade	29,700,000.00				**0.00**
6.3(b) Preferred Return on Realized Investments #1, 2 & 3	7,646,352.22	100% to LP	7,646,352.22		**7,646,352.22**
					0.00
Cash available to distribute further down the cascade	22,053,647.78				**0.00**
6.3(c) 80/20 Split					**0.00**
to LPs	17,642,918.22	80% to LPs	17,642,918.22		**17,642,918.22**
to CIP	4,410,729.56	20% to CIP		4,410,729.56	**4,410,729.56**
Cumulative Distributions			**65,289,270.44**	**4,410,729.56**	**69,700,000.00**
Cumulative Distributions prior to this calculation point/distribution			0.00	0.00	
For this distribution			65,289,270.44	4,410,729.56	

Figure 8.5b Sample preferred return calculation for a hybrid/partial deal-by-deal carried interest model

Clawback: What Is It, and Should We Recognize It in the Financial Statements?

Clawback—also referred to as lookback, negative carried interest, or GP giveback—is an obligation on the part of the GP/CIP to return previously received incentive allocation (carried interest) to the fund due to subsequent losses.

Under U.S. GAAP, consistent with FASB ASC 310-10-45-14, such an obligation would not be recognized as an asset/receivable from the GP/CIP in the fund's financial statements unless substantial evidence of the ability and intent to pay within a reasonably short period of time exists. In most instances, the obligation is rather reflected as a deduction from the GP's or CIP's capital account (and a corresponding increase to the LPs' capital balance). However, if the GP/CIP does not have the financial resources to make good on its obligation, that presentation might not be appropriate. Therefore, a careful reading of the governing document and consideration is required before such a decision is made. If not recognized within the capital accounts, as a minimum, it is appropriate to at least disclose the existence of clawback in the notes to the financial statements.

Similarly, for other GAAPs, the definition of *obligation* and the criteria for recognizing an asset need to be considered to decide whether to recognize the clawback in the financial statements and capital accounts of GP/CIP and LPs. However, unlike U.S. GAAP, no specific guidance on the carry clawback is provided under IFRS or any other recognized GAAPs; therefore, you need to look into the more generic provisions of the relevant GAAP.

Accounting for Carried Interest

Now let's put the concept of the carried interest in accounting context.

The Liquidation Assumption

First, accounting for the calculation of carried interest is based on the liquidation assumption.

This means that carried interest is calculated, accounted for, and presented in the equity balances of each class of partner as if the fund was liquidated on the calculation date. In other words, it is as if the fund realized its assets and settled all its liabilities at the fair value reported in the financial statements, allocated all gains and losses, and distributed the net assets to each class of partner at the reporting/calculation date consistent with the provisions of the partnership's governing document (the LPA).

What Is the Carried Interest from an Accounting Perspective?

From the CIP's perspective, carry could be considered a return on a highly geared investment for the carried interest holders, not a performance fee. Therefore, it is not an expense and does not go through the P&L. This is a transaction between shareholders/partners, and transactions with the shareholders never go through the P&L. Therefore, the general view is that it should not be charged to the P&L—it is all about reallocating profits.

Carry is also an allocation mechanism, not a liability. First, the GP gets its management fee/PPS, and then the LPs get their money back. At the end, if any cash/profit is left, carry profit is allocated/reallocated from the LPs to the CIP.

We can regard the carry simply as a reallocation of revaluation or unrealized gains (losses) from LPs to the CIP.

Accounting Treatment Under U.S. GAAP

TIS Section 6910, "Investment Companies, .29 Allocation of Unrealized Gain (Loss), Recognition of Carried Interest, and Clawback Obligations," issued by AICPA in May 2008 and revised in June 2009, is a document that describes that treatment of carried interest under U.S. GAAP.

According to the interpretation provided by AICPA in this TIS, U.S. GAAP does not mandate a specific treatment for nonregistered investment partnerships, but rather recognizes that the treatment should be consistent with the partnership's governing documents (the LPA). In line with that, it also recognizes that some partnerships record carried interest as an expense for fees (usually for offshore funds) or as an allocation from the LPs' partners' capital accounts to the GP's/CIP's capital account (usually for domestic funds).

Most U.S. funds treat carried interest as an allocation/reallocation from LPs to the GP/CIP.

Calculation, accounting, and presentation are usually done by a class of partners (for example, LPs, GP, or the CIP, if separate).

In presenting each class of partners' interest in the NAV as of the reporting date, the financial statements consider the carry formula as if the partnership was liquidated on that date, with all the assets liquidated and liabilities settled at their reported fair value on that date, with all gains and losses allocated, and with the net assets distributed to each class of partners at the reporting date.

As discussed previously, the same principles apply to clawback recognition. An obligation is recognized as an asset/receivable only if there is substantial evidence of ability and

intent by the GP/CIP/carried interest holders to pay within a reasonably short period of time. In that case, the clawback should be reflected as a deduction from the GP's/CIP's capital account.

Accounting Treatment under IFRS and Other GAAPs

All other GAAPs apart from U.S. GAAP are silent on the carry treatment.

Some obvious triggers in terms of the recognition of carried interest come into play:

- **Trigger point A—**The fair value of the assets is higher than the outstanding contributions and pass hurdle (the theoretical hurdle).
- **Trigger point B—**The actual cumulative distributions are high enough to pass the hurdle (the actual hurdle).

While most U.S. funds under U.S. GAAP accrue for carried interest and treat it as a reallocation from LPs to the CIP after point A, there is generally flexibility around the treatment, presentation, and timing under IFRS and other GAAPs when no guidance is provided.

Most funds treat carry similarly to U.S. GAAP, as a reallocation of cash and profit from LPs to GP/CIP.

However, some funds treat carry as a fee and charge it to P&L but only pass actual (not theoretical) hurdle.

There are two potential arguments leading to two different accounting approaches in accounting for carry between points A (theoretical hurdle) and B (actual hurdle). We consider these next.

First (Hypothetical) Approach

The first approach supported by one group of GPs is the "Hypothetical approach." The argument is that the carried interest partner can start hypothetically getting carry based on the assumption that the partnership is liquidated on the reporting date. (This is one assumption/hypothesis.) The second assumption is that, upon that hypothetical liquidation, all the partnership's assets are realized. The third hypothesis is that they are realized at the fair value calculated by the manager and reported in the accounts. Bear in mind that the valuations in private equity are highly subjective and unobservable, compared to listed investments where the prices are objective and observable (you can just go on Bloomberg and get the prices). So far, there are three assumptions/hypotheses. The argument is that there are too many assumptions, and therefore the whole concept is highly hypothetical, and the hypothetical carried interest (the carry accrual) based on all these assumptions should not be put through the accounts—or in other words, we should not be accruing for carry.

Second (Accrual Basis) Approach

Another group of GPs supports a second approach—let's call it the "Accrual Basis Approach." The argument under this approach is that when we prepare accounts, we prepare them on an accrual basis, on the basis of prudence and looking forward—therefore, it would be prudent to recognize the fact that upon hypothetical liquidation of the fund on the reporting date, a certain proportion of the NAV (simplistically 20 percent of the total NAV for a 20:80 carry arrangement) would be allocated to the CIP instead of the LPs. The GPs that choose to apply the second/Accrual Basis approach broadly present it in two different ways.

First Presentation

If unrealized gains on investments under the relevant GAAP are charged to equity (in revaluation reserve), and if the valuation is in excess of the outstanding contributions, that excess amount (in revaluation reserve) is allocated to the CIP. With a single revaluation reserve, the presentation of the carried interest is basically splitting that single revaluation reserve in two: a "revaluation reserve" and a "carried interest reserve/provision for carry."

If unrealized gains on investments under the relevant GAAP are charged to P&L, similarly to U.S. GAAP, carried interest accrual simply represents reallocation of these unrealized gains from the LPs to the CIP. Whether that will be done at the total LP level or at the individual investor level is a matter of preference. There is no guidance on that.

Keep in mind that this is a tax-sensitive issue, and most GPs prefer not to present it in the accounts.

Second Presentation

Another group of GPs who want to save themselves the hassle of posting the carried interest accrual through the account—whether at the total LP level or at the individual investor level—prefer to simply add a Contingency note (but not a Contingent Liability note—remember, at this point after trigger point A and before trigger point B mentioned earlier, this cannot be a liability) in the notes to the accounts.

Whichever accounting method or presentation you choose, in any case it would be fair to tell the LPs (whether on the face of the accounts or in a tiny note hidden at the back in the notes to the accounts) that if the fund is liquidated (hypothetically) on the reporting date, a certain proportion (20 percent for a 80:20 carry) would be reallocated from the LPs to the CIP.

Accounting for Carry Pass Hurdle

After we start repaying to LPs and reach hurdle, 20 percent of the cash (the carry) and the corresponding gains are allocated to the CIP. At that point, cash most likely starts changing hands; or if it doesn't, a liability arises. Therefore, at that point, we do not usually have much choice but to account for/recognize the carry. That effectively means to reallocate net assets by flipping cash and corresponding gains from the LPs to the CIP.

Notes on Carry to the Limited Partners

LPs need to keep in mind that they will be receiving capital statements in all forms and shapes and financial statements under various accounting frameworks. In some of them, typically for U.S. funds, carried interest is recognized (prehurdle) on the face of the financial statements/capital account. In others, typically non-U.S. funds/non-U.S. GAAP, recognition and presentation of carry (prehurdle) varies, with some being silent on carry and others perhaps having a tiny disclosure hidden in the notes to the financial statements.

When carry is recognized/accrued on the face of the financial statements and/or presented in the LP's capital account (even for the ones that have a tiny note stating the amount of the accrued/hypothetical carry as of the date of the financial statements—do look for that tiny note), the LPs will be able to strip out the carried interest from their NAV in trying to determine the fair value of their interest in these partnerships.

However, for the ones that have no quantification of carry as of the reporting date (typically under IFRS, UK GAAP, flexible LPA GAAP, and other local GAAPs), it would be hard for the LPs to come up with a reliable fair value of their interest in these partnerships. This is because, by not stating the hypothetical carry as of the reporting date, the LP's NAV in these partnerships would be overstated by the amount of the hypothetical carry.

What should LPs do in this case?

First, they should establish which of their investee funds are not reporting hypothetical carry. As mentioned, as a rule of thumb, that is likely to be European, UK, and other non-U.S./non-U.S. GAAP funds.

LPs then need to do their best to strip out the carried interest from these funds' NAVs. Apparently, it is not realistic to expect the LPs to be able to accurately calculate the carried interest for each investee fund (imagine an LP with 200 investments and 200 different carry arrangements), but they need to find a methodology to model a typical carried interest arrangement to come up with some estimate. It is an estimate, after all, and having one that is less than 100 percent accurate is better than having nothing at all.

Summary

Carried interest models are the most complex process in PE accounting, usually made such by the convoluted legal language employed in the LPA. The broad mechanics are not very different from fund to fund (although they can be made so, and there is always a "wrinkle" or two in each LPA), but the wording can greatly vary with some LPAs clearly laying out the mechanics and others disguising it in complex legal language. The challenge for the accounting/financial staff is to translate this convoluted legal language into clear calculational terms. But as long as you are clear on the broad mechanics that were explained in this chapter, you should be able to see through the legal wording. In any case, you most definitely need to get the calculation right—whether on your own, or with help from someone who understands the mechanics because mistakes may not always stay unnoticed buried in the complexities of the model, although that may have been the case previously. The LPs have already started looking in the GPs' backyard (I know that because I have been employed by LPs to help them spot the weaknesses in GPs' processes), and carried interest is first on the agenda to look into. They will not allow much longer for GPs to "flip" 20 percent (typically) from the profits without scrutinizing the calculation, so GPs should start looking to prepare clearer and more concise and easy-to-follow models that reviewers can clearly link to the exact clauses of the LPA—because at the end of the day, one of the two most important rules of financial modelling is not just to calculate the outcomes accurately, but also to communicate them to other interested parties.

9. Consolidated Financial Statements

Roland Mills, PwC

In this chapter, we discuss:

- The basis for consolidation
- Whether a fund needs to consolidate portfolio investments that it controls
- The “investment entity” exemption
- Whether any changes impact the issue of fund consolidation
- Control
- Purpose and design
- Relevant activities
- Power
- Protective and veto rights
- Variable returns
- Principal versus agent—a link between power and variable returns
- De facto agents
- Putting the consolidation issue all together
- Other frequently asked questions

Background

The principles of consolidation embedded in most national and global accounting frameworks had remained relatively stagnant for a long period of time. Except for the well-known investment company-specific guidance issued by the American Institute of Certified Public Accountants incorporated into U.S. GAAP, these principles have been an area of discontent expressed by private equity fund managers and investors. More important, although some national GAAPs have provided a degree of judgment or interpretation, the major global standards issuers have adopted a more rules-based approach to increase consistency and prevent abuse. This set the trend for many national GAAP changes.

Dictionaries around the world define *consolidation* as the combination of a number of things into a single more effective or more coherent whole. This sentiment holds true when the market is considering the consolidation of a global multinational operating group that provides a set of distinct products and services. The combined effect determines the performance on a per-share basis of the group as a whole and forms the basis for its investors to track performance and enjoy rewards. However, it does not necessarily provide the most effective or most coherent picture or result of a private equity investment vehicle. The sole purpose of a private equity investment vehicle is to raise money from investors who have bought into the objective of the private equity fund manager

responsible for buying and selling investments to maximize realized capital and income gains from these investments and the related distributions of capital and profits.

The accounting standards that make up the various national and global accounting frameworks have, for the most part, been designed for widespread application to all conceivable industries and businesses within these industries.

However, over the last few years, change has been afoot. The International Accounting Standards Board (IASB) has issued (and amended already, with good cause) IFRS 10, "Consolidated Financial Statements," which has been effective since 2013 (2014 in the E.U.), and on June 7, 2013, the Financial Accounting Standards Board (FASB) issued its new standard (Update No. 2013-08, "Financial Services—Investment Companies [Topic 946]: Amendments to the Scope, Measurement, and Disclosure Requirements"). Both of these address consolidation with respect to entities involved in investing activities.

IFRS 10 now provides a single consolidation model that prescribes control via the exertion of power for all types of entities, thereby stripping out of IFRS the inconsistencies across industries (particularly the investment management industry) brought about via IAS 27, "Consolidated and Separate Financial Statements," and SIC12, "Consolidation—Special Purpose Entities."

This chapter explores the changes brought about to IFRS (which are subsequently rippling through national GAAPs), particularly the impact on:

- Whether the private equity fund needs to consolidate its portfolio investments if it controls them (there can be control with less than 50 percent voting rights)
- Whether the general partner/private equity fund manager needs to consolidate the private equity funds it manages

Introduction: Basis for Consolidation

IFRS 10, applicable for all reporting periods beginning on or after January 1, 2013 (in the E.U., 2014), denotes control as the primary factor when assessing the requirement for consolidation. It designates the same criteria for determining control for all entities and industries.

This definition of control is supported in IFRS 10 through extensive application guidance that explains the different ways in which a reporting entity (investor) might control another entity (investee). *All entities* are required to apply the new guidance.

Previously, control through voting rights was addressed by IAS 27, "Consolidated and Separate Financial Statements," whereas SIC12, "Consolidation—Special Purpose Entities" placed greater emphasis on considerations when the investor had exposure to economic benefits. However, the relationship between these two approaches to control was not always clear. IFRS 10 now links power and returns by introducing an additional requirement that the investor should be capable of wielding that power to influence its own variable returns from the investee.

The key principle in the new standard is that control exists and consolidation is required only if the investor possesses *power* over the investee, has *exposure to variable returns* from its involvement with the investee, and has *the ability to use its power over the*

investee to affect its returns. In the context of a private equity fund, the investor would be the fund/entity that is *not* an investment entity (see later in this chapter); the general partner of the fund; or the investment manager of the fund.

The core principle that a consolidated entity presents a parent and its subsidiaries as if they are a single economic entity remains unchanged from the previous guidance in IAS 27, as do the mechanics of consolidation.

The basis of determining control has changed with the issue of IFRS 10. It now considers both power (exercised through voting rights or other) and ability to influence the exposure to variable returns.

Does a Fund Need to Consolidate Portfolio Investments That It Controls?

A private equity fund is a vehicle that enables investors to pool resources that can be applied by a specialist private equity investment manager to maximize returns through investment in private market companies. Under IAS 27 and other existing national GAAP (except U.S. GAAP), where the fund acquired a controlling stake (typically more than 50 percent) of a portfolio investment company, this investment would have had to be consolidated by the fund. This reduced the usefulness and understandability of the fund's financial statements to the investors (and other users), as it did not present the financial position and performance of the fund in a manner that reflected its investment objective or against the criteria which the users would assess the success of the private equity fund.

As result, many private equity funds that have also not had to file financial statements under the previous legal interpretations in the UK have typically presented a "properly prepared" set of financial statements rather than a fully GAAP-compliant set. In most cases, these have been presented on a GAAP basis with a consolidation and specific disclosure carved out, or on a limited partnership agreement (LPA) defined accounting policy basis.

The IASB made an amendment to IFRS 10 that is effective for all reporting periods beginning on or after January 1, 2014. This amendment introduces a mandatory exemption from the need to prepare consolidated accounts for entities that meet the definition of an "investment entity" as defined in IFRS 10 and that have controlled subsidiaries in their portfolio of investments.

This is a step forward in terms of IFRS regarding its applicability to private equity funds in producing financial statements that reflect the operating activities and objectives of the funds themselves. Previously, these funds might have found themselves having to consolidate underlying investment portfolio companies that the funds were deemed to control or that they actually did control.

IFRS 10 includes an amendment effective January 1, 2014 (that can be early adopted and is E.U. endorsed), that allows private equity funds to present IFRS-compliant unconsolidated financial statements even where the fund controls certain investment portfolio companies.

The Investment Entity Exemption

So what does this exemption mean in practice? Previously, under IAS 27, when a private equity fund had investments in portfolio companies that it controlled or was deemed to control, for the fund to be able to issue an IFRS-compliant set of financial statements it had to prepare consolidated financial statements and consolidate the performance and financial position of the controlled portfolio investments into its own results. The fund therefore presented a set of financial statements that contained all the line items of the underlying operating-controlled portfolio investment companies alongside the fair value information for the remainder of the portfolio. This was arguably of little use to the fund's investors or any other users.

IFRS 10 introduces a mandatory exemption from consolidation if the private equity fund meets the definition of an investment entity. The standard defines an investment entity as follows:

- Obtains funds from one or more investors, with the purpose of providing those investors investment management services
- Commits to its investors that its sole business purpose is to invest the funds raised from the investors solely for capital and/or income appreciation
- Manages and measures the performance of the investments on a fair value basis (in accordance with IFRS 13, "Fair Value")

Under this definition, if the private equity fund meets the criteria set out in IFRS 10, it should now prepare a separate (unconsolidated) set of financial statements, presenting all its portfolio investments (controlled and uncontrolled) on a fair value basis. If all other aspects of IFRS are met, this would provide a set of accounts on a fully IFRS-compliant basis.

Where local regulations require a fund to prepare consolidated financial statements and the fund is an investment entity as defined, the fund cannot present these financial statements as IFRS consolidated financial statements; instead, it must prepare these statements as "special purpose" financial statements.

This is particularly useful for UK–registered limited partnerships that find themselves on the wrong side of the recent regulatory changes. This could well bring more of these UK–registered funds into the fully compliant regime of UK GAAP or IFRS.

Increased disclosure requirements exist with regard to investment entities, specifically with respect to the significant judgments made in determining the fund's status as an investment entity. These disclosure requirements are set out in IFRS 12, "Disclosure of Interests in Other Entities." These include but are not necessarily limited to the following:

- The change of status in the financial statements presented and the impact on its results and financial statements
- The unconsolidated subsidiaries' details (name, place of business, country of incorporation, and proportion of ownership—and voting rights, if different)
- Any restrictions on the transfer of funds from the unconsolidated subsidiary or intention to provide financial guarantees or financial support to an unconsolidated

subsidiary (whether contractual or contractual)

- Details of the determination of fair value of all investments, including the unconsolidated subsidiaries

Keep in mind that this is a *mandatory* exemption. If the fund meets the definition of an investment entity, it cannot (except for subsidiary companies that provide investment-related services to the private equity fund itself) consolidate any of its portfolio investment subsidiaries; it *must report them at fair value*.

In all likelihood, many funds meet the definition of an investment entity where they fair-value investments. When the fund is an investment entity, it must fair-value its subsidiary investments and should not prepare consolidated financial statements.

Do Any of the Changes Impact the Issue of Consolidation of the Fund?

You might ask why, if private equity funds will likely be exempt from consolidating controlled portfolio companies, is consolidation still an issue for private equity fund managers, general partners, and the funds they manage or advise?

The answer to this question lies in the change of approach to *control* under IFRS 10, which focuses very much on the ability of a general partner or investment manager to exert its *power* over the *relevant activities* of a fund when these relevant activities significantly influence the *variable returns* the fund generates, and when the fund manager benefits from or is party to the receipt of an element of these variable returns the fund generates.

It is still conceivable under IFRS 10 that a private equity fund manager/general partner to a private equity fund might be required to consolidate the underlying fund.

Control

Control is not based solely on legal ownership. IFRS 10 explains that an entity (the investor) controls another entity (the investee) when it is exposed (or has rights) to variable returns from its involvement with the investee entity and also has the ability to affect those returns through its power over the investee entity. Note that the investor/investee relationship can exist via a contractual relationship without any "investment" by the investor into the investee. In other words, the contractual right of the general partner/private equity fund manager to manage a fund in return for fees creates this relationship and hence he becomes an investor as defined.

The concept of *control* encompasses three distinct principles (see Figure 9.1):

- *Power* over the investee entity
- Exposure or rights to *variable returns* from involvement with the investee entity
- The *ability* to *use* its power over the investee entity to *affect* the amount of variable return to which it is exposed

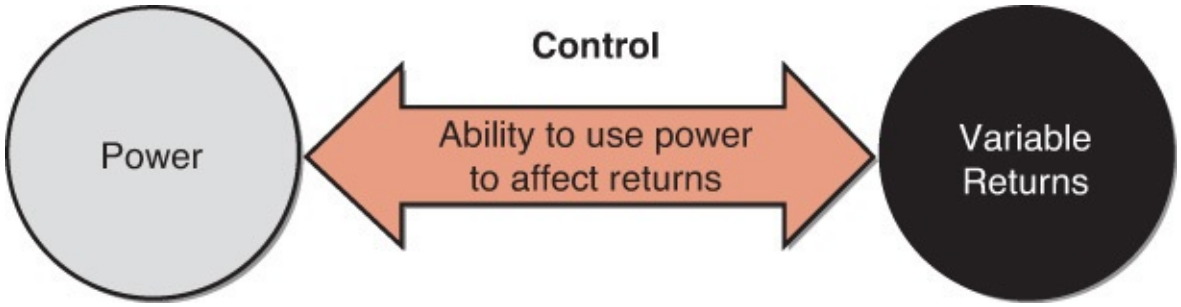


Figure 9.1 The three principles of control

All three of these principles need to exist for the conclusion to be reached that an investor controls an investee entity. They cannot be considered in isolation.

In addition to these three principles, an investor should consider other factors in assessing whether it has control over an investee entity:

- What is the investee's purpose and design (and who defined this)?
- What are the relevant activities in achieving the investee's objectives?
- How are decisions about the relevant activities made?
- Does the investor have substantive rights to direct those relevant activities?

A general partner or private equity fund manager could be deemed able to control a private equity fund if it has power over the investment activities of the fund and if it receives or is exposed to sufficient variable returns from the fund (such as management fees, priority profit share, performance fees, carried interest, or returns from an owned investment in the fund).

Purpose and Design

Sometimes it is clear that an investee is controlled by means of equity instruments that give the holder a proportionate voting right, such as ordinary shares. As long as this is the case and no other arrangements, contractual or otherwise, would alter the decision-making ability of the holders of these equity instruments, an investor with a proportionate majority of the votes (that is, the ability to direct the relevant activities) would control the investee; when that investor is not an investment entity itself (that is, a fund), it needs to consolidate the results and financial position of the investee.

However, in situations that are not as straightforward as this, the investor needs to consider the points discussed previously (relevant activities, who directs it, who earns variable returns from the direction of the relevant activities, and so on).

In some cases, even when voting rights exist, they might not significantly impact an investee's returns, such as when the investee is on autopilot and such relevant activities are predetermined or directed via contractual arrangements. In this situation, the investor should consider the following:

- The downside risks and upside potential that investee was designed to create
- The downside risks and upside potential that investee was designed to pass on to

other parties

- Whether the investor is exposed to those downside risks and upside potential
- Whether the investor has or had the power to affect these downside risks and the upside potential

It is quite likely that, through the fund's LPA and its contractual arrangements with its general partner (GP) and/or investment manager, the relationship might fit this contractual basis. In such a case, the GP or investment manager will likely be considered as directing the relevant activities of the fund (the selection, purchase, management, and disposal of portfolio investment companies) in return for management fees, priority profit share, performance fees, and/or carried interest. All of these fees would be deemed variable returns. Performance fees/carried interest are variable—the fees are based on funds' varying performance. Management fees/priority profit share—although fixed on commitment in the investment period—is normally subjected to a residual cost/value basis in due course, and hence is considered variable as well. Even if the fees remained fixed for the life of the fund, an associated credit risk likely is inherent in the fees to be paid; as a result, the fees could be considered variable.

Private equity fund managers and GPs are normally responsible for the structure, marketing activities, and principal documents of the private equity that will contribute to the assessment of whether the GP/private equity fund manager controls the fund.

Relevant Activities

IFRS 10 introduces the notion of relevant activities in considering whether an investor controls an investee. IAS 27 and SIC 12 did not include specific guidance on this area and instead focused, respectively, on control over the financial and operating policies or access to returns, respectively.

Identification

IFRS 10 defines relevant activities as "activities of the investee that significantly affect the investee's returns." Therefore, the investor must identify the relevant activities. Examples of relevant activities for funds might include the following:

- Marketing the fund and raising capital from investors
- Identifying and concluding on investment opportunities
- Identifying and concluding on investment exit opportunities
- Monitoring portfolio investments
- Determining and approving the fair value of investments
- Handling portfolio risk management activities

How Decisions Are Made

After identifying the relevant activities, consideration needs to be given to how decisions about the relevant activities are made.

The investor might have the ability to affect activities of the investee through equity-based voting rights. Alternatively, the relationship between the investor and the investee might be designed so that voting rights are not the dominant factor in deciding who directs the investee's relevant activities. For example, voting rights decisions might apply only to administrative tasks if those decisions directing the relevant activities are a result of a contractual arrangement. When more than one investor has power to direct the relevant activities, determining which investor (if any) has control can prove challenging and require significant judgment. Therefore, it is important to identify which activities most significantly affect the investee's returns. If this assessment changes over time—for example, if a change occurs in the activities that are most relevant to generating the variable returns—the assessment of control should be reperformed.

> *It is highly likely that the GP or private equity fund manager directs, through a contractual relationship, the relevant activities of the private equity funds managed because the relevant activities are those that drive the investment returns.*

Power

The investor needs to determine whether it has power over the investee when it is able to direct the significant relevant activities. In doing so, the *substantive rights* of the investor need to be considered.

Substantive Rights That Give an Investor the Right to Direct the Relevant Activities of the Investee

Substantive rights are rights that give the investor the current ability to direct the relevant activities of the investee or that prevent another party from directing the relevant activities. Judgment could be required in determining which rights give power over an investee when this is uncertain.

The following points provide evidence that the investor has power over the investee:

- Ability to appoint the investee's key management personnel who have the direct ability to direct the relevant activities that impact the investee's returns. *This can include selecting the service providers of the fund or directors of the general partner.*
- The ability to direct the investee to enter into significant transactions that affect an investee's returns or to veto such transactions. This can involve the general partner acting or not acting on advice from the fund manager or adviser.
- Management or the majority of the governing body of the investee are related parties of the investor—in that the fund and investee are subject to common control.
- Contractual arrangements between the investee and investor that give the holder the

right to direct the relevant activities. This could be the general partner as designated by the LPA or the fund manager.

- The lack of substantive or kick-out rights. In other words, the investors of the fund have limited ability to remove the GP or private equity fund manager from its position or are practically restricted from executing their rights.

A private equity investment manager or general partner will not likely hold a majority of the voting rights (and voting rights will not likely exist in the limited partnership structures generally used to structure private equity funds). Hence, the rights set out in the LPA will need to be assessed in the previous determination.

Practical Ability

An investor should also carefully consider whether it has the practical ability to exercise its rights over the investee. In doing so, the investor must identify potential barriers that would prevent it from exercising its rights.

If more than one party must agree for the investor to be able to exercise its ability to direct the relevant activities, a mechanism should be in place for this agreement to be reached—which may indicate the rights might not be substantive.

In addition, a right is likely to be substantive when the holder of the rights will benefit from its exercise.

IFRS 10 also introduces the notion that potential voting rights that are deeply out of the money could be deemed to be nonsubstantive rights.

Other Indicators

Other indicators can indicate the presence of a “special relationship,” and IFRS 10 requires that these be considered. The following are some examples that can indicate power:

- The investee’s activities are undertaken on the investor’s behalf.
- An investor has a disproportionate level of exposure to returns from the level of investment or involvement. Carried interest investment by the general partner of investment manager then must be considered.
- The investor provides key resources or services that are critical to the operations of the investee. Investment-related activities, portfolio management, and valuation services undertaken by the GP and investment manager should be considered.
- The investor provides specialized knowledge on which the investee is dependent, including investment-related knowledge.
- The investor provides key technology solutions related to the relevant activities of the investee.

All relevant factors need to be considered in assessing whether there is power. It is unlikely that any of these factors, when considered in isolation, will be sufficient to conclude that an investor has power. In addition, as noted shortly, the level of exposure to

the variability of variable returns should be considered.

Voting Rights

The existence of voting rights can indicate power. However, these voting rights must direct the relevant activities (through a majority vote), and the rights must be substantive.

An entity might own instruments that, if exercised, give the entity voting power over the relevant activities of another entity. These can take various forms, including share warrants, share call options, forward contracts, and convertible debt or equity instruments. The following points must be taken into account when considering potential voting rights:

- Whether the rights are substantive
- The purpose and design of the instrument, the potential voting rights, and the other involvement the entity has with the investee
- Whether the voting rights that would be obtained would enable the entity to direct the relevant activities of the investee

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For a GP or private equity fund manager to control a fund, it must have substantive power and the practical ability to direct the relevant activities of the fund.

Protective and Veto Rights

When an investor considers its rights, it must consider whether they are substantive or protective. In addition, it needs to assess whether other investors or parties have rights that are protective or substantive (rights that could prevent an investor from directing the relevant activities of the investee).

An investor has rights that are protective when those rights apply only in exceptional circumstances or relate to fundamental changes in the investee only. An investor that has only protective rights will unlikely control the investee; for example, the investor would not have the ability to replace the general partner or private equity manager with a simple majority that could be achieved at any time by agreement via formal correspondence (practically executable).

Substantive rights held by other investors or other parties can prevent an investor from controlling an investee. They enable the holders to approve, block, or restrict the investor’s ability to direct the relevant activities of the investee. If these rights are merely protective, they will not likely have any restrictive impact on the investor’s ability to direct the relevant activities of the investee on a day-to-day basis.

If a third party has substantive rights that give it the practical ability to prevent the GP or private equity fund manager from directing the relevant activities of the fund, the GP or private equity fund manager does not likely have control over the fund.

Variable Returns

The definition of *control* requires that an investor have exposure or rights to variable returns from its involvement with the investee. Variable returns are defined as returns that are not fixed and have the *potential* to vary as a result of the investee's performance.

IAS 27 focused on the concept of benefits, which often implied a financial return for the investor. IFRS 10 focuses on variable returns and the entity's exposure to such returns (which can be positive, negative, or both—and can be nonfinancial).

Variability can also arise from volatility as a result of foreign exchange rates, interest rates, equity prices, credit risk, or residual values. Variability arises from whether an investor is creating or absorbing variability. For an investor to have exposure to variable returns as defined earlier, the investor needs to *absorb* variability rather than contribute to it.

The following are the potential variable returns that the GP or investment manager will absorb:

- **Management fees and priority profit charge—**Although these can often appear fixed (as a percentage of capital commitments in the fund), this basis is usually amended in accordance with the LPA to a residual cost/value basis after the investing period of the fund ends, making the entire fee variable over the life of the contract. Note that even when fees are fixed for the life of the fund, the existence of credit risk would still likely cause these to be variable fees.
- **Carried interest and performance fees—**By nature, these are based on the realized value of the portfolio investments in the fund, which will be variable. If they are based on an interest paid into the fund, the returns on this interest will not likely be in proportion to the original commitment by all the partners in the fund and, hence, will be variable as well.
- **Co-investment commitment by the GP or investment manager in the fund —**Returns from this involvement with the investee will be variable. These are relevant because they are directly impacted by the ability of the GP or investment manager to direct the relevant activities of the fund.

Variable returns are generally the management fees, priority profit charges, performance fees, and carried interest received by the general partner/private equity fund manager. These fees are included in the assessment of control, where power over the relevant activities of the fund impacts the variable returns.

Principal versus Agent: A Link between Power and Variable Returns

Especially in the fund management industry, the assessment of the control and power that an investor has over the investee ultimately depends on whether the investor, as the decision maker (an entity with decision-making rights for other parties), is acting in its capacity as an agent or as a principal. These two terms are defined in IFRS 10, and explicit guidance exists for them.

Power, returns, and the ability to vary the returns need to be present to establish control. Most funds in the private equity industry give GPs and private equity fund managers wide-ranging powers. These powers commonly are set out in the LPA under which the fund is established, which is generally (certainly initially, anyway) created by the GP or private equity fund manager itself. Such investment mandates within the LPA detail the GP or private equity fund manager's powers and decision-making authority over investments.

Applying the control principles to GPs and private equity fund managers is complex because, in addition to having power, they are generally exposed to variable returns from the funds they manage or advise on via their asset management and advisory fees, even if they have no direct interest in these funds. The agency/principal guidance helps distinguish whether a party is acting primarily for the other investors or whether it is acting primarily for its own benefit. To the investor and to the private equity fund manager or GP, this might be obvious; however, guidance under IFRS 10 can lead to unexpected and unwanted results.

An *agent* is a party engaged to act on behalf of another party (the principal or principals). A *principal* operates primarily on its own behalf and can delegate to an agent to execute some of its decision-making authority.

A decision maker is not necessarily an agent because it has to act in the interests of other parties due to contractual or other legal reasons. In some circumstances, the decision maker might receive a large proportion of the investee's variable returns as a result of the decisions it has made. In such a case, this can result in the decision maker being assessed as a principal rather than an agent—that is, the private equity fund manager might be primarily acting for his or her own benefit.

You can see that four factors need to be considered when making the assessment of principal vs. agent. All four *must* be considered in accordance with IFRS 10:

Indicators relating to power:

- **The scope of the decision-making authority by the GP or private equity fund manager—**Consideration should be given to what the activities are, the level of discretion allowed, and whether the decision maker was involved in setting the purpose and design of the fund.
- **Rights held by other parties (the limited partners)—**Other parties, such as the LPs or investors in a fund, might have rights preventing the decision maker from exercising its power. These might prevent the general partner or private equity fund manager from directing the relevant activities of the fund. When considering rights, the following should be considered:
  - Are there barriers to exercising of rights that could deter the parties?
  - Do one or more parties need to convene and agree, and is there a reasonable mechanism in place for this to take place (such as an annual general meeting or other open forum)?
  - Would the parties holding the rights benefit from their exercise?

- Do substantive or protective kick-out rights exist that the holders of the rights can practically execute?

Indicators relating to the exposure of variable returns:

- **Remuneration of the GP or private equity fund manager—**The greater the magnitude and variability of the GP or private equity fund manager's remuneration compared to returns for the fund's activities, the more likely the general partner/private equity fund manager will be considered a principal. (Note that, even for low levels of remuneration, the remuneration of the decision maker must be commensurate with the services provided and at customary arm's-length rates for similar services requiring similar skills. If this is not met, the decision maker is considered a principal.)
- **The exposure of the GP or private equity fund manager to other variable returns it holds in the investee (such as the founder share of the limited partnership or the GP's share of the fund)—**The magnitude and variability of the returns to which the decision maker is exposed should be evaluated. If the exposure to variability is different than for other investors, this might have an influence.

The first two factors deal with the extent of an investor's power over an investee and whether any restrictions apply to those powers. For example, in the private equity industry, the LPA generally gives the GP or private equity fund manager power over the fund's relevant activities (day-to-day management, investment-related activities, and so on). However, investors might be able to remove the asset manager at any point in time without cause, by a majority vote, and only a few investors might be together in the fund. (For example, a fund might have five investors.) In that case, the manager's power over the fund can be limited through substantive removal rights held by other parties. If a single party had removal rights, IFRS 10 is specific in determining that the decision maker is acting in its capacity as an agent.

The third and fourth factors relate to the returns criterion; they require the investor to consider the magnitude and variability of the returns it gets (expected and maximum) from the investee, relative to the total returns expected from the investee's activities. For example, in the private equity industry, a GP or private equity fund manager's exposure to a fund's variable returns might be limited to the on-market management fees it receives. The GP or private equity fund manager might be exposed to variable returns through some or all of the management fees, performance fees, carried interest, and investments in the fund. Management should carefully analyze whether all sources of variable returns in aggregate, along with consideration of the GP or private equity fund manager's power over the fund, are sufficient to indicate that the GP or private equity fund manager is acting as principal rather than agent.

IFRS 10 does add that different weights should be given to each factor based on the fund's specific facts and circumstances. When a decision maker has power but receives returns that are insignificant in magnitude, or when the exposure to variability is insignificant, it indicates that the decision maker does not exercise power for its own benefit. In other words, it indicates that the decision maker is an agent.

Conversely, when a decision maker has power and has significant exposure to variability

and magnitude of returns, it can be argued that the decision maker exercises power for his or her own benefit and is therefore a principal. The *standard does not include bright lines* in terms of percentage of interests held or levels and types of fees to determine whether a decision maker's returns are sufficient to be acting as a principal. Instead, IFRS 10 requires all factors to be considered. However, the standard includes some examples that help to explain how to make the assessment.

When a GP or private equity fund manager has power and earns significant variable returns, an IFRS 10 control analysis might indicate that the GP or private equity fund manager is a principal in operation of the fund.

If the GP or private equity fund manager controls the fund, but the returns earned are insignificant in magnitude, the person is likely acting in the capacity of agent on behalf of the investors in the fund.

De Facto Agents

An investor should consider the nature of his or her relationship with other parties and evaluate whether those parties are acting on the investor's behalf (that is, they are de facto agents). It is necessary to consider the nature of relationships between the investor and various parties and how they interact with each other to see whether a de facto agent relationship exists.

The term *de facto agent* describes an agent who is acting on behalf of investors even when no contractual arrangement is in place. A party can be a de facto agent when the investor has (or when those who direct the relevant activities of the investor have) the ability to direct that party to act on the investor's behalf. The investor should consider its de facto agent's decision-making rights and its indirect exposure, or rights, to variable returns through the de facto agent, together with its own, when assessing control of an investee.

The standard identifies a number of possible de facto agent/principal relationships:

- Related parties of the agent or principal
- Parties that received interests in the investee as a contribution or loan from the agent or principal
- Parties that agreed not to sell, transfer, or encumber their interests in the investee without approval from the agent or principal
- Parties that have largely similar governing body members or key management personnel as the agent or principal
- Parties that have close business relationships with the principal
- Employees of the agent or principal who have roles related to the agent or principal's investees

Employees of a private equity fund manager who have roles of GP or other roles related to the business of the fund could be considered as de facto agents of the fund manager because they have power over the relevant activities of the fund.

Putting the Consolidation Issue All Together

Example A

Fund XYZ LP (the "fund") is a limited partnership set up as a private equity fund with a predefined life of 10 years. It was set up by PE Fund Manager ABC Ltd. (the "manager") as a product offering of the same brand. General Partner ABC was appointed as the GP to the fund. General partner ABC is governed by an independent board, but its ordinary shares are wholly owned by the manager.

The manager and GP raise £100m from nine globally diverse investors who all sign up alongside the GP and manager to the LPA devised by the GP's advisers. £1m of the capital commitment is committed by PE Investments Ltd., a wholly owned subsidiary of the manager.

The GP will receive a management fee of 1.75 percent based on the original capital commitment of the nine investors (£99m) during the first 5 years of the fund's life (the investment period); after that time, the management fee will be calculated as 1.75 percent of the aggregate residual unrealized cost of the investment portfolio. The GP is responsible for approving all new investments, managing and monitoring investments, exiting investments, and publishing the valuations. However, the GP outsources the responsibility for these day-to-day activities to its adviser, the manager, who reports to the GP on a monthly basis. The manager receives an advisory fee set at 1.5 percent of the 1.75 percent (the GP retains 0.25 percent) management fee the GP receives.

For the commitment and payment of £100k, Carried Interest LP ABC has received its rights as a special limited partner in the fund. As such, it is entitled to the carried interest of 20 percent of all realized gains, on a deal-by-deal basis.

The internal return hurdle for the fund must also be in excess of the preferred return hurdle of 8 percent, as set out in the LPA. The limited partners of Carried Interest LP ABC are the investment team employees of the manager and can be only limited partners, by virtue of their employment with the manager.

The GP calls only one AGM a year, and the investors are invited. The investors can remove the GP or fund manager on the basis of negligence only and can do so only with a 75 percent majority vote at an AGM. Investors must be present at the AGM for their vote to be exercised.

Question: *Does the GP or manager have to consolidate the fund?*

We must first determine whether the fund manager or general partner controls the fund:

Power	The GP has power over the fund. It directs and is responsible for the relevant activities of the fund.
Rights of others	The LPs in the fund have rights, but these are not considered substantive rights that would prevent the GP from directing its activities in full, nor does there appear to be a practical mechanism whereby the LPs can exercise these rights (because nine globally diverse investors must be present at an AGM to exercise rights). These are protective rights held by the LPs. The board can execute no apparent rights against the fund manager other than those in relation to the service level agreements set out in the LPA. It is unlikely that the manager would allow its subsidiary to remove the manager as adviser to the GP, which would thereby remove its delegated rights from the GP to the direction of the activities of the fund on behalf of the GP.
Relevant activities	The relevant activities are those that generate the variable returns of the fund. Because the fund will be investing in private equity opportunities, the successful purchase, monitoring, management, and exit of these investments will significantly impact the variable returns of the fund.
Variable returns	The variable returns that the GP and manager are exposed to are identified as follows: 1 The management fee. Although it is initially fixed, it becomes variable, so the contractual fee is variable. 2 The carried interest payment earned by the employees in the capacity as employees of the manager. The level of the carried interest depends on the success of the deal team in its role played in the investment activities that the GP delegated to the manager. 3 The co-investment made by the manager's subsidiary. The returns will vary with the performance of the fund and the success of the manager's deal team.

Control: *It appears that the GP has power over the fund. However, because the fund manager owns all the ordinary shares (and the voting rights attached) of the GP, the fund manager would likely also be considered to have power over the fund.*

Now we must determine whether the power over the fund held by the fund manager is held in its capacity as agent (on behalf of the investors) or principal (on behalf of itself):

Significance of variable returns	The fund manager assumes that the fund will generate a 15 percent return, 7 percent higher than the preferred return. The GP is exposed to a market-related rate as its only exposure to the variable returns, so it is unlikely to be acting in any other capacity apart from agent. Assuming that the portfolio acquired is exited on a straight-line basis over the final 5 years and performs as noted earlier, the GP is expected to receive 11 percent, based on a discounted cash flow return model, of the variable returns of the fund over the 10-year life. The fund manager group is exposed to the full 1.75 percent management fee (not just its 1.5 percent contractual portion because it owns the GP), the 20 percent carried interest on the aggregate expected 7 percent gain over the preferred return hurdle of 8 percent, and the returns on its 1 percent interest in the fund held via its subsidiary. The manager is expected to receive 16 percent, based on a discounted cash flow return model, of the variable returns of the fund over the 10-year life.

Control: *It appears that neither the GP nor the fund manager group earn significant returns from the fund. As a result, they are acting in their capacity as an agent and not as a principal and do not have control over the fund.*

Consolidation: *It appears that neither the GP nor the fund manager group must consolidate the fund.*

Example B

Assume the same facts as in Example A, but the fund manager has a 20 percent investment in the fund.

The initial assessments stay the same, and we are left assessing the significance of only the variable returns.

Significance of variable returns	The fund manager assumes that the fund will generate a 15 percent return, 7 percent higher than the preferred return. The GP is exposed to a market-related rate as its only exposure to the variable returns, so it is unlikely that it will be acting in any other capacity apart from agent. Assuming that the portfolio acquired is exited on a straight-line basis over the final 5 years and performs as noted earlier, the GP is expected to receive 11 percent, based on a discounted cash flow return model, of the variable returns of the fund over the 10-year life. The fund manager group is exposed to the full 1.75 percent management fee (not only its 1.5 percent contractual portion because it owns the GP), the 20 percent carried interest on the aggregate expected 7 percent gain over the preferred return hurdle of 8 percent, and the returns on its 20 percent interest in the fund held via its subsidiary. The manager is expected to receive 31 percent, based on a discounted cash flow return model, of the variable returns of the fund over the 10-year life.

Control: *It appears that the GP does not earn significant returns from its power over the fund and is acting in its capacity as agent.*

However, the fund manager group does have significant exposure to the variable returns of the fund (31 percent of the funds returns over its life). When considered with the rights of others, its involvement in the purpose and design, and so on, the manager could well be considered to be acting as principal and to have control over the fund.

Consolidation: *It appears that, in this scenario, the manager might have to consolidate the fund.*

Other Frequently Asked Questions

What about the Consolidation of Master-Feeder Fund Structures?

Master-feeder fund structures are commonly used by hedge funds to pool investment capital raised by groups of investors with different tax personalities into one central vehicle called the master fund. Separate investment vehicles, or feeder funds, are created for each identified investor group. The investors invest in the respective feeder fund, which then invests its assets into the master fund. The master fund makes all the portfolio investments and conducts the trading activity. The management fee and performance fees can be payable at either the master or feeder fund level.

Under IAS 27 and SIC 12, when a feeder fund owned a controlling stake (greater than 50

percent of the voting rights or economic benefit), the feeder fund generally consolidated the master fund. This was not always useful for investors in the feeder fund or cost effective to the feeder fund.

So what about under IFRS 10? Has this position changed?

In accordance with IFRS 10, it is highly likely that master funds and feeder funds will each meet the definition of an investment entity. This is because it is expected that the following conditions will exist:

- Both master funds and feeder funds will obtain funds for the purpose of providing investors (the feeder fund as the master fund's investor, and the actual investors as the feeder fund's investors) with investment-management services.
- A master-feeder fund structure's business purpose, which generally is communicated directly to investors of the feeder funds, will likely be investing solely for capital appreciation and investment income.
- Master funds will have identified and documented potential exit strategies for its equity and no-financial investments.
- Although feeder funds will not always have an exit strategy for their interests in the master funds (they are quite often set up only to invest in the master fund, with the only exit option being the redemption back to the open-ended master fund), feeder funds can nevertheless be considered to have an exit strategy for their investments. This is because the master funds that are formed in connection with the feeder funds and that hold investments on behalf of the feeder funds have their own exit strategies; they are measured and evaluated on a fair value basis, and information about the investments made by the master funds will be provided to investors on a fair value basis through the feeder funds.

As a result, it is expected that a feeder fund that owns a controlling stake, or a stake that entitles it to the majority of the economic benefit of the master fund, will, under IFRS 10, no longer have to be consolidated. The feeder fund will reflect an single investment line, as that of the investment in the master fund, at its fair value, as determined in accordance with IFRS 13. Also, the basis of conclusions drawn by the IASB makes it clear (BC273 of IFSR 10) that there is no requirement under IFRS for feeder fund financial statements to have the master fund financial statements attached. However, investors might expect this information to continue to be included.

Master funds and feeder funds that are typically formed in connection with one another—whether for tax, legal, regulatory, fund-raising, or similar requirements—and are considered together and individually will likely demonstrate the characteristics of an investment entity as defined in IFRS 10. As a result, controlling feeder funds will no longer have to consolidate the master funds into which they hold a controlling or majority stake.

What about the Consolidation of Funds of Funds?

The analogy to be applied when a fund holds multiple lines of investments in other funds that themselves hold a wide range of investments is similar to that of a master-feeder fund structure, discussed earlier.

In a way, meeting the IFRS 10 characteristics will be easier for the fund invested into by a fund-of-funds (FoFs) vehicle because it will generally have multiple investors and investments. A master fund, on the other hand, might have only one investor or a limited number of investors. Similarly, the FoFs vehicle will have multiple investments, not just an investment into a single fund such as a feeder fund.

Consideration must be given to the exit strategy of the FoFs vehicle. Generally, it involves investing in a mix of open- and closed-ended funds, which themselves generally are expected to have defined exit strategies for their financial and nonfinancial assets and liabilities. However, if the FoFs vehicle is not an active participant in trading its fund positions (as a secondary transaction market), it will likely have no exit strategy. Instead, it will use a similar rationale to that used by the feeder fund in that the master fund has exit strategies for its investments which the FoFs vehicle participates in through its investment in the fund making the investments.

As a result, both FoFs vehicles and the investment vehicles into which they invest will likely be investment entities, as defined by IFRS 10. Therefore, an FoFs vehicle that "controls" an investment fund into which it invests will not have to consolidate that fund vehicle; instead, it will include the fund vehicle as an investment at fair value in its financial statements. Careful consideration must be given to the fair value basis applied under IFRS 13 when an FoFs has exit strategies planned from its underlying fund investment positions that go beyond holding to receive the net asset value (that is, secondary sale strategies).

> *An FoFs applies a rationale similar to that of master funds in assessing the need to consolidate underlying controlled investment fund positions. An FoFs also is not expected to be consolidating any underlying investment fund positions.*

Are Tax Blockers Treated the Same?

Tax blocker companies (or blocker corporations) are types of companies that tax-exempt individuals or foreign investors use to protect their investments from taxation when they participate in certain fund structures.

These structures can exist between the fund and its investments, between the fund and its investors, or both.

However, unlike the master-feeder fund structures of FoFs structures, these do not likely demonstrate the typical characteristics of an investment entity as defined under IFRS 10. They also do not meet the three defining criteria of an investment entity as defined under IFRS 10. This is often a function of how the tax blocker company is created to achieve its objective.

Tax Blockers between a Fund and Its Investments

Where the fund invests into its investments through such a structure, the fund (which meets the definition of an investment entity) will not consolidate the tax blocker entity, despite the fact that it probably owns 100 percent of the equity share capital and has control. It shows its investment into this investment structure by reflecting the fair value as determined in accordance with IFRS 13 of its direct investment being the investment in the tax blocker entity that owns the ultimate investment. The IFRIC announced in February 2014 that it does not expect many entities to be consolidated under the provision of investment management services in IFRS 10. As a result, tax blockers will not likely be able to be consolidated by the fund, to avoid this issue.

If the tax blocker entity applies IFRS and is not considered to be an investment entity in accordance with IFRS 10, it might have to consolidate the ultimate investment, in which it owns a controlling stake (under IFRS 10). This could be a costly (and likely unnecessary) exercise.

Tax Blockers between a Fund and Its Investors

Assuming again that the tax blocker entity does not meet the criteria of an investment entity, the issue here is whether the tax blocker entity controls the fund. If so, it might have to potentially consolidate the fund (in accordance with IFRS 10) if the tax blocker entity prepares IFRS financial statements. In addition, if the fund itself were designated an investment entity and had not consolidated investments that it itself controlled, these investments would need to be consolidated by the tax blocker entity. The fair value exemption does not carry up to noninvestment entity parent companies under IFRS 10.

> *Careful consideration needs to be given to tax blocker entities within fund structures. Consolidation of the fund or investments held by the tax blocker entity or via a fund might be necessary if the tax blocker cannot demonstrate that it is an investment entity as defined.*

So Are There Any Other GAAP Options?

Before IFRS 10, U.S. GAAP stood out as the only major national GAAP that catered to the requirements of the investment management industry. U.S. GAAP offered the only GAAP-compliant exemption from funds consolidating investment portfolio companies that they controlled. However, this approach had its pitfalls: It required additional expertise in U.S. GAAP, some funds' home jurisdictions did not allow the use of U.S. GAAP for statutory filing purposes, and some investors did not want U.S. GAAP accounts (in these cases, either multiple GAAP versions of accounts were presented to differing investors or GAAP reconciliations had to be developed).

UK GAAP remained prescriptive in its approach to consolidation and offered no alternative to the investment management industry.

U.S. GAAP

On June 7, 2013, the FASB issued Accounting Standards Update No. 2013-08, "Financial Services—Investment Companies (Topic 946): Amendments to the Scope, Measurement and Disclosure Requirements." This standard modifies the criteria used in U.S. GAAP to define an investment company under U.S. GAAP. It also sets forth measurement guidance and disclosure requirements and is a result of a joint project with the IASB's issue of IFRS 10. Funds can continue to be exempt from having to consolidate their controlled investment portfolio company investments. The application date for this standard is for all years beginning on or after December 15, 2013. Unlike with IFRS, early application is prohibited.

The standard includes similar fundamental characteristics to that of IFRS 10 that must be present for an entity to qualify as an investment company. An investment company must obtain funds from investors and provide them with investment-management services. It also must commit to its investors that its business purpose and only substantive activities are investing the funds solely for returns from capital appreciation, investment income, or both.

This new standard also requires an investment company to measure noncontrolling ownership interests in other investment companies at fair value (as determined in accordance Topic 820, "Fair Value") instead of using the equity method of accounting, which was previously a widely used basis of accounting in these situations. Consolidation of another controlled investment company will be permitted but not required.

For entities that become investment entities because they meet the assessment of investment company status set out in the standard (Topic 946), the effect of applying the standard will be recorded as an adjustment to opening net assets. The adjustment to net assets will represent both the difference arising from fair valuing entities' investees when the investees were previously consolidated or equity accounted, and the difference arising from amounts previously recognized in other accumulated, comprehensive income.

For those entities that are no longer considered to be investment entities as a result of applying the guidance set out in Topic 946, the difference between the net assets required to be recognized and the amount previously recognized related to the investees will be recognized as a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption. In considering the consolidation or equity accounting of these investees, entities must determine the initial measurement amounts and be based on the carrying amounts of the net assets. Consideration needs to be given to whether the determination of the carrying amounts is practicable. If determining the carrying amounts is not practicable, the fair value of the investee must be considered in applying Topic 805 on business combinations or Topic 323 on equity method accounting.

Differences to IFRS

Although the FASB and IASB guidance is substantially converged in most areas, several key differences exist:

- The IASB's definition of an investment entity differs in some respects. The IASB's goal was to provide a narrow exception to consolidation and the equity method of

accounting for investments held by an investment company, on the basis that fair value reporting was viewed as the more appropriate method. Consequently, unlike the FASB's definition, the IASB's final guidance requires fair value measurement as a fundamental characteristic of an investment company. In addition, the IASB requires an explicit exit strategy for equity and other indefinite-lived investments, to demonstrate a business purpose of investing in order to obtain capital appreciation.

- In addition, the IASB's final standard does not allow a noninvestment company parent to retain the investment company scope exception from consolidating controlled investments. The FASB's standard continues to allow for existing practice and allows but does not require a fund to consolidate another fund. Under U.S. GAAP, a noninvestment company parent retains specialized investment company accounting on consolidation by a noninvestment company parent.
- The IASB's definition requires an entity to measure and evaluate the performance of substantially all of its investments on a fair value basis. The FASB includes this concept as a "typical characteristic."
- Unlike the FASB's final standard, which specifies that all entities subject to the Investment Company Act of 1940 are investment companies, the IASB's guidance does not allow funds subject to certain regulatory requirements to qualify for investment entity status without meeting all of the stated criteria.

From the perspective of the private equity fund manager, the potential for fund consolidation remains largely unchanged. Consolidation can sometimes be seen when the fund is a partnership and it ends up qualifying as a variable interest entity (under EITF 04-05, "Determining Whether a General Partner, or the General Partners as a Group, Controls a Limited Partnership or Similar Entity When the Limited Partners Have Certain Rights") when the LPs don't have kick-out rights or the GP doesn't have equity at risk. The FASB is looking to refine these situations through its own guidance on principal versus agent.

UK GAAP

UK GAAP in its current form will be replaced by a new set of standards for periods beginning on or after January 1, 2014. Entities currently using UK GAAP will have to choose full IFRS, an IFRS "light" set of rules (subject to it being part of a group into which it is consolidated, along with other requirements), and the new UK GAAP, referred to as FRS 102. FRS 102 is aimed at private companies and is broadly based on IFRS for Small and Medium Sized Entities. It has the objective of being a user-friendly and pragmatic standard set of rules.

FRS 102 offers a similar exemption or consolidation for entities that hold investments as part of an investment portfolio. Private equity funds would most likely qualify for this treatment.

In terms of the requirement for a fund manager to consolidate the fund, FRS 102 determines that entities should consolidate subsidiaries. Subsidiaries are considered to be entities in which the entity has control over the financial and operating policies, and therefore receive benefit from exercising this control. Voting power is the key characteristic assessed, but the ability to influence voting rights and to control the

financial and operating activities of the subsidiary also feature.

FRS 102 also has guidance with respect to the consolidation of special-purpose entities, being those with a narrowly defined objective, which certain private equity funds may be defined as. The need to consolidate a special-purpose entity depends on whether or not the activities are in the interest of the controlling entity and whether the entity has access to most of the benefits of the special-purpose entity.

Convergence between U.S. GAAP and IFRS, and with the new standards forthcoming in the UK, results in broadly similar consolidation rules that private equity funds must apply. The funds no longer need to consolidate their controlled subsidiary portfolio companies. Instead, they can fair-value these investments in a set of unconsolidated financial statements.

Under these standards, the risk still might exist that, because of the GP or private equity fund manager's control over the private equity fund, and as a result of the fees and other returns that could be earned from involvement with the fund, the GP or private equity fund manager might have to consolidate the fund into its financial statements.

The principles of determining when an entity should consolidate an investee have been changing in the various mainstream national GAAPs that impact the private equity industry. While these rules can be complex, useful exemptions from consolidation have found their way into these rules, which is a welcome relief for the private equity industry —although care should still be taken when considering these complex rules.

About the Author

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Roland is primarily involved in the assurance line of business and specializes in the asset management industry, with a focus on private equity and alternative fund sectors.

Roland sits on the PwC Channel Islands private equity industry focus group, demonstrating his significant experience with the private equity industry. His current clients include a wide range of alternative and private equity funds and fund of funds, varying from large buy-out fund groups to more boutique operations.

Roland also leads PwC's Global Private Equity IFRS Industry Accounting Group and sits on PwC's Global IFRS Asset Management Industry Accounting Group, whose objectives are to comment on, identify, and develop industry-specific views and interpretations of IFRS as they apply to the private equity industry and the asset management industry.

10. Technology in Private Equity

Mariya Stefanova, PEAI,
and Graeme Faulds, TopQ

In this chapter, we discuss:

- Technology options for general partners
- Technology options for limited partners
- What are the options?
- What are the pros and cons of having a specialist PE system?
- The pitfalls of implementation: what is the solution?
- Features of a good comprehensive specialist PE platform
- Benefits from having a specialist PE system for your back office, middle office, and front office

Introduction

No discussion of private equity (PE) accounting, investor reporting, and performance measurement would be complete unless it covered the latest developments in technology. This chapter explores how general partners (GPs), limited partners (LP), and fund administrators can take advantage of them to advance development in this area.

The heightened level of scrutiny by LPs and regulators makes the discussion even more relevant. Over the past few years, LPs, strongly supported by the Institutional Limited Partners Association (ILPA), have been complaining about the lack of transparency within the asset class. This is understandable: They invest across a number of other asset classes, and they have inevitably been comparing private equity to other asset classes—in terms of not only performance, but also reporting and practices. That inevitably brings up the issue of transparency. By being opaque, private equity, whose very name hinges on the concept of privacy, has challenged LPs, regulators, and even the general public, precipitated by the mass media that has always wanted to lift the veil of perceived secrecy over the whole industry.

This call for transparency, boosted by an expanded level of due diligence to cover more thorough investigation of the GPs' operations and controls and the need for more granular level of detail, brings the discussion on technology in PE to the table. One of the areas LPs and regulators are looking into is GP's systems. Having a report straight out of a system to minimize potential human error and manipulation of data is a valid demand.

In addition, to carry out active portfolio management, LPs are starting to use more technology and advanced software to meet their more selective criteria in picking their investments. (The majority of them still use spreadsheet-based methods for now, as explained later in this chapter.) And you can beat technology only with better technology and know-how, so GPs should better be prepared for that shift, to preempt potential questions by sophisticated LPs dissecting the GP's performance, including some

uncomfortable ones, that can be predicted by the GPs only if they look into their own "back yard."

But it's not only about counteracting—software systems can also facilitate easier GP–LP communication across GP and LP platforms to share fund information. Technology can help bridge the current information gap.

Technology for General Partners

Some GPs want an in-house system. Others want to buy one off the shelf. For a third group, neither of these might be justifiable, so those GPs might decide to simply run a spreadsheet-based system or a combination of these. None of these decisions should be taken lightly, and GPs should carefully consider the options in light of the financial and human resources available, the demand from LPs, and the complexities of the fund.

Ideally, the best system should be an integrated one that facilitates all the different operations of the GP: back office, middle office, and front office. However, both GPs and LPs often patch together a solution with bits and pieces from different systems, both in-house and off the shelf, coupled with spreadsheets allowing them more flexibility.

What Are the Options?

For a first-time GP, investing in an expensive specialist PE system might not make much sense. However, as GPs grow and get subsequent funds, they will eventually need a more efficient and more sophisticated system, particularly under the pressure of LP demand.

For some GPs, this might be a game changer. For others, it might not make a big difference. This is very much an individual decision, but in any case, all options should be considered. Some of these options are:

1. Buy an off-the-shelf PE specialist platform.
2. Buy an off-the-shelf PE specialist platform and tailor it to your specific needs.
3. Build an in-house/custom-built system or modify an existing one (that you use for other asset classes) to suit the needs of a PE fund/manager.
4. Run a spreadsheet-based system.
5. Outsource to a fund administrator.
6. Use a combination of the other five options.

What Are the Pros and Cons of Having a Specialist PE System?

Whichever path you decide to take, there would inevitably be pros and cons of having a specialist PE system over using spreadsheet-based processes.

These are the pros:

- Reliability of the information coming out of a system
- Consistency of the information and methodologies used—all the information is based on the same data source that is consistently maintained

- Accuracy
- Minimized human error, with no more mistakes or wrong formulas
- Controls in place (important for LPs and auditors)
- Ability to slice and dice information
- Flexibility and variety of reports

Now consider the cons:

- Costs
- Other resources (including human resources), particularly with regard to implementing a new system

Beware the Pitfalls of Implementation

If you decide to have your own specialist PE system, beware the pitfalls of its implementation. Sometimes even the best system can be undermined by its implementation. The tricky part is that you might not see the full picture until you are well into your, say, fifth or sixth year. By then, you might have made a number of wrong decisions, whether you were trying to save on costs instead of hiring expert consultants, or you didn't properly anticipate your future needs, or your accountants merely inconsistently posted journals (to different transaction types) into that system. In any case, an implementation gone wrong might render the whole idea of having a system useless, in the worst-case scenario.

Finally, keep in mind that implementation should be done by configuration, not by building. Configuring an off-the-shelf system should be done by changing certain parameters, not adapting the core of the system to individual needs with all nonstandard functionalities built into the code of the system. Also keep in mind that the configuration needs to be redone at each upgrade of the core of the system. However, an added complication is that data from one implementation might not be interchangeable with data from another implementation.

What Should a Good Comprehensive Specialist PE Platform Have?

Different systems are structured in different ways, but generally, a good comprehensive specialist PE system should cover the following areas:

- Back-office and middle-office module(s):
  - Accounting/transactions
  - Reporting
  - Portfolio management system
- Front-office module(s):
  - Deal management
  - Contact management/customer relationship management (CRM)

- Fundraising and investor relations (FR & IR)

- Add-in components:
  - Compliance
  - Waterfall calculation (might be part of the back-office/middle-office/reporting module)
  - Performance measurement (might also be part of the reporting module)
- Additional/optional products:
  - LP web portal

Benefits from Having a Specialist PE System for Your Back Office, Middle Office, and Front Office

Accounting Allocations and Allocation Rules

One of the main benefits of having a specialist PE system in terms of accounting and reporting is to be able to allocate all the transactions on an investor-by-investor basis to achieve accurate allocation of the fund net asset value (NAV) at the individual investor level (see Chapter 2, "The Importance of Allocations and Allocation Rules"). This would be pretty much impossible for a fund with more complex allocation rules.

Administration

Specialist systems can achieve great efficiencies in administering processes such as drawdowns and distributions. Most of these systems are designed to make these processes very easy, compared to a spreadsheet-run process. Sometimes the press of a button (or a sequence of buttons) can initiate a whole process, from the calculation and allocation on an investor-by-investor level, to the final email shot with the drawdown/distribution notices to investors—all perfectly streamlined.

Contact Management and Reporting

In terms of contact management and reporting, a benefit of having a system is that the information (both static and transactional information) comes from the same place. This minimizes reporting discrepancies, whether reports are generated by the accounting, investor relations, or the deal team.

However, you need strict controls and careful procedures around inputting information into the system (for instance, who can change investor information, to what transaction types certain transactions should be posted, and so on). You also need at least a two-level review process for inputting information into the system, particularly for certain types of information such as investor contact details.

Standardized Reporting

Over the past few years, ILPA has been advocating standardizations to increase efficiencies and reduce costs across the industry, with ILPA capital call and distribution notice templates that ILPA released in October 2011. Large institutional investors such as the California Public Employees' Retirement System (CalPERS) have demanded that all capital call and distribution notices from their investee funds be issued in the standardized ILPA-template format. If standardization is the way to go, technology can be helpful in achieving it, in addition to cost cuts from the improved LP data entry process.

Waterfall Calculation

A useful add-in feature to your system might be the waterfall calculation. Excel might prove to be a useful tool in modelling your waterfall, but having it done in a consistent manner by your system after you've managed to get this functionality to work and you've proven that it works properly could prove to be a good investment of your time and money.

However, beware of your accountants using inconsistent transaction types to post journals over the years: You might never be able to get this functionality to work, if that is the case.

Portfolio Tracking, Performance Calculation, and Analysis

By using modules for portfolio tracking and performance calculation, GPs, as well as LPs, can go to great lengths from tracking the performance at the portfolio level using consistent methodologies to modelling it. This topic is discussed in more detail later in this chapter in the "Technology for Limited Partners" section.

In addition, as discussed in Chapter 7, "Performance Measurement: IRRs, Multiples, and Beyond," the GP typically would only calculate traditional metrics such as IRRs and multiples (gross and net), but by using a specialist PE system, you can build in a number of other non-traditional performance metrics.

Investor Web Portals

Centralizing underlying portfolio company data into a web portal set up for the LPs to have direct access to fund information is one of the biggest trends over the past few years. In most cases, LPs do not really have a live data feed—they rather have selectively uploaded (by the GP) reports. Still, LPs like this functionality because the information is always available to them, it is accessible from everywhere, and they don't need to store the information on local drives or search thousands of email messages trying to find the PDF they received long ago. It's all in there, ready to be accessed at any time, from anywhere on any stationary or mobile device.

To meet LPs' information demands and transparency requirements, in some platforms, LPs are given access to all relevant data points in the fund they have invested in. LPs can slice and dice the numbers as they see fit, with filters for industry, geography, time, or fund. LPs might also be allowed to access detailed transaction information on an investment, such as the investment thesis, performance, valuations, leverage, covenants, and maturities.

Some platforms even allow the data to flow automatically from the software's cloud-based service into the GP's valuation process, allowing the GP to deliver fund reports within significantly shortened deadlines.

For GPs, the benefit of having these types of features is that the LPs can get the information they require themselves instead of bombarding GPs with investor queries. This results in fewer investor information requests for GPs to deal with.

Technology for Limited Partners

Currently, private equity performance is predominantly calculated (if at all) and analyzed by LPs manually using spreadsheet-based processes with no standardized or transparent methodology. This is inefficient and makes it difficult to compare performance on a like-for-like basis when evaluating private equity investments and making investment decisions. Some sophisticated investors no doubt are carrying out active portfolio management using sophisticated track record and portfolio analytics, but a $3 trillion industry surely deserves a better way of working. LPs with diverse investment portfolios —investing into funds, secondaries, and directly through co-investments—can certainly benefit from more sophisticated specialist private equity systems to help them improve the efficiency and effectiveness of their due diligence and to enhance their process of monitoring and evaluating the performance of their co-investment portfolio.

What are the main problems with using a spreadsheet-based approach?

The main problems with the current spreadsheet-based approach are that it is:

- Time consuming
- Prone to human error
- Resource intense

With the current method, investors rely on the GPs to present their track record to them in a spreadsheet, if not in PDF format. The data is often presented in a static format, making it hard for investors to carry out their own analysis. Investors can request more data from their GPs, but they are then subject to the resource-intensive process of manipulating the data into their own preferred format before they can perform an analysis. It's no surprise that ILPA is advocating standardization.

Another issue with the current spreadsheet-based approach to performance analysis is a consequence of the long-term nature of private equity. Past performance stretches back years—and even decades for certain fund managers. For spreadsheets to accommodate this depth of data, it is common practice for the cash flows to be consolidated into months or even quarters, as explained in Chapter 7. This dilutes the accuracy of the data and can affect the results of the performance calculations and investment decisions thereafter.

The inefficiencies of the process also impact GPs, and that creates more pain points for LPs. Because creating track records is currently so inefficient, GPs usually dedicate resources to this task only at the time of fundraising or intermittently throughout the year to provide fund performance data to current investors. Shouldn't investors be able to see the whole performance of the GP, not just the funds in which they have invested, and on a more regular basis?

Furthermore, for resource-constrained LPs, the amount of time spent preparing data for analysis reduces the amount of time they can spend carrying out quantitative and qualitative due diligence.

LPs are often provided with only high-level performance numbers, which gives them information at the fund level (remember the problem with aggregation that Chapter 7 discussed) rather than individual asset performance. Without being able to analyze a fund based on the underlying portfolio company data, LPs are limited to the amount of insight they can gain into how value was created, or how the previous funds' success factors align with future strategies.

The actual methodologies used to calculate performance also vary from GP to GP because each has its own preferred way that it believes is correct and/or the most efficient. The knock-on effect of this is that not all performance metrics are calculated in the same way, and which methodologies have been used is not always transparent. This can bring the accuracy of the track record into question, which doesn't give investors the confidence that they are making like-for-like comparisons across funds. This obviously has a significant impact on the resulting decisions made in either portfolio monitoring or due diligence.

If LPs are new to the asset class, they deserve to know that there are much more sophisticated tools. Why limit themselves by traditional IRRs and multiples if so much more is available?

In today's environment, LPs need more sophisticated, powerful tools to address main areas such as due diligence and track record to make decisions on which fund to commit to.

After they have committed to a fund, LPs need tools to address the following areas:

- Ongoing performance calculation and analysis (fund level and portfolio level)
- Portfolio tracking and monitoring
- Coinvestment monitoring
- Modelling

How can that be achieved with a sophisticated piece of software?

A sophisticated software should be able to allow LPs to request that GPs share their track record with them through that software. Doing so gives LPs instant access to a detailed and interactive track record; LPs will not have to waste time reconciling their numbers against the GP's numbers later. If the system you've chosen does not allow a direct feed from the GP, an alternative solution in some systems is to request that the GPs populate a spreadsheet template. This should rather be a simple process that involves inputting the cash flows and deal parameters of the portfolio companies into the required format. When the LP receives the populated template from the GP, it can import that template into the relevant system using some sort of an intelligent import wizard. Within seconds, the LP should have an accurate track record generated, ready for analysis, containing IRRs, money multiples, valuation bridges, and much more, depending on the system.

In any system, LPs should look for a track record using asset-level cash flow data supplied

by the GP, for a consistent level of accuracy and granularity in performance.

By using some sort of suite of performance analysis tools, users should be able to slice and dice data in real time to carry out detailed analysis of a portfolio coupled with dynamic filtering functionality. This would allow users to intelligently filter a track record using a host of qualitative and quantitative parameters.

Performance analysis tools should be quickly and easily configured and customized to allow users to carry out their analysis the way they want. Furthermore, users should have the freedom to create custom analysis dashboards for complete control.

By providing a suite of sophisticated data visualization and analysis tools, the software you choose should give users the ability to dig deeper into data, look past the headline performance numbers, and easily gain insight into the true drivers of performance.

Some software solutions even provide a web-based data analysis, meaning that it requires no installation, downloads, or plug-ins. That means no high-cost or resource-intensive implementation process.

Some Features LPs Should Expect from a Specialist System

LPs should expect certain features when investing in a specialist PE system. Some of these features are provided here:

- **Performance calculations—**Automatically and accurately calculated IRRs (gross and net), gross multiples, all standard net/fund-level multiples (such as PIC, DPI, RVPI, and TVPI), and other metrics to ensure a consistent level of accuracy.
- **Portfolio tracking and analysis—**Ability to track at the portfolio company level and uncover the value drivers.
- **Portfolio modeling—**Ability to adjust NAVs, TVPI, and/or exit date to model unrealized investments in your portfolio and project future performance.

On top of these features, LPs should also expect the following:

- **Customizable analysis—**Ability to configure and customize your analysis to allow you to slice and dice your data in real time and compare and analyze track records across the whole asset class by vintage year, by strategy, by size, and so on. This allows you to look past the headline numbers. Fast creation and export of standard and customized reports for inclusion into your own documents should also be a must.
- **Flexible reporting—**Ability to generate standard or custom reports, ready for inclusion into your own internal documents.
- **Quick track record creation—**Via an intelligent import functionality and instant access to track records GPs share with LPs.
- **Centralized underlying portfolio company data into web portals—**This offers more direct access to fund information.
- **Tools at your fingertips—**In line with modern technology, you should expect to be able to use the web portals anytime, anywhere, and on any device (accessible from

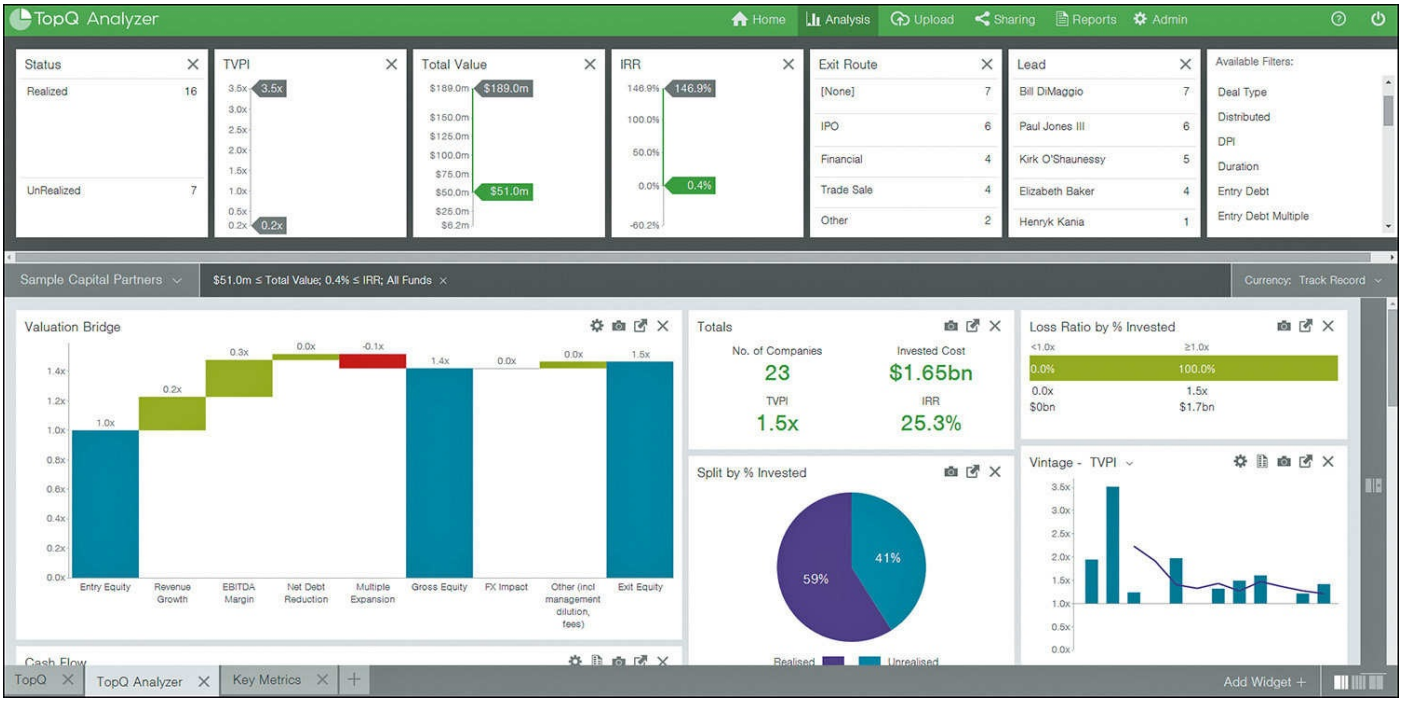
desktops, laptops, and mobile devices).

In addition to the recommendation to use more sophisticated tools than just spreadsheet-based analysis, following a few more tips can ensure greater accuracy and consistent comparison across the board:

- Use GP-certified, up-to-date information.
- Use daily instead of monthly cash flows to allow greater accuracy.
- Use standardized and transparent performance calculation methodologies to ensure consistent fund comparisons.

Following are some examples of analyzing a portfolio by a range of quantitative and qualitative variables using specialist private equity software.

Figure 10.1 shows how you can use a specialist system to filter a portfolio by a range of qualitative and quantitative variables. It represents the so-called valuation bridge, which helps investors identify how value has been generated within the portfolio. In this particular example, value generation is split among Revenue Growth, EBITDA Margin, Net Debt, and Multiple Expansion. In the screenshot, most of the uplift has come from improving EBITDA margins and revenue growth, with very little movement in debt and a small amount of multiple contraction. This can be interpreted as a good sign for an LP because it shows that the company has benefited from sales growth and operational improvements, probably due in some part to the efforts of the fund manager.



Source: TopQ

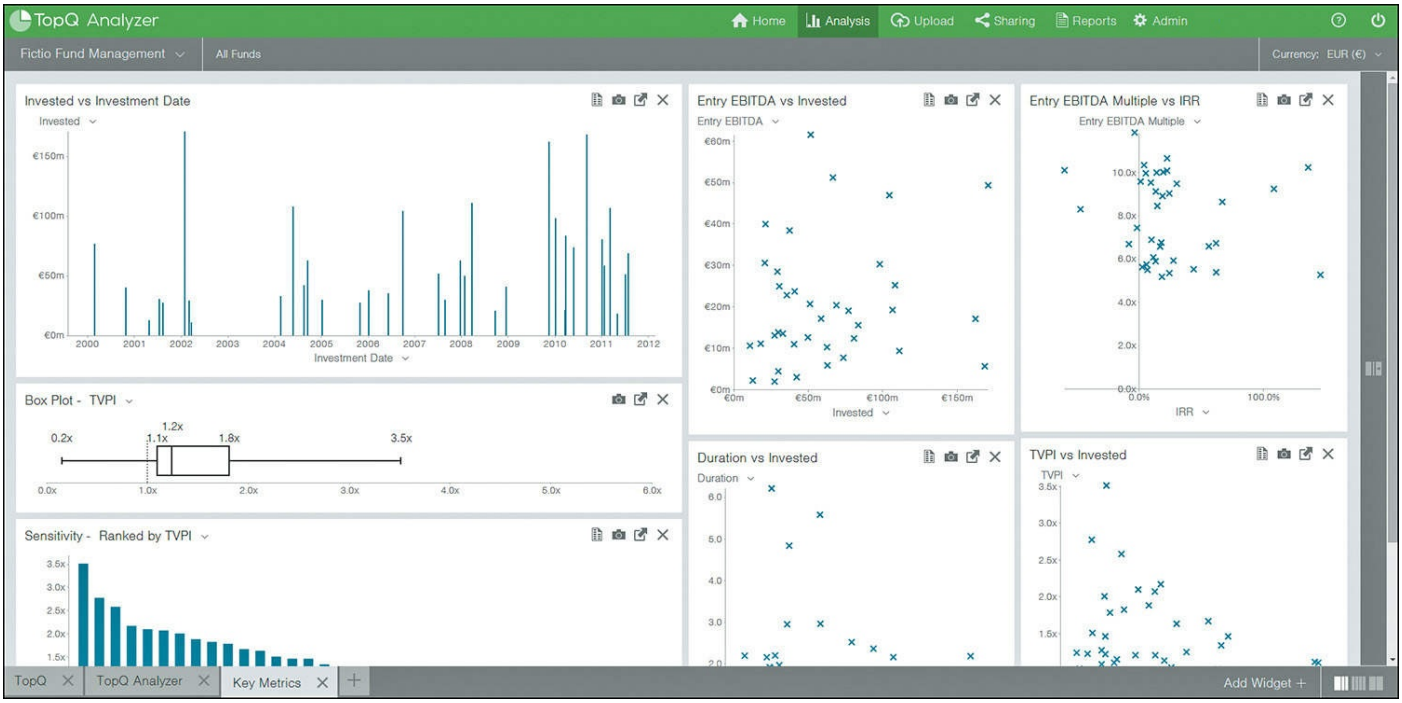
Figure 10.1 Example of filtering a portfolio by a range of quantitative and qualitative variables

In the example of high Net Debt reduction, the value could have been generated from debt paydown or other structural efforts, which might or might not have been in the control of the fund manager. Similarly, if Multiple Expansion was high, the value could have been driven by external factors out of the manager's control. There is no right or wrong

Valuation Bridge—instead, it helps identify the way in which value has been generated so that the investor can get a clearer idea of whether it is repeatable.

The boxes along the top highlight how the software allows the user to filter by key parameters to see the analysis for a particular subsection of the portfolio.

The key feature in Figure 10.2 is the Time Series chart in the top left. In this configuration, it shows the amount invested in each deal at the time the deal was done. It is useful for investors to identify any periods when no deals were completed and understand the reasons why. Was it due to fund raising, internal restructuring, or overinflated prices in the market? If the latter is the case, the question arises whether they were exiting deals. This is an example of how track record analysis is about not just finding answers, but identifying the questions to ask.

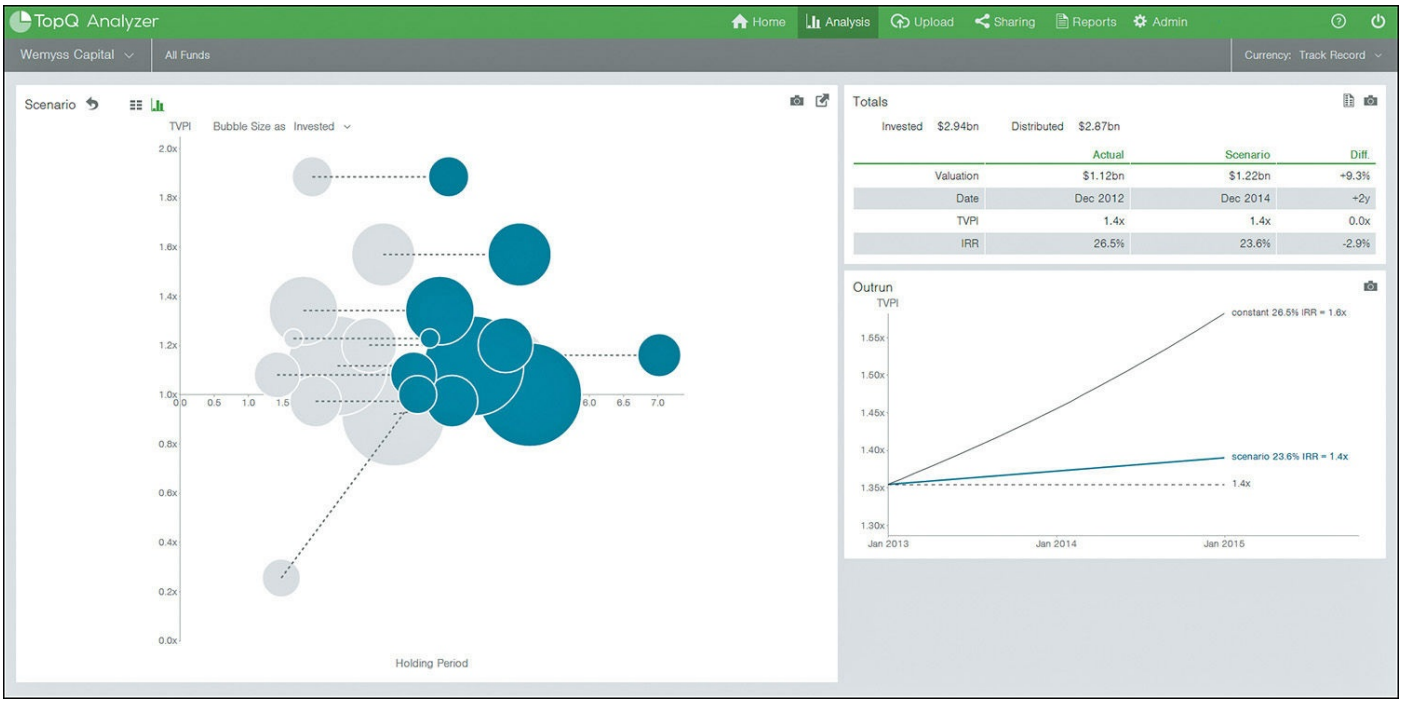


Source: TopQ

Figure 10.2 Performance data in a graphical format allowing users to customize their analysis screen by configuring the framework

The box plot in Figure 10.2 helps identify whether outliers are inflating or deflating the performance of the fund manager. Here you want to see a strong interquartile range of returns demonstrating that the performance is not dependent on one or two star performers. The collection of scatter charts to the right is configured to show different parameters and help identify any patterns of performance due to deal size, purchase multiples, or holding period, for example.

Figure 10.3 shows a what-if analysis. Unrealized investments have always been a feature of track record analysis, but with the financial crisis, the proportion of unrealized deals within a portfolio increased. As such, the need to understand the impact of unrealized deals on the eventual outcome of a fund can be critically important. Here the investor or fund manager can use the software to model the expected performance of each deal, to see the projected impact on overall performance.



Source: TopQ

Figure 10.3 Portfolio modelling featuring functionality such as the ability to restate the NAVs of unrealized deals to model a portfolio

Figure 10.4 shows how you can use a system to perform a public market equivalent (PME) analysis, which allows users to benchmark the performance of a private equity portfolio against listed indices using a variety of methodologies. Increasingly, LPs are looking to see if private equity investments outperform other asset classes, and this allows them to do it quickly easily and consistently. In the figure, you can see that the methodologies being applied are along the top, and the index being used is on the down left side.

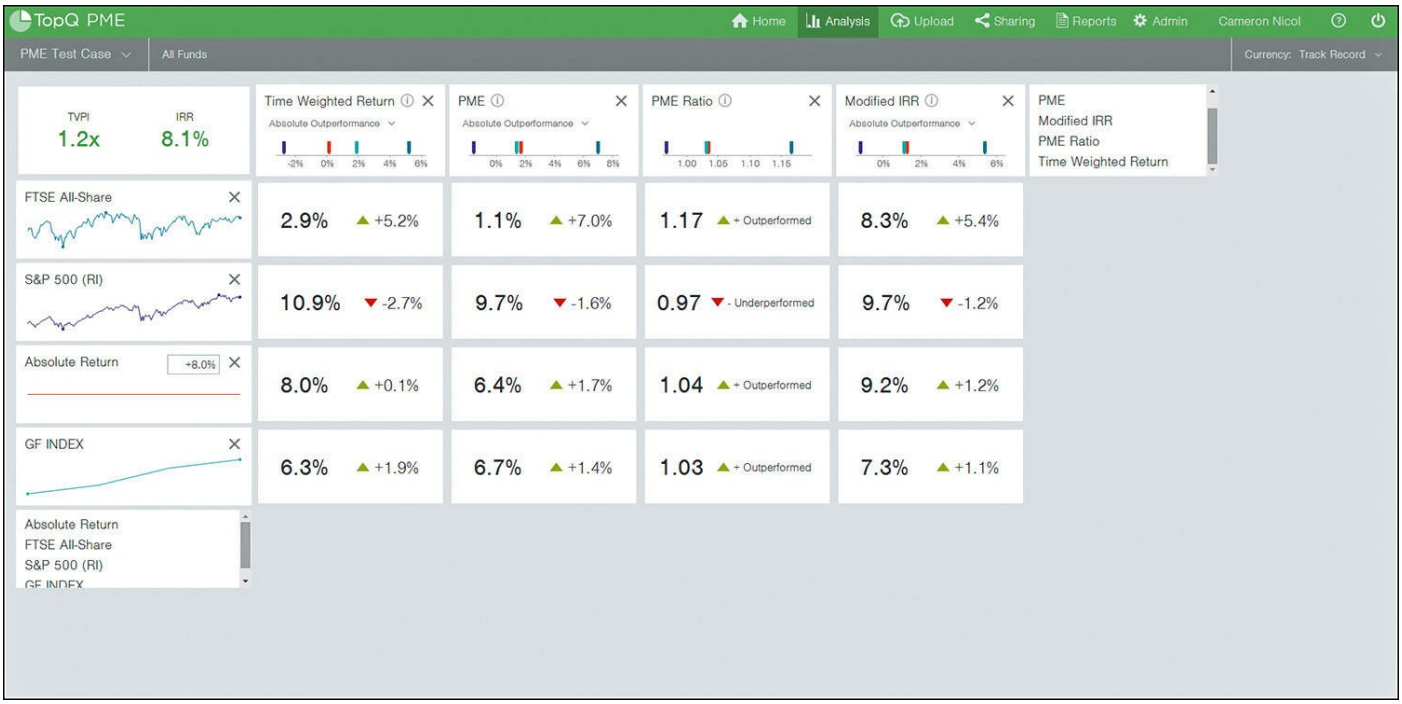


Figure 10.4 Public market equivalent (PME) analysis

By drilling down into the deal statistics, you can identify patterns, gaps, spikes, and

anomalies, which prompts a range of additional questions for due diligence. Why were no deals done between certain years? Why are so many deals co-lead? Why are the best performers outside your core strategy?

Often these types of questions can catch a fund manager off guard. Individual deal executives might know their deals inside out, but the track record is pulled together once every few years and is not always analyzed as a whole. Venturing beyond the surface of a track record can give you insight into the real value drivers. This is why GPs can also benefit from that type of specialist PE software as the LPs get more sophisticated.

How much debt do they use? How expensive are the deals, and where does the growth come from? Usually captured in the eponymous valuation bridge, the true picture only emerges by slicing and dicing this data into its component parts and constituent deals. One deal with significant margin improvement could drag up the entire fund and mask the reality.

Of course, mitigating factors will come into play, and we've lost count of the number of times we've heard a manager claim that his poor performance was a product of his old strategy and that the new fund won't do deals like that. Such responses could be true, but they deserve to be questioned. A track record might not contain all the answers, but good analysis of it can provide all the questions.

Summary

As the asset class matures with more and more LPs scrutinizing GPs' processes, looking into their performance and drilling down into their portfolios and the portfolio drivers, both LPs and GPs should start employing the latest methodologies and research if they want to stay ahead of the game. As these processes become more sophisticated, spreadsheet-based systems will not be enough to support this development. But before you start looking into fancy portfolio construction and performance measurement systems, you need to get in order your primary data, such as cash flow (between fund and LPs and between fund and portfolio companies) and other information, streamline it, and think about the granularity of the reporting you require. It's time for the industry to start moving from the intuitive investment process private equity has traditionally been applying to a much more quantitative and analytical model that should inevitably be powered by new technology so that we are not the "cottage industry" we used to be 20-30 years ago.

Part II: Accounting for Different Types of Funds: Beyond Traditional Private Equity Fund Accounting

11. The Limited Partner's and Fund-of-Fund's Perspective on Private Equity Accounting, Reporting, and Performance Measurement

Mariya Stefanova, PEAI

In this chapter, we discuss:

- Difference in the legal structure of FoFs compared to traditional PE funds
- Some reporting challenges with respect to more complex structures through which LPs invest
- Reporting for master-feeder structures
- Reporting for parallel structures
- Some accounting-, reporting-, and performance measurement–related issues for FoFs and other LPs
- Carried interest: what to do when investee funds do not report interim carry accruals
- Impact of bridged investments ("quick flip") on preferred return
- Impact of the priority profit share (PPS) on the LP's capital account
- Treatment of management fees and fund/partnership expenses paid to investee funds
- Management fees and fund/partnership expenses called before year-end but due in the next accounting period
- Treatment of deal expenses associated with acquiring a fund investment as of year-end
- Treatment of carried interest charged by carried interest partner of investee funds
- Administration, tracking, and treatment of drawdowns and distributions
- Recapitalizations
- Accounting treatment of recapitalizations
- Treatment of distributions from dividend recaps at the LP level
- Performance measurement
- Impact of recapitalizations on performance
- Impact of netting off drawdowns against distributions on performance
- Impact of temporary distributions on performance
- Stripping out carried interest for the purposes of IRR calculation
- Challenges associated with secondary investments

This chapter addresses issues and hopefully provides insights from the perspective of an investor/limited partner (LP) in a private equity (PE) fund, whether as a large institutional

investor, a fund-of-funds (FoF) or any other LP.

Most, if not all, of the issues relevant to LPs investing in PE are common to FoFs because FoFs act as both general partners (GPs) and LPs. As such, they understand and have to deal with both perspectives—the GP's perspective when they are acting as private equity fund managers and the LP's perspective when they act in their capacity as an investor in other underlying investee funds. This chapter ignores the GP's perspective and instead focuses on the LP perspective in order to help LPs new to the asset class get a clear idea of the challenges they'll be facing, and help experienced LPs decide on treatments and come up with solutions in areas they have been struggling with. These issues in private equity accounting seldom have easy black-and-white solutions; therefore, my aim is not to provide you with straightforward answers (usually there aren't such in private equity accounting—usually it is a judgment call), but to help you channel your thoughts in the right direction.

Difference in the Legal Structure of FoFs Compared to Traditional PE Funds

The legal structure of an FoF is not very different from the legal structure of a traditional PE fund. All the structuring considerations outlined in Chapter 1, "Private Equity Structures and Their Impact on Private Equity Accounting and Reporting," apply, along with one significant difference: the legal personality of the fund.

Legal Personality: Should an FoF Have One?

As briefly explained in Chapter 1, in some jurisdictions, such as Scotland, the limited partnership has a separate legal personality; in others, such as England and Wales, it doesn't. For instance, an English partnership does not have a separate (from its partners) legal personality.

What does that mean, and what are the legal implications?

According to *Debevoise & Plimpton European Private Equity Handbook*, if a partnership does *not* have a legal personality that is separate from its partners, that means:

1. It is not recognized by courts as:
    a. Having the standing to sue
    b. Being able to execute contracts
    c. Having the right to own property in its own name

    A partnership with legal personality is deemed (for certain purposes) to be a body corporate.
2. A partnership must look through any partner that also happens to be a partnership (without a separate legal personality).

This second distinction is important in an FoF situation: If one English partnership (or any other partnership in any other jurisdiction that does not have a separate legal personality), being the FoF, became a partner in a second English partnership (or any other partnership in any other jurisdiction that did not have a separate legal personality), that second

partnership (the investee fund) would have to include each of the partners in the first partnership (the FoFs) as a limited partner of the second partnership (the investee fund). This would potentially subject the partners in the first partnership (the FoF) to liabilities and obligations assumed by partners in the second partnership (the investee fund).

Without the blocker effect of a vehicle with a separate legal personality, FoF investors would, for legal and registration purposes, be treated as direct investors in the private equity funds in which the fund-of-funds invests (investee/portfolio funds). As such, any change in the identities or commitment amounts of the investors in the fund-of-funds would also constitute a change in the identities or commitment amounts of the investors in each of the portfolio funds. This would present a number of difficulties for the portfolio funds, for two reasons.

First, each time a new investor joins the FoF or an existing investor varies its commitment amount, each portfolio fund would be required to update its own register of investors accordingly and make any necessary regulatory filings.

Second, if the relevant event occurred after a portfolio fund's final closing date, a technical breach of the terms of the portfolio fund might result because a portfolio fund usually cannot admit new investors after its final closing date, except pursuant to a transfer from an existing investor. Scottish Limited Partnerships (SLPs) are popular vehicles for FoFs because their separate legal personality avoids these problems: The SLP itself, not its investors, is the registered investor in its portfolio funds. For the same reasons, SLPs are also popular vehicles for carried interest vehicles.

In some jurisdictions, such as Guernsey and Mauritius, the limited partnership can elect to have a separate legal personality upon initial registration.

Some Reporting Challenges for More Complex LP/FoF Structures

As discussed in Chapter 1, LPs (including FoFs in their capacity as LPs) sometimes invest through more complex structures, such as the master-feeder or parallel structure.

Reporting for Master-Feeder Structures

Sometimes LPs are investing through master-feeder structures. If that is the case with your structure, the question is how the GP should be presenting/reporting and how LPs should be interpreting the information in the context of the relevant structure. There are two ways to report for a master-feeder structure:

1. On a "see-through" basis, which basically works as if you are "consolidating" the master fund into the feeder fund
2. By providing a simple (but not very useful to the LP because it shows a single investment in the master fund) set of accounts for the feeder, along with a copy of the accounts for the master fund

Which option GPs choose depends to a great extent on the accounting framework and interpretation of the structure and how it fits within the relevant GAAP guidance, if any. The problem is that you need to look into each structure on a case-by-case basis, and the interpretation is not always straightforward: You need to apply a lot of judgment, with no

guarantees that the auditors will agree with your interpretation. In any case, the analysis should start from the "true and fair" presentation point of view from the perspective of the users of the accounts—that is, the LPs.

Reporting for Parallel Structures

Some LPs invest through parallel structures. If that is the case, you also need to bear in mind that it might be more prudent, for reporting purposes, to assume that, although you invest in one out of, say, five parallel vehicles, you might need to view all five vehicles as simply one fund. If it weren't for tax or regulatory reasons, you would have only one fund, not five; therefore, you should view it as only one fund and expect to receive a set of aggregated accounts (for all five funds) in addition to the accounts of your own vehicle.

To decide on the level and granularity of reporting, you need to look into the structure on a case-by-case basis. Interpreting a structure is rarely straightforward and requires careful consideration regarding the true-and-fair-presentation principle in the context of the relevant accounting framework.

Some Accounting-, Reporting- and Performance Measurement–Related Challenges for LPs and FoFs

Private equity investors face a number of challenges in terms of accounting, reporting and performance measurement. Some of them that I consider most common are discussed in this section.

Carried Interest: What Should LPs Do When Investee Funds Do Not Report Interim Carry Accruals

The variety of methods to account for and report on carried interest used by general partners (GPs) might represent a particular challenge for LPs by jeopardizing the comparability across investee funds. As a general rule of thumb, U.S. funds and/or funds reporting under U.S. GAAP, as discussed in Chapter 8, "Carried Interest and Carried Interest Modelling," typically accrue for carried interest. However, virtually any other GAAP would not have a specific treatment for carry. This leads to varying practices in terms of accounting, reporting, and disclosing carry. Some funds do a "full-fledged" accrual, allocating carry at the investor level; others simply disclose the total amount at the fund level somewhere in the notes. Still others are absolutely silent on carry until it actually kicks in and is paid out in cash to the carried interest partner (CIP).

This poses a problem because LPs need to make sure that carried interest is consistently stripped out of all the investee funds' valuations/NAV. Why?

1. First, because if carried interest has not been stripped out of the relevant investee fund's valuation, that valuation would be inflated by the amount of the carried interest, as if the fund is liquidated on that valuation/reporting date, the carried interest partner will receive a certain proportion of the cash received from the disposal of the investment left in the fund's portfolio that would be distributed to LPs (in simplistic terms, 20 percent for an 80:20 carry).
2. Second, with the lack of consistency in reporting, LPs will not be able to compare

"apples to apples." Some funds' valuations will include carry; others will exclude it.

3. Third, in a similar manner, if the relevant investee fund had failed to strip out the carry accrual of their cash flows used for calculating IRRs, those IRRs would be inflated.

How can LPs make sure that carry is stripped out of the NAV and the IRR calculation?

First, LPs need to look into the investee funds' financial statements and see how carry is accounted for/reported on. If it is not accounted for, they need to check the notes to the financial statements, as well as their capital account. Hopefully LPs can find at least a note that reads something like, "If the fund is to be liquidated on the reporting date, an amount of $X.XX would be paid to the carried interest partner." Unfortunately, many non-U.S. funds wouldn't have even that note, which would generally lead to an overstatement of the valuation of the LP's fund interest. One last thing that the LP can do is either ask the GP for a carry estimate or try to calculate it (which might not be an easy task, particularly if the GP invests in numerous PE funds with varied waterfall terms reporting under a myriad of accounting and reporting frameworks).

Because of the extreme importance of the issue, Private Equity Accounting Insights is working on a web-based tool to allow LPs to calculate a rough estimate for each investee fund only with the cash flows, net asset value (NAV) of the fund as of the calculation/reporting date, total commitment, and drawn commitment. LPs would also need to indicate some details on the relevant waterfall clauses used by investee funds, such as the type of carry (whole-of-fund/European style, deal-by-deal/hybrid, and so on), hurdle rate, some details on the preferred return (whether it is a daily calculation, frequency of compounding, date of compounding), catch-up (whether it is 100 percent catch-up or otherwise), and carry split (such as 80:20).

Impact of Bridged Investments ("Quick Flip") on Preferred Return

Bear in mind that the bridge investments (also called "quick flip" in PE jargon, these are investments of a temporary nature, usually up to 12 months) are typically excluded from the preferred return calculation, per the fund LPA provisions. The quick flip is not a typical PE investment and is redrawable/recallable so that the GP can have the chance to invest the funds in a proper private equity way in order to generate the promised high returns. There are a few reasons for the bridge investments. Sometimes the GP may draw the funds from the LPs with the expectation that the deal will go through shortly, and it doesn't for some reason—or it's delayed, but they expect another deal shortly, and the GP gets to keep the funds for a while and invest them in, say, money-market instruments in the meantime. Sometimes they are held for a short period prior to syndication to other parties. Since such investments are syndicated at cost, and so paying a preferred return on them would adversely impact the fund's IRR, that is often the main reason (and argument) why GPs exclude it from the preferred return calculation. The LPs usually do not even realize this, although it is in the LPA. However, the LPs have still provided the cash to the GP; therefore, there is still an opportunity cost for them involved. Then why not charge Preferred Return on these cash flows? It is not for me to provide you with an answer to that question—this is something for the LPs to think about when they engage in negotiations for investing in their next PE fund.

Impact of the Priority Profit Share (PPS) on the LP's Capital Account

Priority profit share (PPS), also often referred to as the general partner's share (GPS), the general partner's priority share (GPPS), or management priority share (MPS), is characteristic of only UK or Channel Islands (Jersey, Guernsey) partnerships. Therefore, if LPs invest in a UK, Jersey, or Guernsey fund, they would most likely have to deal with PPS instead of management fee. However, if correctly accounted for, the presentation in financial statements (FS) and capital accounts for PPS can be quite confusing to LPs.

So first, what is a PPS/GPS/GPPS?

PPS/GPS/GPPS is a management fee that is structured differently in the UK/Jersey/Guernsey funds, for tax efficiency. In a nutshell, instead of being structured as a fee, with VAT due on that fee, the management fee is structured as a priority share of the profits that is allocated to the GP. It is offset against drawings previously paid to the GP. In the case of insufficient profits, a typical LPA stipulates that the PPS is paid out to the GP as an interest-free loan. However, this "loan" does not have all the characteristics of a loan and is not repayable by the GP other than by offset against allocations of net income and capital gains. Therefore, the correct treatment is that the PPS is presented as GP drawings—or, in other words, as negative capital to the GP's capital account, when drawn by the GP and allocated to the GP's capital account only. This differs from the management fee that is accounted for as an expense allocated across all the investors, depending on the allocation rule prescribed by the LPA, which typically is by commitment (usually excluding the GP). Later, when the fund starts generating profits/gains, the first portion that comes into the fund gets offset against these GP drawings and is allocated only to the GP; whatever is left is allocated across the LPs using the allocation rule prescribed by the LPs (for example, by sharing percentages).

As shown in the example in Figure 11.1, say that the fund draws £110, with a view to invest 100 of it in Investment A, and 10 to pay PPS to the GP. Later, the fund disposes of Investment A and receives proceeds of £150, constituting £100 cost/return on the LP's original investment and £50 capital gains. If we had a simple management fee, this £50 gains would have been allocated across the LPs, per their sharing percentages. However, because it is a PPS, the first £10 would be allocated in priority to the GP and offset against the previously drawn PPS; the remaining £40 now can be allocated to the LPs, say by sharing percentages. The cash of £150 gets distributed to all the LPs—£110 in the form of return of the original distribution and £40 in capital distribution. The GP does not receive any cash distribution to match its allocation of profit/gain because it has already been paid £10 in the form of GP drawings.

Priority Profit Share (PPS) Presentation

Statement of Changes in Partners' Accounts/Capital Account by Class of Partner

	Opening Balance	Contributions	GP Drawings	Net Income/ (Expenditure)	Realized Gains/(Losses)	Distributions	Closing Balance
Limited Partners (LPs)							
Capital and Loan Contribs	-	110	-	-	-	(110)	-
GP Drawings	-	-	-	-	-	-	-
Income A/c	-	-	-	-	-	-	-
Capital Gains A/c	-	-	-	-	40	(40)	-
Total	**-**	**110**	-	**-**	**40**	**(150)**	**-**
General Partners (GP)							
Capital and Loan Contribs	-	-	-	-	-	-	-
GP Drawings	-	-	(10)	-	-	10	-
Income A/c	-	-	-	-	-	-	-
Capital Gains A/c	-	-	-	-	10	(10)	-
Total	**-**	**-**	**(10)**	**-**	**10**	-	**-**
Total							
Capital and Loan Contribs	-	110	-	-	-	(110)	-
GP Drawings	-	-	(10)	-	-	10	-
Income A/c	-	-	-	-	-	-	-
Capital Gains A/c	-	-	-	-	50	(50)	-
Total	-	**110**	**(10)**	**-**	**50**	**(150)**	**-**

Figure 11.1 Impact of the PPS accounting on the Partners' Accounts

Unfortunately, accounting practices with regard to PPS vary widely. You can see these accounted for and presented in financial statements and Partners' Accounts in three different ways:

> **Method #1—**Simply as a management fee that hits P&L. This method is generally incorrect, but some GPs reflect it in this way. It is usually done either because of a lack of understanding or so as not to confuse LPs.
>
> **Method #2—**As an "interest-free loan," as stated in the LPA. This approach is also incorrect, but some GPs do it. The wording in a typical LPA is "PPS is paid out to the GP as an interest-free loan and offset against future profits." Therefore, despite the lack of all characteristics of a real loan, GPs sometimes present it as a liability/loan.
>
> **Method #3—**As "GP drawings," presented as a negative amount on the GP's Capital Account that is offset later against net income and gains. This is the correct approach, per the legal form prescribed in the LPA.

In light of these varying accounting practices, the LPs need to understand how the GP reflects PPS and then must think about the impact of the relevant presentation on the valuation of its interest in the fund/NAV.

If the correct Method #3 is used, the NAV is overstated for LPs by the amount of the

PPS/GP drawings that would have otherwise been charged to P&L and allocated to LP instead of only to the GP. Should this be adjusted in LP capital accounts to ensure no overstatement when the GP is issuing quarterly capital accounts to LPs? Or should LPs adjust the overstated NAV themselves?

To avoid confusion of this sort, some GPs adopt Method #1, although that potentially erodes the legal form and undermines the tax treatment.

If accounted for and presented per Method #3, if the LP feels that it has to adjust its NAV downward with the GP drawings amounts (in our example, by £10) when they are drawn by the GP, then the question is, what are they going to do when the GP allocates net income or gains (£10 out of the total £50 capital gains) to the GP and offsets them against these GP drawings that would have otherwise been allocated to the LP? Will the GP increase the capital gains allocated to LPs by £10? If so, how would the GP know by how much it needed to adjust its own capital account, particularly if it was an excused investor? The GP wouldn't know exactly who the excused investors are? It seems right to adjust the NAV (once downward when GP drawings are drawn and then upward when less profit is allocated to LPs), but from a practical perspective, that might prove a bit challenging. The LPs must decide whether to go to that much trouble. In any case, they shouldn't forget to adjust their NAV upward when the net income/gains are offset against the GP drawings.

Treatment of Management Fees and Fund/Partnership Expenses Paid to Investee Funds

As a common practice in FoFs/LPs, management fees, partnership expenses, and deal fees are typically capitalized as part of the cost of acquiring the investment. This also includes related charges, such as equalization interest paid by an FoF/LP on its late arrival at the subsequent close of an investee fund. It is seen as part of the cost of investment rather than a separate P&L expense, even though it does not get credit on a capital statement or get you any extra "shares"/interest in the partnership.

Ordinarily, under IFRS, transaction costs directly attributable to the acquisition of a financial instrument/investment classified as "at fair value through profit or loss" are immediately expensed instead of being capitalized to the asset/investment. However, management fees and operational/fund expenses are not a transaction cost of the FoF/LP buying into the investment; these are ongoing operating costs of holding, monitoring, and exiting the investment. For that reason, some FoF/LPs think that it is more appropriate to expense them, except for the equalization interest on their "late arrival," which they view as a transaction cost directly attributable to the acquisition of that investment. However, that practice is less common.

A rather rare example of when LP contributions would be taken to P&L as a transaction cost is a situation in which the LPs have agreed to fund expenses of the investee fund on top of their subscribed commitments for investments, and the extra contributions are not applied to their capital accounts when paid in: They just go outside the fund/commitment. This is rather rare (although it would apply to equalization interest charged).

Effectively, when management fee and fund expenses are capitalized, we are tying all

these costs to the investment instead of expensing them as operational costs. That is the real reason for the LPs' preference to capitalizing these expenses, not so much GAAP rules (which are often flexible in PE accounting because of the lack of specific guidance).

The advantage of this is that we get more accurate performance reporting. You sell the investment for $2.0m, it cost you $1.1m ($1m being the investment cost and $0.1 management fee/fund expense)—that's about a 1.8x return. But if your cost base was just $1.0m, you would be claiming a 2.0x return, ignoring the management fees and fund expenses you paid. Another point is that, without expressing an expert tax opinion (I am not a tax expert), when you generally do your tax returns, they rather expect you to report $2m proceeds against a 1.1 cost basis instead of trying to claim a 0.1m operating expense.

The bottom line is, when you make a decision that is subject to the applicable GAAP, you also need to take into consideration all the previous points, including performance and tax reporting. Sometimes you even have to slightly bend the rules under the relevant GAAP if you think it is in the interest of the true and fair presentation (subject to the auditor's approval). Of course, as usually happens in private equity accounting, practice varies.

Management Fees and Fund/Partnership Expenses Called before Year-End but Due in the Next Accounting Period

On a related matter, I have often been asked about management fees and fund/partnership expenses called by an investee fund in, say, December 2014 (notices dated in December), but due in January 2015. Do the LPs need to accrue at year-end 2014?

As explained previously, the management fee and fund/partnership expenses are rather capitalized by most of the funds to the cost of the investment instead of being expensed. If that is your treatment of management fees and fund/partnership expenses, you should be consistent with that treatment. In trying to answer that question, you should be looking into the asset/investment recognition criteria under the relevant applicable accounting framework/GAAP instead of simply accruing for them and taking them to P&L as of the year-end. If the criteria for asset recognition are met, you should recognize them as part of the investment, similarly to when a drawdown for an investment is made in December and due January next year.

However, if you treat the management fee and fund/partnership expenses as operational expenses and ordinarily charge them to P&L, then you should treat them consistently and instead accrue for them as an expense at the year-end.

Treatment of Deal Expenses Associated with Acquiring a Fund Investment as of the Year-End

You might have incurred deal expenses (such as due diligence costs) as of the year-end when acquiring a new fund investment, but you haven't decided whether you will commit to that fund investment. If that is the case, generally, subject to your specific GAAP requirements, you can consider deferring these deal costs and take them to Other Assets as of the year-end. For example, under U.S. GAAP, if the deal is not signed by, say December 31, 2014, the deal costs associated with that investment could be deferred. Your deferred costs line item then would go into Other Assets on the balance sheet. If the deal is successful in 2015, the deal fees will be rolled into the cost basis. If not, they would be written off.

Carried Interest Charged by Carried Interest Partner of Investee Funds

Sometimes I get this question from FoFs: Can carried interest charged by the investee fund's CIP be directly expensed to the P&L?

Some GPs show the distribution on a net (net of carried interest) basis only, presenting whatever cash they are returning to you after they have "flipped" the carry to the CIP. Others, who would present this in a more transparent way, would show the grossed-up amount less carried interest that they have flipped to the CIP. If the latter is the method chosen by your GP, and you know how much they have flipped from your distribution to go to the CIP, then I guess that is a relevant question for LPs to ask.

Generally, carried interest is structured as a reallocation (of cash and corresponding profits/gains), not a performance/incentive fee. It is a transaction between shareholders/partners, and transactions between shareholders are not charged to P&L. You might be asking yourself, "Should I treat carry as a transaction fee on exiting the investment or simply as a performance/incentive fee charged to P&L? Again, remember that in most of the funds (except for probably some offshore fund that cannot take advantage of the benefits of the beneficial carried interest because, for example, the tax in this jurisdiction is zero, and it's not worth going into all the trouble of presenting the carry as a reallocation mechanism), carried interest has been structured rather as a reallocation mechanism. Therefore, if you want to mirror the GP's treatment, then the LPs shouldn't be presenting it as an expense.

Also, for performance reporting purposes, an LP would probably find it more useful to simply compare how much it invested to how much it has returned on that investment. This calculation can be achieved more easily by following the suggested treatment.

Administration, Tracking, and Treatment of Drawdowns and Distributions

Administering drawdowns and distributions and tracking information from them might represent a challenge to the LPs, particularly if they are new to the asset class.

What should they be tracking?

Ideally, so that the LP can track the performance of individual portfolio investments within

an investee fund, as well as for accounting and tax purposes, they should be tracking by the following criteria:

- Underlying portfolio companies (UPCs) on a portfolio-company-by-portfolio-company level.
- Following the categories in the distribution notices (or, in other words, by the character of the distribution—return of the original investment, return of capital [RoC (this is a negative contribution, not a proper distribution)], income distribution, and capital [gains] distribution).
- Tracking temporary distributions from the quick flip/bridge/temporary investments and distribution assigned by the GPs. This is done as a return of drawdowns for management fees and fund expenses that are recallable/redrawable and need to be added back to commitment to reflect the fact that they might potentially be readvanced if the GP decided to do so. They thus have the chance to invest in a "proper" private equity way so that they can deliver the high returns promised to you.

However, tracking by each one of these criteria might represent a challenge in itself for an LP. Tracking individual portfolio companies is a challenge, particularly if no specialist PE systems are in place because of the volume of the information. Imagine that an LP has 100 investee funds in its PE portfolio, and each one holds 20 portfolio companies on an average basis. That means tracking 2,000 portfolio companies.

Add the complication of tracking the distributions by the character of the distribution, assuming that all the distribution notices are consistent and provide an adequate level of detail. To do that, an LP needs to have in place an efficient specialist system and enough human resources.

On top of that, add the inconsistency of the level of detail provided in the notices within a fund, let alone across funds.

In this case, what should an LP do?

1. One solution is simply to keep chasing the GPs that don't provide enough level of details so that you can get details during the drawdown/distribution process. The problem with this solution is that it is too time consuming and you would need to have enough human resources to do that. Plus, you'd never have a guarantee that you would receive the information in time for your own reporting—particularly if you are not a big investor in their fund.
2. The second solution is to true up based on the quarterly reports received at the quarter-end. The trouble with this solution is that, on the quarterly report, you would have fund-level information, not investor-level information. If you simply apply your commitment percentage to the fund-level numbers and other LPs (excused investors) are opting out of a particular investment, you will not be able to calculate the accurate amounts of capital gains or investment income attributable to you for a particular investment.
3. A third way, which is probably the best way toward a solution with regard to the inconsistencies, is probably adopting the ILPA Capital Call and Distribution

Templates. That kind of standardization would save you a lot of trouble, particularly if the templates are provided in the Excel format released by ILPA.

4. One last option (but one that should really be used only as a last resort) is using the so-called cost recovery method (CRM). In the U.S., that practice is sometimes referred to as the Equity Method, but under U.S. GAAP, the Equity Method is no longer permitted (FASB ASU No. 2013-8, June 2013). That is why I prefer to refer to it as "the cost recovery method" rather than "the equity method." CRM is a revenue-recognition method under which no profit is recognized until all the cost has been recovered. Once the cost of the investment is zero, anything on the top is recognized as capital gains. Just bear in mind that not all accounting frameworks allow it, so make sure that the one you are using allows it before you resort to it. This method is usually done when tracking the different elements of distributions is particularly challenging—in other words, when it takes an unreasonable amount of time or involves significant costs.

The preferred method would be to follow the distributions and track the types of distributions as per the distribution notices (income, capital, return of investment/capital/contribution), in order to be able to track performance at the portfolio investments level.

In addition to that, some LPs track UPCs and data related to them for reporting purposes, but not for accounting. Ideally, to make it more efficient, the primary data entries should be done by the accounting/reporting team, so that it can be used for accounting, reporting, and performance measurement purposes at the same time and the information being used by multiple departments. However, that would depend on your internal organization, structure, and operations, as well as the system/platform that you use.

Recapitalizations

Recapitalizations, also referred to as recaps, are becoming an increasingly popular tool in private equity. This has been particularly true over the past few years in the context of a flat economy when most of the PE funds didn't have many disposals and corresponding significant distributions to LPs, which have a significant impact on their IRRs.

But first, what is a recap?

Broadly, in a recap, when the finances of a portfolio company have improved and potentially the portfolio company will be able to support a larger burden of debt in the future, the company is recapitalized. How recaps are structured can vary, but generally, some or all of the equity (or debt in the form of loan notes) is released back to the fund and replaced with debt from, say, a bank, at the portfolio company level. Another form of recaps are the so-called dividend recaps, meaning that, instead of releasing equity back to the fund, a dividend is paid back to the fund. As opposed to a typical dividend that is paid regularly from the company's earnings, a dividend recapitalization occurs when a company raises debt externally or simply takes a bank loan, to fund the dividend.

Accounting Treatment of Recaps

“How do we treat proceeds from recaps from the LP’s perspective for accounting purposes?

This generally depends on the terms of the recap. To decide on the accounting treatment, a careful reading of the terms needs to be performed to establish the substance of the transaction.

For example, in a leveraged recapitalization with a substitution of equity for debt, and with a change in the capital structure of the company, the proceeds from the recap in the form of distribution to the LPs should probably be treated as return of the LP’s original investment/capital.

Treatment of Distributions from Dividend Recaps at the LP Level

Another issue that I’ve discussed with FoFs is proceeds from investee funds due to dividend recapitalization because of issuance of a new term loan from the underlying portfolio company. Do we treat the proceed as cost or dividend income?

To decide on the accounting treatment, we should look into the substance, although the legal documents sometimes refer to the recap as a dividend recap.

We need to perform a proper analysis and ask the GP some questions.

To help you draw a reliable conclusion, I’ll start my sample analysis of the dividend recap from the treatment of the transaction at the lowest level: the portfolio company. What is happening there at the portfolio company level? In most simplistic terms, the company borrows money from a bank and passes it on to the shareholder(s), claiming that this is a dividend recap. But, is this really a dividend, and have there been enough profits to cover that payment? Or is this actually paying “dividends” before the profits have been generated? If the latter, aren’t these cash payments to the shareholder(s) similar to “owner’s drawings” that would potentially be offset against future profits, provided that there are such profits. But what if they never generate these profits, we have reported them to the fund, and the fund reported them to LPs as dividend distributions? Would the tax man tax these “profits”? The answers to these questions might have tax implications, so performing this type of analysis is very important. In order to understand the transaction, though, the LPs might need to ask the GP to provide more details, regardless of the fact that the distribution notice may refer to it as a dividend.

If the answer to this question is that these are cash payments similar to drawings at the portfolio-company level and there aren’t really any profits to cover that “dividend,” then the substance of this transaction is rather a repayment of your capital, not a dividend distribution.

In summary, a careful analysis of the recap transaction needs to be performed, and additional information perhaps should be requested from the GP about the transaction before you make a decision on the accounting treatment. In most cases, though, this would be a case of being returned a capital rather than a genuine dividend distribution.

Performance Measurement

Let’s look at some GP practices that would have an impact on the IRR and the multiples and can be used to “window dress” GP performance.

Impact of Recapitalizations on Performance

Back to the subject of recapitalization, but this time let’s see what effect they would have on the performance of the fund.

1. Regardless of how the recap has been structured (dividend or otherwise), since a positive cash flow has gone back to the fund and then passed on to the LPs well ahead of the actual exit, the IRRs, both net and gross IRRs, would be boosted.
2. Recaps would also enhance the multiples that will be made on eventual exit by injecting some extra cash flows.

Recaps are often resorted to when the exit route is blocked (for instance, when an IPO window is closed or in times of depressed public market valuations that inevitably lead to depressed private companies valuations). Finding themselves stuck with investments for, say, 5 or even more years, GPs might feel tempted to use recaps to improve their performance.

The question of whether these transactions are genuine transactions that make commercial sense, or are they done only for the purposes of boosting the IRRs, is irrelevant to this discussion. However, in a broader perspective, it is useful for LPs to look into value creation: Has the GP done exceptionally well on a certain transaction due to its skills, or has it simply cleverly used leverage? Regardless of the answer, my point to the LP accountants is that they need to track that information.

Impact of Netting Off Drawdowns against Distributions on Performance

Netting off drawdowns against distributions is another way for the GP to boost multiples. The standard multiples that GPs report on are as follow:

- DPI (Distributions to paid-in capital) = Distributions/paid-in capital[*]
- RVPI (Residual value to paid-in capital) = NAV (Residual value)/paid-in capital[*]
- TVPI (Total value to paid-in capital) = (NAV+distributions)/paid-in capital[*]

[*] *Paid-in capital being cumulative drawdowns*

Because all three of them have the cumulative drawdowns in their denominators, by showing a lower denominator through offsetting drawdowns against distributions, two of them (RVPI and TVPI) would be overstated. DPI will not be affected because its numerator is also understated by the same amount.

Impact of Temporary Distributions on Performance

Temporary distributions, particularly from bridge or temporary investments, would also boost the IRRs: Cash is pooled quickly (within 12 months) in and out, which we know has a massive effect on the IRRs, particularly if the amounts are significant. Therefore, it might be fair to exclude them from the IRRs, similarly to excluding them for the purposes of calculating the preferred return to LPs (although I would personally argue their exclusion for the latter, but this is a different discussion).

In terms of the effect on the multiples, the calculation of which they are part of (namely, the DPI and the TVPI), there will be no similar boosting effect, as if they are redrawn/recalled/readvanced, the denominators of these will also go up.

Stripping Out Carried Interest for the Purposes of IRR Calculation

As discussed earlier in this chapter and as relevant to the discussion, always make sure that the GP's net IRRs are stripped out of carried interest; otherwise, they will be "boosted" by the amount of the hypothetical carry that hasn't materialized yet.

Challenges Associated with Secondary Investments

Secondary investment in a PE fund is when an investor acquires an interest in a fund after the final close from an existing investor who generally wants, and has been, let out of the fund. That is done through the process of partner transfer or assignment. It is a provision for rather exceptional circumstances, but when that happens, a substitute investor(s) (called the transferee(s) or assignee(s)) takes the place of the old one (called the transferor or assignor). It may be that one or more substitute investor(s) has a secondary interest in the fund.

The problem with secondary investments is that, from the substitute investor's perspective, everything is a bit skewed. Some of the problems for secondaries are:

- The IRRs would (and should) be different from the other investors' net IRRs because they didn't participate in drawdowns and distributions from the outset; they simply acquired their interest in the partnership, usually at a very different price (either at a discount or a premium) from the NAV, as of the time of the acquisition. In addition, the GP might not even be able to calculate their IRRs because they are missing that first cash flow paid to the transferor, which is a significant cash flow to miss.
- The second problem is with the accounting for secondary investments. As mentioned in the first point, because the secondary investor acquired its interest in the partnership at a price that is typically very different from the NAV of the fund (either at a discount or at a premium), if the investment is treated, for accounting purposes, as an investment at fair value through profit or loss, the investment will be revalued at the first quarter end, up (if bought at a discount to the NAV) or down (if bought at a premium to the NAV). Sometimes the amount of the unrealized gain or loss is quite significant and the secondary investor will take a massive hit on the P&L. I often get FoF/LPs asking if they can amortize the discount/premium, but the way to do it under the most recognized (modern) GAAPs is generally to take the hit

at the first quarter-end and then gradually "amortize" it (in a manner of speaking) by reporting realized gains/losses (and reversing out unrealized gains/losses in the same amount) as the investee fund realizes portfolio companies and distributes cash back to the LP. If anything from the unrealized gains resulting from the initial discount is left at the end of the life of the investee fund, it will be posted as final realized gain, so that has (sort of) the effect of amortization (although not entirely in the way they would typically want it done).

- Another issue related to the second point is the treatment of the distributions. How can the cost and gain be split, given that the cost is the secondary purchase price, not what the distribution notices would ordinarily show for the primary investor/transferor from which the secondary investor acquired its fund interest? One way to deal with that and smoothen out the effect of the discount or premium is to allocate, from the outset, the total cost on acquisition to the existing (as of the time of the acquisition) investments in the investee fund's portfolio.

Consider an example. If the NAV of a secondary investment as of the time of the acquisition is $100, made up of ten investments at $10 each, and the secondary fund acquires the secondary interest in that fund for $90 (at a discount), then we can assign an acquisition cost of $9 instead of $10 to each one of the ten existing investments.

Later, as Investment 1 is realized (say, for $15), the GP will report in the distribution notice a distribution of $15, made up of $10 return of the original cost and $5 capital gain/capital distribution. Instead of reporting a $10 return of the original cost and a $5 capital gain/capital distribution, the secondary fund should report a $9 cost and a $6 realized gain/capital distribution and reverse out the $1 unrealized gain out of the initial $10 unrealized gain incurred from the discount.

I have also recently discussed with some LPs the effect of the carried interest on the price of the secondary interest. We have been looking into various scenarios, particularly when they are intending to buy a secondary interest in a fund that is in the catch-up phase, or when an investee fund is barely passing hurdle and the catch-up is not 100 percent. However, these are lengthy and complex discussions.

Summary

In this chapter, I have tried to summarize some of the issues LPs most often raise with me. I have also tried to make you aware of some hidden issues that are harder for LPs to spot as they are deeply buried in the LPA, in a complex calculation (such as the carried interest calculation or the preferred return calculation), or in long strings of data.

This is not to say that you shouldn't trust your GPs and shadow their calculations—you should have a healthy amount of trust in them. Still, a little caution is useful, particularly in an asset class that is not as transparent as other asset classes.

12. Real Estate Funds

Henry Todd, KPMG LLP

In this chapter, we discuss:

- Key real estate accounting requirements and options
- Asset revaluations, rental income, service charges, and lease structures
- Managing agents and advisers
- Different accounting frameworks
- Which one you should use
- Common accounting mistakes
- Stripping out lease incentives from valuations
- Grossing up of head lease liabilities
- Bad debt expense presentation
- Service charge recording and monitoring

Introduction

This chapter gives you a quick tour through some of the more common areas of real estate accounting.

This is a changing environment for reporting real estate assets. A movement to "harmonize" the accounting landscape is gathering steam, but others are digging their heels in. The International Accounting Standard Board (IASB) is continuing to tear down the veil of how every asset and liability in the balance sheet is measured. It recently introduced International Financial Reporting Standard (IFRS) 13, requiring property owners to disclose in more detail how their assets are valued, what the key inputs are, and how sensitive the valuations are to changes in those assumptions. How the real estate industry will respond remains to be seen.

The chapter outlines areas of particular concern in real estate accounting, primarily in the UK, although many of the issues are common to other recognized accounting frameworks.

Key Real Estate Accounting Requirements and Options

We cover the specific accounting options later, but here we consider the accounting options available for real estate assets.

Investment Property, or Property, Plant and Equipment (PP&E)?

Most investments in property are held for a combination of some or all of the following:

- Capital appreciation
- Rental income

- Development potential

For the investor, the financial statements should seek to reflect this investment objective and give a fair representation of the investors' intentions.

In general terms, property assets (land and/or buildings) are considered to be investment property if they are held for rental income, capital appreciation, or both. Other property assets will be either trading property (held for development and sale) or PP&E (operational properties such as hotels or properties occupied by the owner). Our focus in this chapter is investment property.

Asset Revaluations

Typically, the owner of an investment property values the underlying real estate assets on a regular basis—and at least annually. More regular valuations are often used to support net asset value (NAV) statements to investors or interim results announcements. The directors or external valuation specialists can perform these valuations. External valuations are more prevalent where third-party debt or investors are involved.

The valuation requirements differ slightly under various accounting frameworks. However, the common theme is to measure the property at the fair open market value that can be achieved in an orderly transaction between market participants at the measurement date. This commonly requires an assessment of a price between willing buyer and willing seller with an appropriate marketing period minus an assessment of the purchaser's costs (such as stamp duty land taxes and other adviser costs).

Method of Valuations

Various methods of valuations are available depending on the jurisdiction in which the asset is physically located and where the owning entity is domiciled. For UK properties owned by UK domiciled landlords, the most common is a valuation performed in accordance with the valuation manual issued by the Royal Institute of Chartered Surveyors (RICS). This is more commonly known as the Red Book and is also used in a number of European countries. Other jurisdictions have their respective models as well. For U.S. properties, the most common is a valuation performed in accordance with the Uniform Standards of Professional Appraisal Practice.

The valuer uses a variety of data inputs, such as current leases and contracted rents, as well as estimated rental values, comparable sales transactions, and other market data, to establish an opinion on the market value. Subject to the comments in the later sections "Stripping Out Lease Incentives from Valuations" and "Grossing Up of Head Lease Liabilities," this is the value that is then recorded in the financial statements.

IFRS 13: New Transparency on Valuations?

For accounting periods starting on or after January 1, 2013, when the entity applies IFRS as its accounting framework, a new standard relates to the disclosure of fair values. The standard requires that the reporting entity classify its investment property (as well as other financial assets and liabilities) into one of three levels of a fair value hierarchy. These are determined by the types of inputs used in valuing the assets:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs are unobservable inputs for the asset or liability.

We expect that many real estate entities will conclude that their valuations fall into level 3 because the valuation process has more unobservable inputs (estimated rental values, yields, capital values, and more). Being in level 3 means that increased levels of disclosure are required concerning the most material of these inputs and the sensitivity of the valuation to changes in these assumptions.

It will be interesting to see what consensus, if any, emerges in the public reporting from the industry.

Rental Income

Rental income is typically billed on a quarterly basis in line with the lease agreements for most tenants. Monthly billing arrangements have become more common in recent years as tenants seek to manage cash flows in the economic downturn. This is not typical for commercial property—it is more the case for residential property.

In the UK, rent is commonly billed, in advance, on the four quarter days (or “rent days”) in the year. In England and Wales, this is March 25, June 24, September 29, and December 25; in Scotland, it is February 28, May 28, August 28, and November 28. In other countries, the quarter end date is normally used (for example, March 31, June 30, September 30, and December 31). In the U.S., rental income is typically billed in equal monthly installments, in advance, on the first day of every calendar month.

Rental income is generally recognized on a straight-line basis over the lease term, but there are variations between accounting frameworks, as discussed later.

For a typical entity that tends to have its accounting year end at the end of a calendar month (for example, December 31 or March 31), an accounting adjustment to defer rental income that has been billed in the year but that relates to a future period may be required.

Service Charges

A landlord typically incurs certain expenses in relation to a property that can be charged back to the tenant. These are commonly called service charges, and they cover items such as supply of utilities, maintenance of common areas, or plant and machinery and security.

Service charges can result in disagreements with tenants over the nature, quantum, and allocation of such expenses due to interpretations of leases and related agreements. Landlords usually bill quarterly in advance for service charges based on an annual budget and then arrange for an annual service charge statement to be prepared and audited. This can give tenants added surety of amounts being charged because the statement will also include a true up from budgeted to actual expenditure.

Lease Structures

Tenant leases can be set up in numerous ways. This section looks at lease incentives, rent reviews, lease break options, and rent increases.

Lease Incentives

In the UK, the landlord commonly offers incentives to a tenant to secure the lease. This can take a variety of forms, but typical offers include the following:

- **Rent-free** (or reduced-rent) periods—The tenant pays no rent or reduced rent for a period of time.
- **Capital contributions—**The landlord makes a contribution toward the cost of the tenant fitting out the property to requirements (shop fixtures or office furniture).

Next, we identify some common errors in lease incentive accounting.

Rent-Free Periods

Under both IFRS and UK GAAP accounting standards, the income over the full life of the lease is spread evenly, usually on a straight-line basis, across a period of the lease. This is designed to provide a fairer reflection of the revenue generated from the lease. The period over which the incentive is spread is determined by the accounting framework chosen, as discussed in the upcoming section "Mind the GAAP."

A common accounting error is to account for this on a cash basis (to recognize the rental income only when cash is received) instead of considering this on an accruals basis.

Figure 12.1 is a simple worked-out example in which the landlord enters into a lease with a tenant on January 1, 2014 for 10 years at £100 per annum, but payable only from January 1, 2016 (a two-year, rent-free period). In this example, there is no break option or rent review in the lease.

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Cash - 31 Dec	-	-	100	100	100	100	100	100	100	100	800
Rent spreading - income statement	80	80	80	80	80	80	80	80	80	80	800
Rent free debtor - balance sheet - 31 Dec	80	160	140	120	100	80	60	40	20	-	

Figure 12.1 Rent-free lease incentive spreading

Calculations for spreading lease incentives are generally straightforward. The main hurdle to ensuring that these are captured appropriately within the accounts is the identification of lease incentives. In reality, a property or asset manager might agree to terms with tenants, such as for capital contributions, yet this is not communicated to the finance team. As such, it is accounted for on a cash basis.

To keep this from happening, processes or controls should be in place within the business so that copies of lease agreements are shared with the finance team. Regular updates should take place between operations and finance to ensure that incentives are captured. Alternatively, a quick assumption for the finance team is that every new lease will have an incentive of some form, so the property team should be pressed for further information.

In most cases, the impact of this accounting is to recognize revenue in advance of cash and to build up a lease incentive debtor in the balance sheet that is then unwound as cash is received later in the lease period. If an entity sells a property to which a lease incentive is attached, the remaining balance should be written off to the income statement as part of the gain or loss on sale.

Capital Contributions

Let's now consider an example in which a capital contribution of £200 is paid to the tenant at the inception of the lease (see Figure 12.2). Rent of £100 is charged per annum for 10 years from January 1, 2014.

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Capital contribution paid - 1 Jan	-200	-	-	-	-	-	-	-	-	-	-200
Cash - 31 Dec	100	100	100	100	100	100	100	100	100	100	1,000
Net rent over lease life											800
Rent spreading - income statement	80	80	80	80	80	80	80	80	80	80	800
Lease incentive debtor - balance sheet - 31 Dec	180	160	140	120	100	80	60	40	20	-	

Figure 12.2 Capital contributions lease incentive spreading

In this example, the year-end lease incentive debtor is calculated as follows:

Debtor brought forward – Cash received + Rental income recognized

£200 – £100 + £80 = £180 in year 1

Next, let's use the same example but add in a 2-year rent-free period (see Figure 12.3).

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Capital contribution paid - 1 Jan	-200	-	-	-	-	-	-	-	-	-	-200
Cash - 31 Dec	-	-	100	100	100	100	100	100	100	100	800
Net rent over lease life											600
Rent spreading - income statement	60	60	60	60	60	60	60	60	60	60	600
Lease incentive debtor - balance sheet - 31 Dec	260	320	280	240	200	160	120	80	40	-	

Figure 12.3 Capital contributions plus rent-free period lease incentive spreading

In this example, the year-end lease incentive debtor is calculated as follows:

Debtor brought forward – Cash received + Rent recognized

£200 – £0 + £60 = £260 in year 1

Rent Reviews

A lease typically contains a clause that allows for a periodic market testing of the passing rent being paid. Typically, these are upward-only reviews so that if the market rent happens to fall below the passing rent, the existing passing rent would be retained.

The rent review process can be prolonged. Both parties seek to obtain evidence on market rent for a comparable property in a comparable location.

Accounting practice is divided on when to recognize the benefit of a rent review uplift. Some companies make an estimate of their expectation of future rent from the rent review date. Others take a prudent view and record the new rent only after the review has been

agreed upon, with a cumulative catchup for the rent unbilled since the review date.

Break Options

The rent review can coincide (but does not have to) with an option for the landlord or tenant to break the lease term without penalty. This gives the tenant the option to vacate the property, renegotiate on the size of space let, or, more generally, restructure the lease.

Fixed and/or Minimum Uplifts

A lease can contain a provision in which the annual passing rent increases by a predetermined amount, a minimum amount, or an index-linked amount. Similar to lease incentives, the lease cash income over the life of the lease is spread evenly over the lease. (Different GAAP frameworks have different time profiles—see the "Mind the GAAP" section.)

When the lease contains a contingent element that is linked to a market metric (such as inflation or the Retail Price Index), these are considered contingent rents. They are accounted for only when the metric is known and billed.

Let's consider a simple example in which the increases are predetermined. The landlord enters into a 10-year lease on January 1, 2014, with rent of £100 in year 1 increasing by 5 percent per annum (see Figure 12.4). There is no lease break option.

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Cash - 31 Dec	100	105	110	116	122	128	134	141	148	155	1,258
Rent spreading - income statement	126	126	126	126	126	126	126	126	126	126	1,258
Rent debtor - balance sheet - 31 Dec	26	47	62	72	76	74	66	51	29	-	

Figure 12.4 Predetermined rent increase lease income spreading

Now let's add in a two-year rent-free period (see Figure 12.5).

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Cash - 31 Dec	-	-	100	105	110	116	122	128	134	141	955
Rent spreading - income statement	95	95	95	95	95	95	95	95	95	95	955
Rent debtor - balance sheet - 31 Dec	95	191	186	177	162	142	116	84	45	-	

Figure 12.5 Predetermined rent increase, including 2-year rent free period lease incentive spreading

Managing Agents and Advisers

Many landlords use established managing agents (such as Jones Lang LaSalle or CBRE) to handle the day-to-day management of the property. In such cases, landlords might employ specialist investment managers and advisers. Managing agents often handle the rent and service charge billing and collection. An entity should look to maintain close relationships with the manager to ensure the timely flow of accounting and other asset information to enable reasoned management decisions.

Mind the GAAP

All accounting is the same, right? Not quite, but it's getting there. The choice of accounting framework is still varied, and then within the framework are some policy choices. So what different frameworks are there? Which one should you use? How are they different? Will the frameworks ever align? Let's consider these questions.

What Different Frameworks Are There?

Broadly, three different frameworks operate in the UK:

- **UK Generally Accepted Accounting Practice (UK GAAP)—**Still the most common framework for nonlisted entities. It consists of Financial Reporting Standards (FRSs), Statements of Standard Accounting Practice (SSAPs), and other pronouncements.
- **IFRS—**Increasingly common, and required for all listed entities. It is made up of IFRSs standards, International Accounting Standards (IASs), and other pronouncements.
- **U.S. Generally Accepted Accounting Practice (U.S. GAAP)—**Rare for UK–registered companies and partnerships, but common for overseas owned entities for internal reporting.

Many individual countries have their own GAAP model, albeit these are generally aligning to either IFRS or U.S. GAAP. As we explore later, UK GAAP is due to align more closely with IFRS for accounting periods starting on or after January 1, 2015.

Over and above these in the nonlisted sector are the accounting requirements of a particular entity (established, for instance, by the trust instrument or limited partnership agreement [LPA]). You might see a trust instrument requiring UK GAAP accounts, but with certain exemptions or additional requirements, such as reporting interest rate swaps on the balance sheet (which UK GAAP does not necessarily require).

Your choice of accounting framework can be restricted or determined by these factors:

- What the LPA or trust instrument requires
- What local law requires or permits
- What your investors or lenders want or need
- Other industry guidance, such as the statements of recommended practice in the UK (SORPs)
- Influences from industry bodies, such as the European Public Real Estate Association (EPRA), European Association for Investors in Non-Listed Real Estate Vehicles (INREV), and the British Property Foundation (BPF) for the property industry.

Which One Should I Use?

You can answer this question by responding to the earlier questions. If you are establishing a new fund or entity, however, we advise caution before you apply the current UK GAAP framework. The current suite of UK GAAP standards will be replaced by a new framework that generally aligns to IFRS: FRS 101 and 102 in Table 12.1. The industry- and entity-specific SORPs are currently undergoing consultation at the time of writing but are expected to apply similar options to those noted.

	Accounting Regime	Applicable To	Example
IAS accounts	IFRS	Those required to apply by law or regulation (optional for others)	Group accounts of E.U.-listed entities Group accounts of AIM-listed entities
UK Companies Act accounts	IFRS recognition and measurement with reduced disclosures (FRS 101)	Individual accounts of qualifying parent and subsidiary entities*	Parent company and subsidiary entities in a listed group
	FRS 102	Large and medium-size entities	Large and medium-size private companies
	FRS 102, with reduced disclosures	Individual accounts of qualifying parent and subsidiary entities*	Parent company and subsidiary entities in a group
	FRSSE	Qualifying small entities	Small# private companies

* A qualifying parent or subsidiary is a member of a group that prepares publically available financial statements intended to give a true and fair view in which it is consolidated. Fewer exemptions are available for financial institutions. A charity cannot be a qualifying entity under FRS 101.

As defined by UK company law.

Table 12.1 IFRS: FRS 101 and 102 Framework

The choice of the entity in the UK can depend on whether it is a “qualifying entity” (refer to the footnote below Table 12.1). However, even if an entity can apply a particular framework, it can always trade up to a higher one, if it chooses. The decision tree in Figure 12.6 can also be helpful in making GAAP choices.

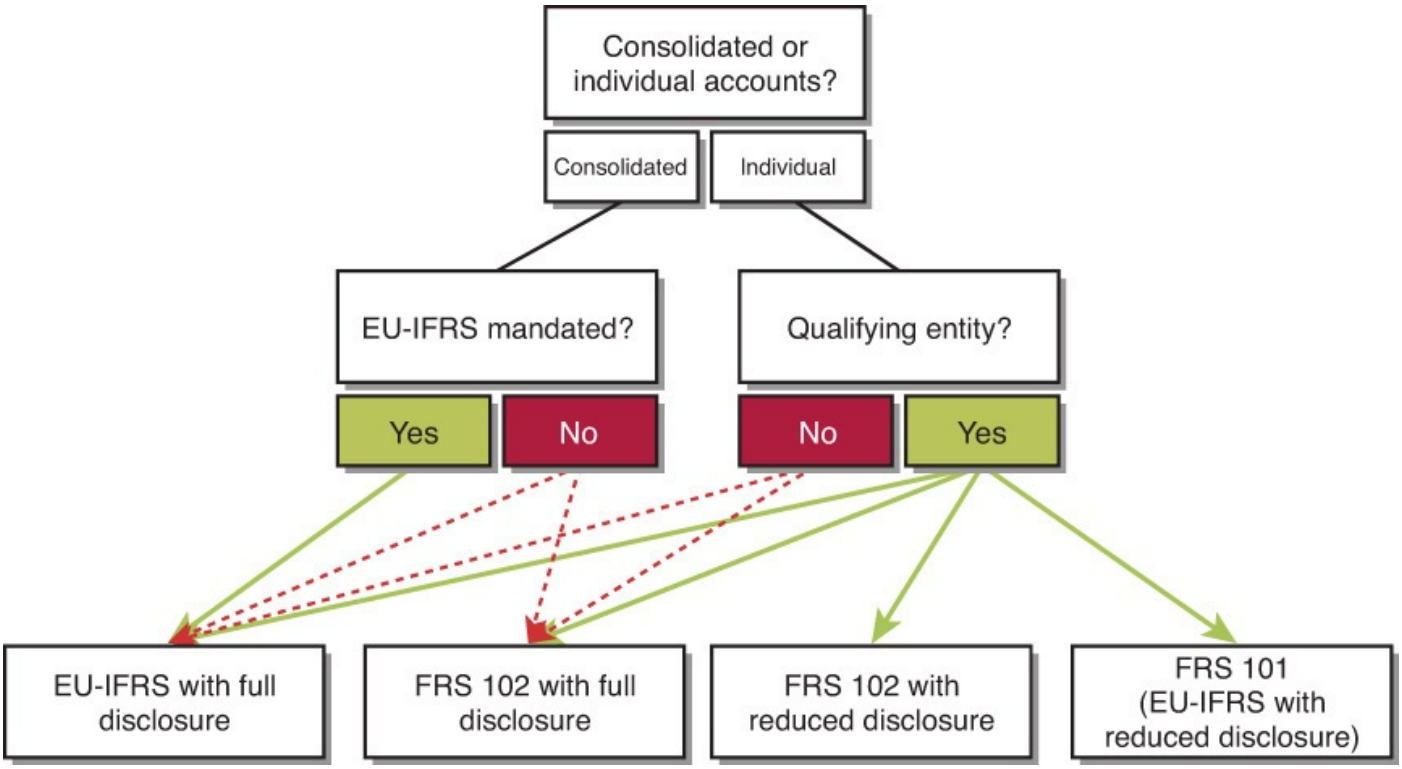


Figure 12.6 New UK GAAP decision tree

How Are They Different?

Table 12.2 highlights the key differences in relation to real estate accounting for UK GAAP (current), FRS 102 (new UK GAAP), FRS 101, IFRS, and U.S. GAAP. Note that this is not exhaustive.

	Current UK GAAP	FRS 102	FRS 101	IFRS	U.S. GAAP
Investment property	Held at valuation. Changes in fair value (other than permanent diminution of value) taken to reserves via a statement of total recognized gains and losses.	Held at either cost (minus depreciation) or valuation. Cost can be used only when a valuation is unobtainable. Valuation gains or losses are taken to the income statement.	Cost (minus depreciation) or valuation. Valuation gains or losses are taken to the income statement.	Cost (minus depreciation) or valuation. Valuation gains or losses are taken to the income statement.	No specific definition of investment property applies; such property is accounted for at cost as property, plant, and equipment unless it meets the criteria to be classified as held for sale. No requirement exists to disclose the fair value of property, plant, and equipment. However, this depends on the initial assessment of whether the entity is an investment company as that term is defined in U.S. GAAP. Guidance on the application of this requirement is not covered here.
Guaranteed rental income increases and lease incentives	Incentives spread on a straight-line basis over the shorter of the lease term or the period to the first rent review. Guaranteed uplifts spread over the lease term.	Spread on a straight-line basis over the uncancellable lease term. Exemption for grandfathered leases existing at the date of transition.	Spread on a straight-line basis over the lease term.	Spread on a straight-line basis over the lease term.	Spread on a straight-line basis over the lease term.
Financial instruments (derivatives)	Generally, off balance sheet. Entities have the option to apply FRS26.	Asset or liability on balance sheet. Fair value movements are taken either to equity (when applying hedge accounting) or to the income statement.	Asset or liability on balance sheet. Fair value movements are taken either to equity (when applying hedge accounting) or to the income statement.	Asset or liability on balance sheet. Fair value movements are taken either to equity (when applying hedge accounting) or to the income statement.	Asset or liability on balance sheet. Fair value movements are taken either to equity (when criteria is met to apply hedge accounting) or to the income statement.
Borrowing costs on development properties and development costs	May capitalize when criteria are met.	May capitalize when criteria are met.	*Must* capitalize when criteria are met.	*Must* capitalize when criteria are met.	*Must* capitalize when criteria are met.
Investment in joint ventures in consolidated accounts	Gross equity accounting—equity accounting, but showing gross assets, gross liabilities, and turnover, inclusive of share of joint venture revenue.	Equity accounting.	Equity accounting (proportional consolidation is no longer permitted).	Equity accounting (proportional consolidation is no longer permitted).	Equity accounting (after first assessing whether the joint venture meets the consolidation requirements).
Cash flow statements	Not required for small companies or subsidiaries of a consolidated group where the group accounts are publically available and prepared under a comparable GAAP.	Required for all entities. Qualifying entities may apply an exemption.	Required for all entities. Qualifying entities may apply an exemption.	Required for all entities. Qualifying entities may apply an exemption.	Required for all entities, with certain exemptions for investment companies. Exemptions are applicable only when the entity has little or no debt and underlying investments are carried at fair value and classified as Level 1 or 2 measurements. This unlikely to be applicable for investment companies holding investments in real estate.
Deferred taxation	No deferred tax is provided on revaluation gains.	Revaluation gains give rise to deferred tax liabilities.	Revaluation gains give rise to deferred tax liabilities.	Revaluation gains give rise to deferred tax liabilities.	When the entity is an investment company (refer to first row in the table), revaluation gains give rise to deferred tax liabilities.

Table 12.2 Key Differences in Real Estate Accounting

Some Tax Considerations

Other important considerations when choosing a replacement framework if you currently apply UK GAAP are taxation and the determination of distributable reserves. For example, the smoothing of lease incentives, as shown in the previous table, is done over a longer period under IFRS, which brings rental income forward in the income statement. This increases distributable reserves earlier in the asset life, possibly enabling earlier payments of dividends.

However, taxable profits generally follow accounting profit for rental income, so this also brings forward cash tax payments without the comparable cash inflow. Added to this, in the UK, we have been in a period of reducing tax rates, so this means the overall tax paid could be higher.

Figure 12.7 demonstrates how rental income arises earlier. In the example, a lease is entered into on January 1, 2014, with a two-year rent-free period and a rent review after five years. In this example, the rent review concluded the current rent was at market and was therefore unchanged.

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
UK GAAP					**Rent review**						
Cash received	-	-	100	100	100	100	100	100	100	100	800
Rental income recognized	60	60	60	60	60	100	100	100	100	100	800
Lease incentive debtor	60	120	80	40	-	-	-	-	-	-	
IFRS											
Cash received	-	-	100	100	100	100	100	100	100	100	800
Rental income recognized	80	80	80	80	80	80	80	80	80	80	800
Lease incentive debtor	80	160	140	120	100	80	60	40	20	-	
Difference on rental income	**-20**	**-20**	**-20**	**-20**	**-20**	**20**	**20**	**20**	**20**	**20**	

Figure 12.7 Two-year rent-free period with rent review after five years—impact of GAAP differences

Other Common Accounting Mistakes

The following sections discuss some common accounting mistakes made with rental properties.

Stripping Out Lease Incentives from Valuations

As a consequence of the accounting for lease incentive and fixed uplifts, a lease incentive debtor has arisen within the balance sheet. It is important that this not also be included within the carrying value of property because that would lead to double counting. Financial statements are often prone to error in this area.

Properties are generally valued by taking into account estimated rental values, which ignores the accounting conventions for lease incentives and other straight-lining requirements. As such, the property valuation provided by the external valuer takes into account future rental income only. The carrying amount in the accounts should be reduced from the reported market valuation.

An illustrated disclosure note is included in the next section on grossing up, which demonstrates how this should be presented within the accounts to reconcile from fair value

to carrying value.

Grossing Up of Head Lease Liabilities

In the instance of ownership of a leasehold property, when the landlord is also required to make head lease payments to the land owner, a valuation typically is based on the net rental figure.

This makes the valuation correct in terms of market value of the building, but if the property value were included within the accounts on this basis, there would be no separate liability or land-use asset captured for the amounts on the leasehold interest. We often see that this liability is not recorded.

When the ground rent is on a peppercorn (say, £1 per annum), the amount of the gross-up rarely is material to the financial statements. However, some ground rents can be substantial, depending on the lease terms (for example, if the rent is geared to a proportion of the lease income received from the end tenant).

The impact is to gross up the balance sheet so that the carrying value of the property will be higher than the valuation figure. A separate liability will be included within the balance sheet for the future head lease payments.

Consider an illustration of a model disclosure (see Figure 12.8) to demonstrate how to present this within the accounts.

Adjustments from Fair Value to Carrying Value:	
At 31 December 2014	**£000s**
Fair value as valued ABC Chartered Surveyors	1,000
Lease incentive debtor recognized separately	-50
Grossing up of head lease liabilities	250
Carrying value	**1,200**

Figure 12.8 Model disclosure

Bad Debt Expense Presentation

Under most accounting frameworks, revenue is measured as the fair value of the consideration received. For rental income, this is a combination of the rent billed plus or minus any spreading of lease incentives or fixed rental uplifts.

At the point when the revenue is recognized, there should be a reasonable certainty that the income will be received. Where, subsequent to the revenue being recognized, the tenant has been unable to pay, this then becomes a bad debt. A provision or write-off is recorded against the debtor in the balance sheet (including any remaining lease incentive debtor), and a charge is made in the income statement as a cost. A reduction of the revenue previously recognized should not be made: This is the error we have seen some companies make.

On the other hand, if at the point of recognizing the revenue it is already known that the tenant is unable to pay, it would be inappropriate to recognize this as revenue in the first

place. For example, if a customer is already in administration but billing is maintained for commercial reasons, it would not be appropriate to recognize revenue or a debtor.

Service Charge Recording and Monitoring

In the financial statements, service charges can be presented either on a gross or a net basis, depending on whether the landlord is acting as an agent for the tenant or as the principal. Service charge income and costs are often included in error within an entity's income statement when the entity is acting as an agent. A net presentation should be adopted, other than in respect of void space, when the landlord is responsible for bearing the service charge costs.

From an operational perspective, care should be given to the maintenance and control of service charge costs. In particular, this involves putting in place appropriate processes and controls to ensure correct billing, resolving any disagreements with tenants, and keeping debt from building up. Service charge control accounts should be reconciled regularly, and amounts should be invoiced as required.

Summary

This chapter covered some of the more common areas of real estate accounting.

About the Author

Henry Todd is a qualified chartered accountant with the Institute of Chartered Accountants in England and Wales. He is a senior manager at KPMG LLP, in the UK, and has worked in the audit of real estate companies throughout his 13-year career. Henry's clients include UK- and European-based corporate and fund clients with property asset values between £3m and £3bn. Henry provides these clients with a wide range of audit and assurance services, including statutory audits, GAAP conversions, accounting advice, listing transactions, and other assurance engagements.

13. Infrastructure Funds

Yasir Aziz and Ramon Louw, Deloitte

In this chapter, we discuss:

This chapter looks at the infrastructure private equity funds and serves as a good introduction to the various types of infrastructure funds. The chapter is split into four sections. The first introduces the key concepts of infrastructure funds; the second describes some of the considerations involved in the structuring of these types of funds. Next, this chapter delves into some market trends by looking at a rise in the asset class and where the industry is heading, with a particular focus on public-private partnerships. Finally, this chapter touches on some key accounting concepts in infrastructure funds, with a focus on consolidation and how the investment entity exemption applies.

Introduction

Infrastructure funds (IFs) are a specialized type of private equity (PE) fund in which the investments are in physical assets, generally for long-term income. The infrastructure asset class provides unique investment characteristics—they are generally assets with these characteristics:

- Provide an essential service to society
- Often have a monopoly in their market because of the nature of the assets

- Display high barriers to entry for competitors

The assets also typically operate on long-term licenses that provide a steady stream of income for the asset owners, often within a highly regulated environment. In most cases, the income streams are from either the public (for regulated assets) or government-related counterparties, not the general public directly.

Key features of infrastructure assets follow:

- They are fundamental for an industrial economy, or a portion of it, to function.
- They are physical assets that are part of providing an "essential service."
- They provide a predictable stream of long-term income with low levels of volatility.
- They operate in highly regulated industries.

Investments in infrastructure assets behave similarly to investments in bonds. They might have regular, predictable returns over the life of the investment, with an expected return of capital at the end of the term. Although the primary focus of IFs is cash yield, the additional benefit of infrastructure investments is that investors can share in any increase in the equity value of a project. With a bond, on the other hand, the upside is limited to a premium in which the coupon rate of the bond is higher than the prevailing interest rate. Additional risks apply when investing in infrastructure assets over bonds, but there are similarities in the timing of the cash flows they present.

Investor Base

The investor base within a typical IF tends to consist of long-term investors (investors who have a longer investment horizon than typical PE investors). Pension funds (both public and private) remain the largest investors in infrastructure assets. Insurance companies with significant unused commitments that funds are able to draw on to make investments also allocate a significant portion of their investments to IFs.

Institutional investors such as pension funds and insurance companies do not typically require asset churn (the constant stream of purchasing and selling assets) because they have longer investment horizons and tend to prefer the more stable income streams over the higher-risk buyout model. Therefore, investments in IFs are ideal for institutional investors because they provide a steady stream of income and a safe investment.

IFs also allow these investors to diversify their portfolio of investments. Infrastructure asset values do not typically correlate to other investment assets (such as equity investments or investing in the debt markets) because the income streams that the assets generate are often linked to long-term contracts. Therefore, infrastructure assets are less volatile.

Another differential between typical buyout funds and the IF model is that regulated purchases of infrastructure assets tend not to require any enhancements or drastic changes in the business model to be realized. The income streams of an infrastructure asset are generally derived from a long-term contract (such as for toll roads or electricity generation), so the fund is not reliant on the asset stripping or change in business plan that traditional private equity funds generally employ to enhance the value of the companies

they invest in. When the investment is made in an unregulated asset (such as an airport), the IF still has the opportunity to enhance the asset, similar to traditional buyout funds.

Because of these characteristics, the general trend over the last 10 to 15 years has been a greater focus on IF as a way for institutional investors to diversify their portfolio and reduce the overall reliance of their investments on market factors. Investing in an IF might not be suitable for the aggressive investor that requires a high-risk/high-reward strategy in traditional PE funds, but as market risk increases, more funds are diverted into infrastructure assets.

Assets Held

IFs typically invest in these types of assets:

- Roads and other transportation infrastructures (airports, railroads, ports)
- Utilities (electricity plants, electric plants and distributers, water)
- Telecoms infrastructure
- Renewable energy projects
- Schools and hospitals
- Private finance initiative contracts (see the later section "Public-Private Partnerships and Private Finance Initiatives")

Infrastructure assets are usually built to have long useful lives. They are an essential part of a country's resources and act as a base requirement for macroeconomic growth. Infrastructure assets often also enjoy a monopoly in their markets, and regulators commonly set prices for future periods.

Two key types of investments can be made for IFs:

- Direct, such as investment into the infrastructure asset (for example, an IF purchasing an airport or utility company) without having any say in the running of the business
- Indirect, such as investing in the underlying infrastructure business (for example, owning an airport and also owning the management company that runs the airport). Investing into the infrastructure business involves managing and operating the asset. A direct investment in the asset enables the IF to gain a share of the returns from the asset.

Managing the infrastructure asset requires the IF to have a deep understanding of the industry and a thorough understanding of the regulations within the industry. This understanding and expertise underpin the investment thesis and are key factors in increasing the value of the investment, through increasing the revenues it generates, improving the asset's capital value for future realization, or both.

Exit Routes

The most common routes for exiting investments for infrastructure funds are a sale to either another fund (a secondary sale—for example, one infrastructure fund selling its stake in an asset to another infrastructure fund) or to a competitor that operates in the same industry as the infrastructure asset (a trade sale—for example, an infrastructure fund that owns an shipping dock selling the company to another shipping port). The past few years have seen a steady increase in direct investors, as explained in the upcoming "Market Trends" section.

Structure of Infrastructure Funds

When IFs are structured as closed-ended funds, they are normally set up in a similar way to traditional PE houses in which the fund will be a limited partner (LP), based either onshore or offshore (see Chapter 1, "Private Equity Structures and Their Impact on Private Equity Accounting and Reporting"). This is in keeping with traditional PE funds that will determine the domicile of the various entities based on a wide range of factors (such as where investors are based, tax considerations, and reporting requirements). This fund will have a general partner (GP) that can also be onshore or offshore and an onshore adviser.

The considerations for each of these elements are similar to those involved when setting up a regular PE fund (frequency of reporting, where the investor base originates, tax structures employed, regulatory concerns, and more).

Closed-Ended vs. Open-Ended

IFs can be set up as open-ended or closed-ended funds. Open-ended funds have no set time period for investment and no set period before they are closed. Closed-ended funds have a definitive life that is set at the beginning of the fund.

The decision of whether to have open- or closed-ended funds is based on what investors require. Both structures have their benefits and drawbacks:

- Open-ended funds are attractive for investors looking to match their liabilities in the long term. These types of funds tend to charge lower fees than closed-ended funds and allow the liquidity option via a redemption facility to withdraw from the fund on a periodic basis.
- From an investor's perspective, a closed-ended fund provides reasonable certainty that the fund manager will remain unchanged over the life of the fund. From the fund manager's perspective, the closed-ended fund provides an incentive to maximize the returns over the whole life of the fund.

Traditional private equity funds are mostly set up as closed-ended funds, to provide investors with a definitive timeline on how long their money will be used for.

Unlisted vs. Listed Infrastructure Funds

Infrastructure funds can be unlisted or listed. To gain exposure to infrastructure as an asset class, investors can invest in unlisted funds that own a number of project companies holding a portfolio of infrastructure assets. This investment route also allows the investor to co-invest with the main fund if he is looking to increase his asset allocation to infrastructure. A benefit of this type of investment is that it allows the investor to target a specific infrastructure strategy (for example, developed assets in a specific geographical region). The drawbacks with unlisted funds are the high initial investment required and the fact that these funds are not suitable for short-term investment strategies because capital is tied up for a long period.

Listed infrastructure companies provide an investor with increased liquidity, which is a benefit for investors who need to adjust their asset allocation on short notice. A drawback with a listed IF is the higher correlation to the wider equity market and, therefore, increased exposure to macroeconomic conditions. This detracts from one of the key benefits of investing in IF: the diversification it provides.

Fee Structures

Fees within the IFs follow typical PE models. A percentage of capital committed is charged as a management fee (2 percent is usual), and an amount is charged on profits above a certain threshold (20 percent above a hurdle rate of 8 percent, for example). Although this is generally the norm, some funds offer lower rates in both management fee and incentive fee. Investors have argued that if infrastructure as an asset class is less risky than private equity investments, it should demand a lower fee rate from fund managers. Some fee pressure is pushing the fee structures down to a 1 percent management fee and a 10 percent performance fee, but this is less typical within IFs because this asset class is more stable in performance and overall fund returns are still attractive.

To incentivize the manager of these longer-term funds, various alternatives to the standard carried interest model have been considered. An example of this is a value-based carried interest model that focuses on fund performance rather than deal success. This method pays based on an estimate of the hypothetical price at which market participants would agree to pay for the investments, in contrast from the typical distributed cash basis.

Market Trends

Since the introduction of IFs in Europe around 2001 (and especially over the last 5 to 10 years), investing in an IF has become increasingly attractive to investors both because of the risk diversification it offers and because alternative low-risk investments have had low returns (for example, bond yields have been low). The trade-off for this increased allocation to IFs is that capital is tied up for a longer period (10–20 years vs. 10–12 years for traditional PE buyout funds). To offset this greater investment period, infrastructure assets generally pay out a steady stream of income during the life of the asset.

Infrastructure Funds and the Wider Economy

The assets that are invested within IFs typically do not depend on general market trends (consumer spending, fashions, or seasonal fluctuations). Infrastructure assets thus are generally more resilient against macroeconomic downturns and recessions.

The exception is infrastructure assets influenced by the gross domestic product (GDP), such as airports or telecoms. The general state of the economy and other economic factors can adversely impact these assets. The resilience to changes in the economic cycle explains the shift toward IF over the last decade as traditional buyout funds have decreased the overall returns they offer their investors. Banks are now more willing to lend to IFs that have established track records due to the lower-risk investment class and the stable cash yields. The extent of lending depends on the type of assets and strategy the IF adopts.

With this increased focus on the asset class and the longer-term investment horizons, the supply of assets that meet the criteria for IFs has decreased and deals are less frequent. The market is currently characterized by deal-hungry infrastructure investors who have significant capital (referred to as “dry powder” in PE) at their disposal but who are finding it more difficult to source the right asset due to a lack of supply.

The market has also seen an increase in the regulatory burden within the industries it invests in. What was once seen as a key attraction for investing in this asset class has become a hindrance from both an investment and a management perspective. An element of regulation provides security in the price of the regulated assets sold and creates additional barriers to entry, safeguarding an investment into IF. With the increased regulation, this investor protection has turned into an investor burden: The costs associated with meeting the regulations can outweigh the benefits it provides.

Future of the Industry

The rise to prominence of the direct investor has been a key feature of both traditional private equity and IFs. Direct investors are generally large institutional investors (pension funds and insurance companies) that manage their own money and invest directly into assets without the need for asset managers or PE funds. This is a way for institutional investors to reduce the cost of investing and increase their returns, as they do not have to pay a PE house to manage their money—they manage it themselves.

The aim of direct investing is to reduce the costs associated with investing because management and performance fees are not paid out to an external party. However, to attract the same talent as PE houses, direct investors must pay staff rates that are commensurate with those paid in PE houses (including salaries, benefits, bonuses, and carried interest incentives). This increases the costs associated with direct investing.

To date, not many exits have taken place within the infrastructure industry, for two primary reasons. First, as noted already, the assets are generally purchased with a view to hold them for the long term (10–20 years is not uncommon). Second, the industry as a whole is still in its relative infancy, so not many funds are coming to the end of their lives and need to dispose of the assets. Over the next 5 years, the level of activity is likely to pick up as the first generation of funds comes to maturity.

Role of Infrastructure Debt Funds

Another topic that has become prevalent is the role of specialist infrastructure debt funds. Following the recent financial crisis, the difficulty of obtaining bank loans across all industries has seen the rise of alternative lenders. This is exaggerated in the IF industry because deals are generally very large.

Although still a relatively new phenomenon in the market, infrastructure debt funds are typically looking to finance future investments as a tranche of mezzanine (refer to Chapter 15, "Mezzanine Debt Private Equity Funds" for further details on mezzanine funds). These debt instruments are higher up in the capital structure than equity, so they tend to offer lower risks and returns than the infrastructure equity funds.

Public-Private Partnerships and Private Finance Initiatives

Public-private partnerships (PPPs) are a way of creating a partnership between the private sector and the government by funding public infrastructure projects with private capital. Investments in PPP can be either primary or secondary investments. Primary investment involves investing at the development stage of the project, whereas secondary investments are acquisitions in operational projects. One such method used in the United Kingdom is private finance initiative (PFI) contracts, which are becoming less attractive to investors because of the lower returns offered when compared to other IF investment types. Note that primary PPP investments generally offer higher returns than secondary investments because of the added development and construction risk exposure. In practice, though, this additional risk might result in certain risk-averse investors not wanting to invest.

PFI contracts usually involve a consortium of players, including a construction company and finance providers (either a bank or an IF) who fund the construction (and, generally, maintenance) of a capital asset (such as a school, hospital, or other type of infrastructure asset). A government body enters into a long-term arrangement with the consortium to repay the costs of the construction (plus high rates of interest) over an extended period (via a unitary charge). PFI contracts are generally attractive to governments because they require no money up front (they are funded by the private sector), and the debt is repaid over the long term but often at above market rates of interest. Critics of the schemes have noted the high costs involved in financing these deals, which are ultimately borne by the taxpayer because of the high finance costs associated with these contracts.

Figure 13.1 shows a typical PFI arrangement.

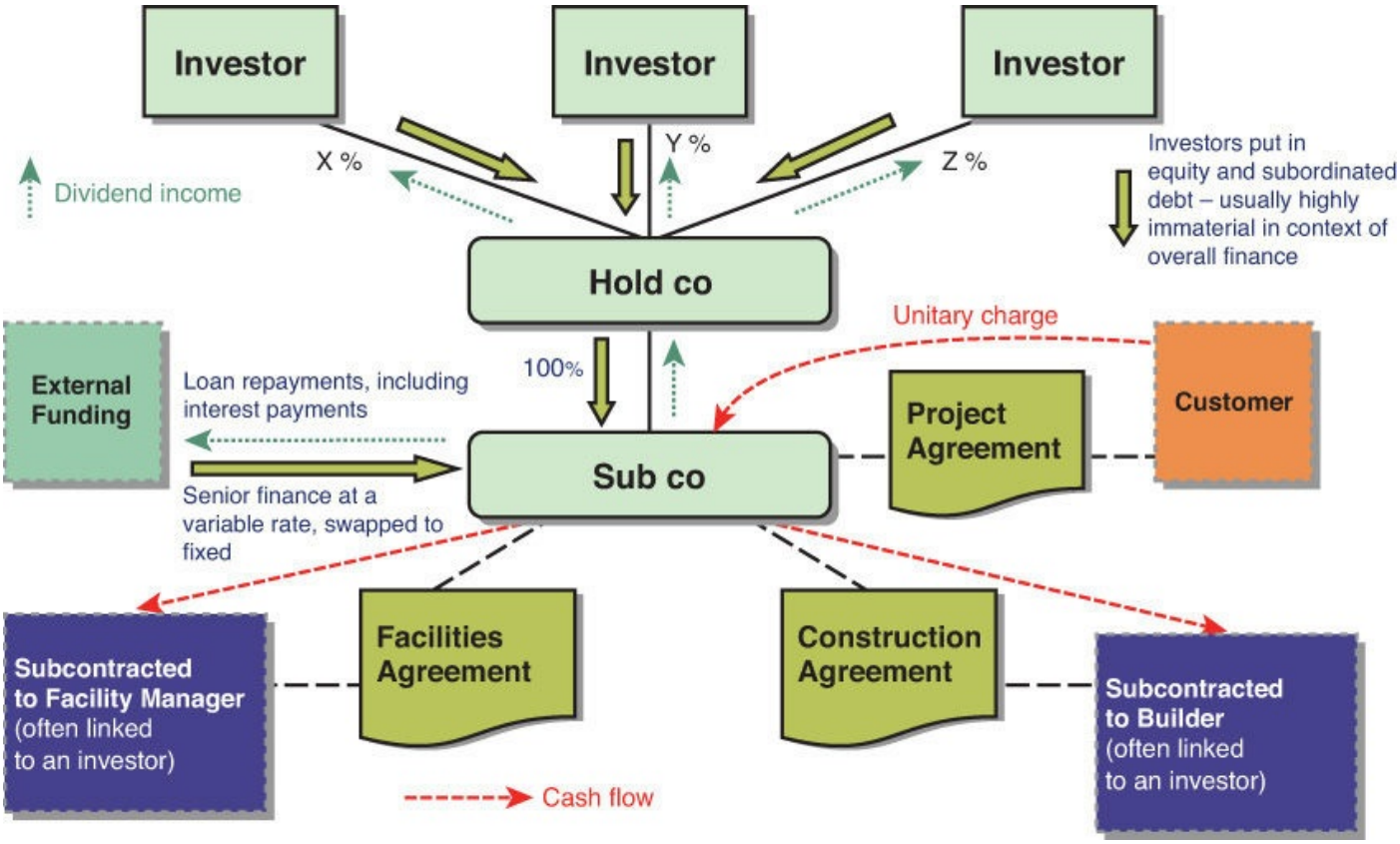


Figure 13.1 Overview of a PFI arrangement

These key parties are involved:

- **Investors—**Commit capital into the infrastructure fund. This is often less than the overall financing of the entire project.
- **Hold Co—**Newly created holding company, created for investors to participate in.
- **Customer—**An authority that pays a unitary charge, which is a single annual charge for the services provided under the service concession arrangement.
- **External funding—**Typically, a bank or IF providing senior debt.
- **Facility manager—**The subcontractor responsible for servicing the asset.
- **Construction company—**The subcontractor responsible for the development of the asset.
- **Special-purpose company (sub co.)—**Responsible for the project, including negotiation of the main concession agreement and the subcontracting agreements.

Accounting for Infrastructure Funds

The financial crisis has encouraged the need to provide investors with fair value information about their investments on a timely basis in order to highlight issues that would have remained hidden under cost-based models. Due to the long-term nature of infrastructure funds, there still remains some debate as to whether short-term fluctuations captured through fair value accounting are actually indicative of the long-term changes in value of the infrastructure investments. In this section, we explore some of the key accounting considerations for infrastructure funds.

Reporting under IFRS

Overall, the differences in accounting under International Financial Reporting Standards (IFRS) in respect to infrastructure PE funds and traditional buyout funds are limited.

Because of the nature of the investments made by infrastructure funds, some additional considerations in terms of consolidating investments specifically relate to any participation by the fund in the activities of the asset (outlined shortly).

Furthermore, the valuation of investments requires some additional analysis under both financial reporting standards and industry valuation guidance.

Consolidating Investments

Until now, IFRSs have stated that, when an entity has control of another, this parent entity is required to consolidate those investments in the statutory group accounts. Some factors to consider when assessing consolidation include these:

- The proportion of the investment in the underlying business (regardless of whether the IF controls the asset)
- The nature of the investments (either in the management of the infrastructure asset or just in the asset itself)
- Whether the asset is regulated
- The investment strategy (the fund owns a single asset or owns multiple unrelated assets)
- Accounting framework adopted

As is the case with traditional buyout funds, it is not unusual for IFs to have controlling interests in the assets they own. Until recently, IFRS has required investments to be consolidated in the statutory group accounts. This means that the results of the subsidiary would be consolidated on a line-by-line basis, as would be the case with any other subsidiary.

Consolidation and the Investment Entity Exemption

An amendment (effective for annual periods beginning on or after January 1, 2014) to IFRS has been issued requiring entities that qualify as investment entities to fair-value investments in subsidiaries instead of consolidating the subsidiaries' results on a line-by-line basis.

Under international accounting standards, establishing that a subsidiary relationship exists goes beyond assessing whether there is greater than 50 percent ownership of the investee company and uses the concept of control as the determining factor in assessing whether an investee is a subsidiary. Control is normally established when all the following elements for a parent entity are present:

- Exerts power over its investee company
- Has exposures or rights to variable returns of the investee

- Has the ability to use these powers to affect the return expected (to propose dividends)

Within private equity, most investments in portfolio companies would meet the criteria for control (generally, PE houses have majority ownership of portfolio companies and the ability to influence the returns). Therefore, they would otherwise be required to consolidate their investments under IFRS.

However, entities have an exemption from consolidation when they meet the definition of an "investment entity." IFRS 10, the standard that deals with consolidated financial statements, requires investment entities to fair-value investments even if control is established if the parent entity meets the following criteria:

- It obtains funds from one or more investors for the purpose of providing those investor(s) with investment management services.
- It commits to its investor(s) that its business purpose is to invest funds solely for returns from capital appreciation, investment income, or both.
- It measures and evaluates the performance of substantially all of its investments on a fair value basis.

Further guidance is provided for other common characteristics of investment entities, but these are not required to meet the investment entity criteria.

When these conditions are met, an entity *must* fair-value the investments it controls. Note that the parent entity needs to be considered when determining whether the investment entity exemption can be used. The investment entity definition in IFRS was developed as part of a convergence project between IASB and FASB (the U.S. GAAP accounting setters).

Application of the Investment Entity Exemption to Infrastructure Funds

The previous analysis might affect some funds that hold controlling interests in infrastructure projects. If the purpose of the fund is solely to maximize returns for investors and it has no significant involvement in managing the construction, operational, or maintenance activities of the underlying infrastructure projects, the fund must consider whether it meets the definition of an investment entity.

In the context of an infrastructure fund, it is important to understand how the underlying projects are managed (for example, understanding who is responsible for managing the construction, operational, maintenance, and life-cycle activities). If the fund is substantially involved in the day-to-day management of the infrastructure projects in which it has invested, its business purpose is not necessarily to invest solely for capital appreciation or investment income. Therefore, it might not meet the definition of an investment entity. In such a case, it would continue to be required to consolidate its subsidiary investments.

IFs have previously made use of existing guidance in IFRS for investments in joint ventures and associates. The guidance permitted entities considered to be venture capital organizations, mutual funds, unit trusts, and similar entities to fair-value their investments under IFRS 9.

Investment Strategy

When the IF has a single investment strategy, this is straightforward: The consolidated results reflect the operations of the underlying investment. When the IF has multiple investments in different industries (for example, a toll road, a utility company, and a PFI project for a school), the consolidation of such entities might be less meaningful to investors because the subclasses of assets will have different business models and risk profiles. These types of multi-asset IF funds are less common in practice.

IFs that have prepared consolidated accounts will normally disclose investments on a pro forma investment basis (that is, they will provide pertinent details about the investment to investors) in the fund managers' report. This gives investors an alternative and often more meaningful representation of the IF's net asset value.

Service Concession Arrangements

IFs also might be consolidating investments in PPP project companies with service concessions. This normally requires determining the accounting treatment under IFRIC 12, "Service Concession Arrangement." A service concession arrangement is a contract between the owner of an asset and the operator of the asset. IFRIC 12 gives guidance on the accounting by operators for public-to-private service concession arrangements. Specifically, IFRIC 12.15 states that an operator that provided construction or upgrade services should recognize consideration for those services either as a financial asset or as an intangible asset. IFRIC 12.16 states that an operator should recognize a financial asset when it has "an unconditional contractual right to receive cash or another financial asset" because such an agreement is enforceable by law. If an operator has the right to charge for use of the service, it should record the consideration as an intangible asset.

This section describes the key factors in determining whether the investment entity exemptions apply, but it is not an exhaustive list of the criteria. Because of the complex nature of applying the investment entity exemption, consult with professional advisers to determine the correct accounting and financial reporting treatment. In practice, correct application of the guidance relies on assessment and judgment on a case-by-case basis by looking at the facts and circumstances of a wide variety of factors to determine the correct treatment. For example, you must consider whether any entities in the group provide investment-related services because this can have an impact on the appropriate accounting treatment.

However, this determination and analysis is not specific to infrastructure funds (and it applies to all investment entities that report under IFRS); it is a key consideration and area of judgment.

Divergence between IFRS and U.S. GAAP

U.S. GAAP has no specific guidance on the accounting for service concession arrangements. Some entities account for these contracts as leases because of the terms of the contracts. ASC 840-10-25-25 provides general guidance on leases of certain property owned by a governmental unit or authority. In the absence of clear U.S. GAAP guidance on this issue, other entities account for their rights in service concession contracts as intangible assets, financial assets, or both (see IFRIC 12, "Service Concession Arrangements"). Therefore, the financial accounting results can differ in accordance with the guidance applied.

Although U.S. GAAP does not currently preclude an entity from reaching the same conclusion it would reach under IFRSs, accounting differences can arise because the guidance in IFRSs is not currently included in U.S. GAAP. This potential difference can be eliminated because it is currently a topic for discussion for standard setters.

Investment Company Exemption

Under U.S. GAAP, similar exemptions apply to investment companies as to investment entities under IFRS (see the earlier section "Consolidation and the Investment Entity Exemption"). The two standard setters worked together to develop a consistent approach to this concept. The definition is similar to the amended IFRS criteria for an entity to qualify as an investment company under ASC 946, but differences between the two standards remain.

The key difference between IFRS and U.S. GAAP is how a noninvestment company parent should account for its interest in an investment company subsidiary. For example, consider a bank's investment arm—the bank wouldn't meet the definition of an investment entity, but the investment arm subsidiary would.

Figure 13.2 illustrates consideration of the parent entity and describes the situation in which the parent is an investment entity and a noninvestment entity. When the parent is an investment entity, it is able to fair-value its investment in the subsidiary (which is also an investment entity); the subsidiary then would fair-value the investments it holds. When the parent is noninvestment entity, it cannot take the investment entity exemption under IFRS and thus would consolidate both the investment entity subsidiary and the underlying portfolio companies.

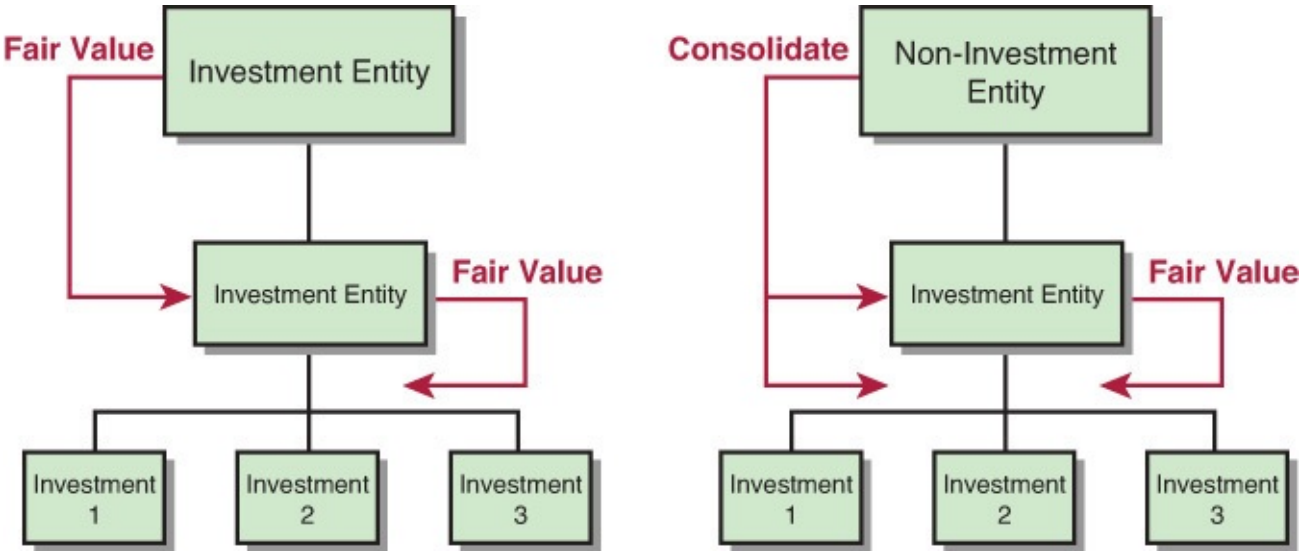


Figure 13.2 Investment entity fair value accounting versus noninvestment entity consolidation accounting

Under U.S. GAAP, a noninvestment company parent can mirror the accounting applied by an investment company subsidiary in consolidation and measure investments at fair value.

For example, this could impact a bank (a non-investment entity parent) that is a sponsor of an infrastructure fund that meets the definition of an investment entity. Under IFRS, although the infrastructure fund will measure investee companies at fair value, the bank is required to consolidate controlled investees of an investment entity subsidiary.

Nonstatutory Financial Statements

As with other PE funds, infrastructure funds that are not required to prepare statutory accounts tend to opt to not consolidate the investments in entities that it controls. Instead, IFs measure those investments at fair value, with changes in fair value recognized in profit or loss. This is the case for funds set up as limited partnerships that do not meet the definition of a qualifying partnership under UK law based on the underlying EU rules. These nonqualifying partnerships generally prepare accounts in accordance with accounting policies set out in the partnership agreements instead of following a recognized accounting framework such as IFRS. As a result, the accounts are prepared for the benefit of investors who are more interested in the fair value of investments than in their underlying trading and assets.

However, where they meet the conditions for investment entities, investments must be fair-valued. Where these conditions are not met and control of subsidiaries is established, consolidation is required (see Chapter 9, "Consolidated Financial Statements," for additional details and further explanation on consolidation).

Investment Valuations

Where a parent entity has concluded that it is an investment entity under IFRS (or an investment company under U.S. GAAP), the accounting standards require investments to be recorded in the financial statements at fair value. IFRS 13 defines fair value as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.” This is in line with the definition under ASC 820 (for U.S. GAAP reporter) in which *exit price* rather than *market price* forms the basis for fair value.

To determine fair value, the reporter needs to use valuation methodologies. IFRS 13 recommends that valuation techniques should be “appropriate” to the circumstance and advises maximizing the number of observable inputs while minimizing the unobservable inputs.

The methodology that is generally adopted by PE funds (including IFs) to determine a fair value for their investments is consistent with the methodologies prescribed in the International Private Equity and Venture Capital (IPEV) valuation guidelines. The discounted cash flow (DCF) methodology is the most appropriate basis for valuation used when looking at IFs. This valuation can be supported by a cross-check using another valuation benchmark that is relevant to the particular investment, such as using an earnings multiple or regulated asset based multiple.

A DCF model looks at predicted cash flows over the life of the asset (both cash inflows and outflows), discounts these cash flows at the appropriate risk-adjusted rate (discount rate), and discounts any residual value in the asset at the end of the term to calculate the net present value (NPV) of the investment. The DCF model is most appropriate, given that many infrastructure assets have a predictable cash stream that can be estimated and then used to calculate a fair value.

Determining the discount rate is a matter of judgment. The weighted average cost of capital (WACC) can estimate the cost of capital and determine a suitable discount rate.

Traditional buyout PE funds predominantly use a multiples-based approach to value trading entities, but DCF models are more appropriate within the infrastructure industry. Consider the IPEV guidelines:

> This [DCF] valuation technique would generally be applied to Investments with characteristics similar to Debt.

As noted, the regular payments and lower level of risk give these asset classes similar characteristics to debt.

Performance Measurement for IFs

To assess performance of the returns made by the fund, internal rate of return (IRR) is still the most common method (as with traditional PE). It considers the cash flows (both ongoing income gains and any capital appreciation on exit) and calculates a return on investment. However, cash yield is becoming more prevalent in the industry because the investment horizon for this asset class is longer than for traditional PE investments. This reflects that, for many investors, cash yield is king; investors are looking to service long-term liabilities with steady cash return. For a simple example of the cash return, imagine that you have investment of £100,000 in an asset that is netting £500 per month. The annual income is £6,000, so the cash yield on the investment is 6 percent.

Summary

Infrastructure assets have development as a separate asset class in their own right and are still viewed as an attractive option to secure a steady stream of income over a long term. Although infrastructure assets have clear similarities to typical PE funds, this asset class provides characteristics that are unique and uncorrelated to other asset classes.

About the Authors

Yasir Aziz is a senior manager in the Deloitte Investment Management and Private Equity Audit group in London. He has more than seven years' experience in investment management providing both advisory and assurance services, focusing on private equity. His client base is made up of both European and U.S. private equity groups and range from traditional buy-out private equity funds to debt funds, venture capital, hybrid PE structures, and others. The clients he advises are large mature multinational organizations who have raised multiple to start-up funds looking to raise their first fund.

Yasir is a qualified chartered accountant with the Institute of Chartered Accountants in England and Wales and specializes in the audit of private equity funds and corporates, including providing regulatory reviews and controls assurance engagements within the industry. Yasir also has particular experience in performing valuation reviews, including review of valuation policies and best practices.

Ramon Louw is a senior manager in the Deloitte Investment Management and Private Equity Audit group in London. He has more than eight years of experience in financial services and has focused on providing assurance and advisory services within the private equity industry. He holds a Chartered Accountant (South Africa) from the South African Institute of Chartered Accountants and is also a Chartered Alternative Investment Analyst.

Both Yasir and Ramon have extensive experience in leading engagements with some of the most prominent private equity groups in the UK and internationally, where they have provided assurance services and advised on private equity structures for UK, European, and U.S. PE houses. They also have wide experience in financial reporting in UK, U.S., and International standards, corporate governance in asset management and alternative asset management, and advising on the impact of accounting regulations on private equity.

14. Private Debt Funds

Roland Mills and Stephanie Coxon, PwC

In this chapter, we discuss:

- How debt funds differ from private equity funds
- Liquidity, risks, and rewards associated with differing debt instruments
- Secured and unsecured debt
- Senior debt
- Mezzanine debt
- Corporate bonds
- Asset-backed securities
- Infrastructure debt
- High-yield securities
- Distressed debt
- How debt funds are structured
- Debt funds and financial reporting
- Differences between IFRS and U.S. GAAP as a debt fund's financial reporting basis
- Measuring debt instruments at fair value and at amortized cost

Debt Funds in General

Debt funds are funds for which the investment objective is to invest in debt. They are generally preferred by investors who want a steady regular stream of income rather than growth of capital. These funds have become increasingly popular because of the large reduction in global interest rates and increased volatilities in the equity markets. They have the following characteristics:

- Debt funds typically pay periodic dividends/distributions that represent the interest payments received by the underlying investments as well as periodic realized capital appreciation.
- The debt in which debt funds generally invest may have a level of priority similar to that of the equity of the investee company/issuing institution.
- Debt funds can invest in different types of debt instruments, all of which function differently and have a different risk profile. As a result, their returns vary with the degree of risk exposed by each instrument.
- Debt funds also offer a diversified alternative to investing directly in bonds, which themselves can carry a large minimum investment level.

How Debt Funds Differ from Private Equity Funds

Debt funds seek to invest in the debt of an issuer only. Private equity, on the other hand, generally seeks an equity element that offers interaction with the management of an entity and representation as a shareholder of the issuing entity, in addition to a debt element that is less subordinate to the equity stake taken.

Private equity fund managers are typically seeking to use their skills and experience to enhance the performance of the company in which the fund they manage owns a stake, either by directing the operations through board representation or by providing advice to the board and management. The private equity fund manager is involved in the investee company at an operational level. Debt funds, by contrast, seek to be a finance provider to entities and do not get involved in the operational aspect of the issuer—they leave that to management and its advisers.

Sometimes a liquidity event occurs that involves converting senior or secured debt into equity of the issuer in order to facilitate additional financing by the issuer. In these situations, common in recent years, debt funds can end up having their debt instruments replaced by ordinary equity investments of the issuer. This can make a large difference in terms of the debt fund being able to maintain its planned liquidity distributions.

> *Debt funds generally seek to produce more regular cash flows and generate capital appreciation or depreciation as a result of the credit risk taken on with the issuing counterparty of the debt.*

Figure 14.1 provides a brief overview of how to consider the liquidity of instruments.

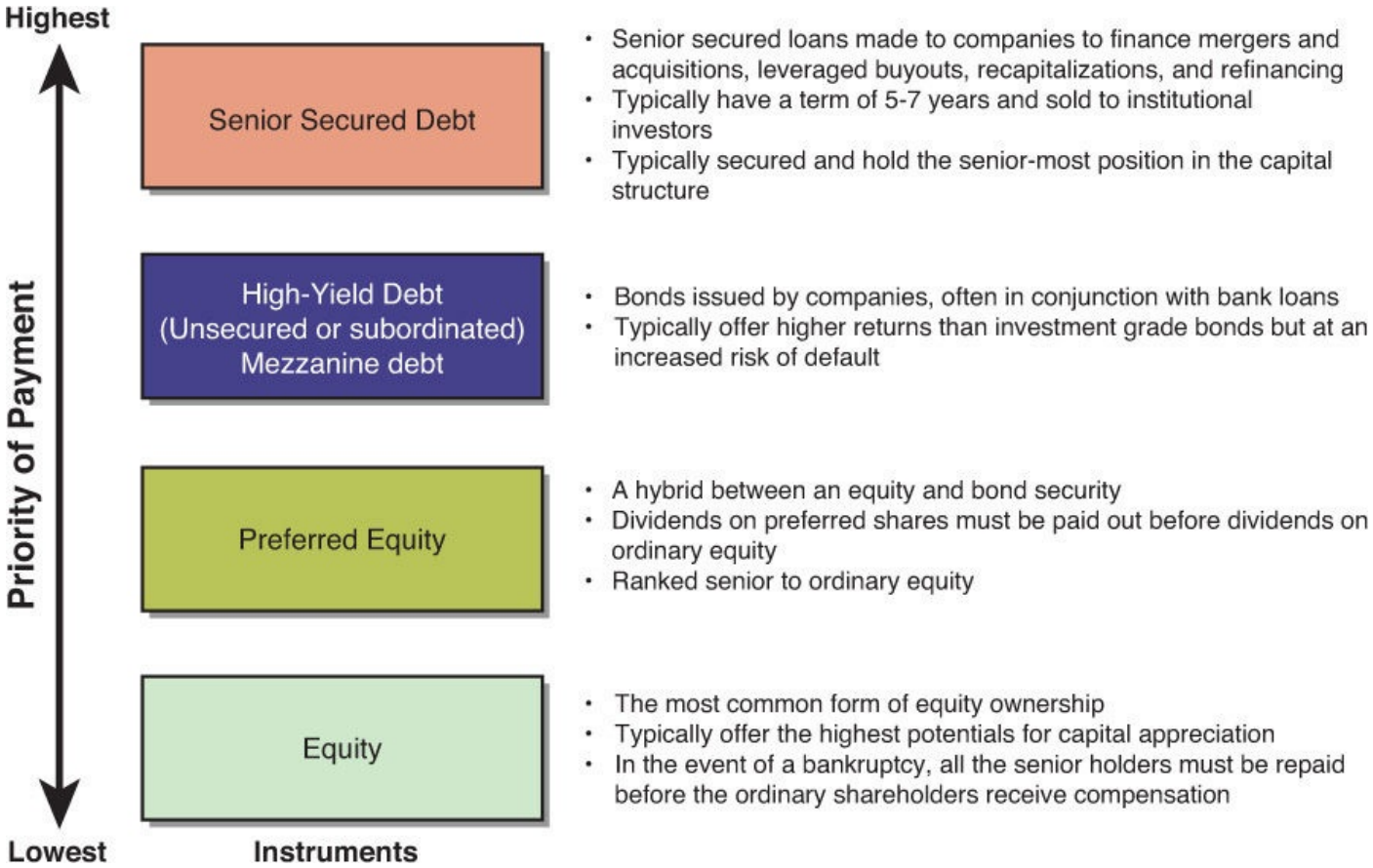


Figure 14.1 Liquidity of instruments

Liquidity, Risks, and Rewards Associated with Differing Debt Instruments

A wide array of debt funds exist, ranging from these two extremes:

- Funds that primarily invest in safe, high-credit-rated sovereign debt instruments that provide a regular, albeit lower, coupon
- Riskier funds that specialize in investing in distressed debt, with large discounts available on the face value of the debt because of poor credit ratings and a coupon that is not paid regularly or that is being rolled up into the value of the instrument because of underlying liquidity problems of the issuer

This asset class can be widely diversified. As a result of global banks' lack of appetite for issuing new debt, debt funds have become very popular.

This section discusses some of the debt instruments commonly used in debt funds issued in recent years.

Secured or Unsecured

A debt instrument can be secured or unsecured. Unsecured debt often is referred to as debentures; interest payments and return of principal are guaranteed only by the credit of the issuing company. If the company fails, you might get little of your investment back.

On the other hand, a secured debt instrument is a bond in which the company pledges specific assets to the debt instrument holders if it cannot repay the original debt obligation.

Senior Debt

Senior debt, often referred to as senior loans, is debt that takes priority over other unsecured or otherwise more "junior" debt owed by the issuer. As its name suggests, senior debt has greater seniority in the issuer's capital structure than subordinated debt. If the issuer of the debt goes into liquidation, senior debt must (theoretically) be repaid before other creditors receive any payment. Senior debt is generally secured with specific collateral, giving lenders a claim on the assets that is senior to the claims of unsecured creditors.

Senior debt is generally made to non-investment-grade borrowers. It typically ranks senior to the high-yield debt in the borrower's capital structure and pays a floating-rate cash coupon. As a result, such secured loans have the potential to provide downside mitigation, lower volatility, and better diversification relative to high-yield debt. Additionally, their typical floating-rate coupons can benefit investors in a rising rate environment and can help mitigate inflation risk. Senior secured debt often comprises both a senior element and a subordinate element, commonly referred to as "senior" and "junior" debt, respectively. Junior debt ranks behind senior debt in terms of access to collateralized security.

These loans are typically acquired at origination (at a debt auction by the issuer or syndication of the debt by current senior debt holders) or on the secondary market. This debt can occasionally be originated between the borrower and the holder themselves in a private transaction.

Mezzanine Debt

Mezzanine debt is subordinated debt that is generally issued in private placements in connection with an equity security (for example, with attached warrants or co-investment rights), or it can be converted into equity securities.

Structurally, mezzanine debt is subordinate in priority of payment to senior debt, but senior in credit rank compared to preferred or ordinary equity of the issuer. Mezzanine debt instruments are usually unsecured.

Mezzanine lending is related to the volume of financial sponsor-driven transactions. This form of financing is most frequently utilized in the buyout of middle-market and smaller public or private companies.

Corporate Bonds

Corporate bonds commonly refer to the debt issued by companies, as opposed to sovereign states or commercial paper issued by credit institutions. A company can issue bonds just as it can issue equity. Large corporations have a lot of flexibility in how much debt they can issue: the limit is whatever the market will bear. These bonds can be categorized as follows:

Short-term corporate bond	Less than 5 years
Intermediate corporate bond	5 to 12 years
Long-term corporate bond	More than 12 years

A company might also find it significantly more advantageous in terms of ability, covenant compliance, and so on to raise debt through a private issuance instead of borrowing from a large credit institution.

Corporate bonds are characterized by higher yields because there is (arguably) a much greater risk of a company defaulting than with a sovereign/government bond. The upside is that corporate bonds can also be the most rewarding (in terms of coupon and discount to face value) fixed-income investments because of the risk the investor must take on.

The company’s credit quality is very important:

- The higher the quality, the less the likelihood of default
- The lower (if any) the discount to face value may be, the lower the interest rate that the investor receives

Other variations on corporate bonds include convertible bonds, which the holder can convert into equity instead of repaying, and callable bonds, which allow the company to redeem the debt instruments before their stated maturity.

Asset-Backed Securities

Asset-backed securities are debt instruments that are backed or collateralized by specific pools of (typically) financial assets, such as mortgages or loans. The coupons and principal payable, as well as the risk profile of the debt portfolio attributable to the asset-backed debt instrument holders, are derived directly from the underlying pools of assets. Individual asset-backed security deals typically cover specific coupon-bearing asset classes, including these:

- Residential mortgages
- Commercial mortgages
- Auto loans
- Credit cards
- Loans to companies
- More generic classes, backed by less liquid, non-coupon-bearing assets (although these are less common)

The relevant pools of assets that back these instruments typically are originated by a bank or financial institution. The debt funds' acquisition of such asset-backed securities is generally structured so that the asset-backed securities are issued by and the underlying pool of assets are acquired by a legal entity that is independent and segregated from the originating bank or financial institution. Although the bank or financial institution might have a continuing role to play in servicing the underlying financial assets, the underlying pool of assets is protected through this structure from external events that might impact the originating banks or financial institutions, such as bank bail-out regulations.

Asset-backed securities are typically structured into different tiers of risk. Broadly speaking, the more senior the tier, the lower the risk and lower the coupon. In this way, the more junior tiers act as loss absorbers for the more senior ones.

Asset-backed securities can encompass a full spectrum in terms of credit quality, from instruments with investment-grade credit ratings (within the range of AAA to BBB-) to those with non-investment-grade credit ratings (within the range BB+ to C). This can even include instruments with no assigned credit rating.

Infrastructure Debt

Infrastructure debt is the fixed-income component of infrastructure assets. Whereas general asset-backed securities are generally backed by a pool of financial assets, infrastructure debt/asset-backed securities are backed by a specific infrastructure project.

Debt instrument holders in infrastructure securities seek the coupon these securities offer, based on the income generated by the specific infrastructure project (such as rates from a water utility). Capital repayment is often seen as more secure, in that these large projects are fundamental to a geographic region's support of the local infrastructure.

Debt instrument holders in this strategy should be able to assess a project's long-term viability and understand the complex credit risk that can be involved with such

investments, given the fundamental service the project provides and the often large-scale operating capital requirements of such projects.

High-Yield Securities

High-yield securities are general securities that are rated lower than Baa by Moody's or that are equivalently rated by S&P or Fitch and are sometimes referred to as "junk bonds."

Investing in these securities involves additional risks than with higher-credit-rated, fixed-income securities. Because of the inherent risk or the subordination of such instruments against the other securities issued by the issuers, these instruments generally carry high coupon rates and are often issued or traded at significant discounts to the face/nominal value of the instrument.

Although they offer a greater potential opportunity for capital appreciation and higher yields, high-yield securities typically entail greater potential price volatility and can be less liquid than higher-rated securities. The payment of interest also might not be as regular because this class of debt is often serviced last by the issuers; they generally face little penalty for defaulting on or deferring interest payments.

High-yield securities can be regarded as predominately speculative with respect to the issuer's continuing ability to meet principal and interest payments. They might also be more susceptible to real or perceived adverse economic and competitive industry conditions than higher-rated securities. Issuers of these securities in default might fail to resume principal or interest payments, in which case a fund could lose its entire investment.

Distressed Debt

Distressed debt generally refers to the financial obligations of an issuer with these characteristics:

- Already in default
- Under bankruptcy protection
- In distress and heading toward default

Distressed debt mostly trades at a significant discount to its par value and could present investors with compelling opportunities to profit if there is a recovery in the business.

Typically, when a company experiences financial distress or files for bankruptcy protection, the original debt holders sell their debt securities or claims to a new set of investors at a significant discount. These new investors often try to influence the process in which the issuer restructures its obligations or implements a plan to turn around its operations.

Distressed debt investors might also inject new capital into a distressed company in the form of debt or equity to prevent the company from going into liquidation or to aid the company in carrying out a restructuring plan. Investors in distressed debt typically must not only assess the issuer's ability to improve its operations, but also ascertain whether the restructuring process is likely to result in a meaningful recovery of the investor's class of

instruments over which they have claim. This often involves a private equity type evaluation of the business as well.

Distressed debt can be performing or nonperforming:

- Performing debt refers to debt that maintains its contractual obligations relating to interest or principal payments (this can refer to debt that has yet to default or even debt that is under bankruptcy protection).
- Nonperforming debt refers to debt that does not continue to meet its financial obligations.

Distressed debt can often be converted into equity if the issuer defaults (or defaults further). As a result, a debt fund invested in distressed debt could end up with a private equity type of stake in its portfolio as a result of such a default conversion. The risks now carried by the investor will be those generally associated with an equity instrument. The investor will now have no entitlement to income, except through dividend receipts, and no right to receive capital repayment, unless the equity stake can be sold by the investor—which may prove difficult if the equity of the entity in which the stake is held is listed on a recognized stock exchange.

Debt instrument investments can take on various forms and structures and can range from the simplest senior-ranking liquid instruments that carry low levels of credit default and liquidity risk; to those that carry high-credit risk, are illiquid, are subordinate to other instruments, or are backed or secured by a portfolio of assets whose fair value can be volatile or indeterminable.

How Are Debt Funds Structured?

The structure of a debt fund very much depends on the target investor base, the investment objective of the debt fund itself (the credit quality of investments into which the fund will invest, targeted maturity [if any]), and the liquidity profile of the product on offer (coupon generating and cash paying, regularity, and so on).

The initial question is whether the fund will be open- or closed-ended:

- **Open-ended—**Subject to regular subscriptions and redemptions
- **Closed-ended—**Limited life and/or restricted amount of issued capital if listed

This decision largely is driven by the liquidity ability to value the investments and the target investor base.

Debt funds can quite often take a totally private form, using a structure such as a limited partnership with a limited life (such as six years). Investors pledge a targeted commitment level to the debt, which then identifies opportunities for investing that are within the investment mandate.

In the initial years, commonly referred to as the investment period, the income streams generated by the debt instruments held in the debt fund are generally recycled and reinvested by the fund (in lieu of calls on the capital commitments assuming an LP structure) instead of being distributed. This structure lends itself to beneficial commercial

terms for the fund and makes it a tax-efficient vehicle for tax-paying investors.

In addition, debt funds are generally structured as limited-life vehicles, which generally are shorter-lived than their private equity equivalents. This limited life offers the investors some certainty and prediction of the anticipated cash flow cycle of the fund and the expected performance of the debt fund manager.

On the other hand, “listed” debt funds have also become quite popular. The fund is set up as a corporate vehicle (closed-ended) and raises funds through a public offering of its securities (generally equity securities) through a recognized exchange. These securities offer similar liquidity: The fund seeks to pay regular dividend streams based on coupon income stream received from the underlying debt instrument portfolio in which the public offering proceeds are invested. In addition, by being a listed security, the holder is able to take advantage of capital appreciation/credit enhancements of the underlying debt portfolio by trading the listed securities through the exchange, if liquidity exists in the listed securities. It is quite common for such listed securities to trade at a discount to the net asset value (as calculated by the fund using benchmark industry valuation techniques—see the section “Measuring Debt Instruments at Fair Value”). This NAV/listed price discount is often actively managed by those responsible for managing the fund through limited share buy-back programs.

Another popular mechanism in debt funds is the use of tranches of debt to differentiate between liquidity and credit risk within the portfolio. These mechanisms are widely used in collateralized debt and loan obligations (CDOs and CLOs, respectively). Senior tranches within such products or portfolio allocations are debt instruments that carry the lowest risk of default, are liquid (in that the coupon is being paid), and, as a result, have the lowest coupon rate and capital appreciation (if any) upside. The bottom line is that an investor’s money is relatively safe in this tranche because the junior tranches will bear any initial default or credit rating degradation. The more junior tranches have the lowest credit rating in the portfolio, have typically been acquired at large discounts, have the highest risk in terms of liquidity (or illiquidity of coupon payments), and carry the highest coupon rates and capital appreciation upside. These tranches are the initial loss absorber for any events of default in the portfolio or capital depreciation from credit events. Investment in junior tranches is often seen as a highly speculative position.

The limited partnership or corporate vehicle set as the fund typically holds its investments through a tax-neutral jurisdiction, to mitigate withholding tax incurred on interest at the source. Such structuring is important because a compromise at this level could lead to capital gains from the debt portfolio being treated as income for tax purposes. This is increasingly important for debt funds: Traditionally, debt funds generate income returns in the form of the regular coupon payments, which differs from the private equity equivalents that typically do not receive income from investments until a realization event.

Debt Funds and Financial Reporting

The type of financial reporting debt funds use in their financial statements depends on these factors:

- The legal structure of the debt fund

- The investment objective of the debt fund
- The investors in the debt fund
- The regulatory environment to which the debt fund is exposed

In recent years, private debt funds structured as limited partnerships have used a limited partnership agreement (LPA) basis of preparation,[1] in which the LPA sets out the financial reporting, accounting, and valuation policies and procedures that the fund will report against. These might or might not be based on generally accepted accounting principles (such as IFRS, U.S., or UK GAAP) and on generally accepted valuation methodologies in which fair value is applicable.

Private debt funds structured as companies or public debt funds are required to present their financial statements in accordance with generally accepted accounting principles (typically IFRS, U.S., or UK GAAP, although those listed in Europe might find themselves restricted to IFRS as endorsed by the E.U.).

The exact accounting policies and approach to fair value, if any, are determined partly by the strategy of the debt fund and partly by the accounting policy choices that those charged with corporate governance are able to make.

Next we explore some of the more fundamental policy choices typically seen in various types of debt funds, as far as IFRS and U.S. GAAP are concerned. UK GAAP will be replaced beginning on or after January 1, 2015, and the following material will be generally applicable under this "new" UK GAAP as well.

Using IFRS or U.S. GAAP As a Debt Fund's Financial Reporting Basis

Under current U.S. GAAP, various specialized pronouncements[2] provide quite specific guidance for the classification and measurement of financial assets. IFRS has significantly less bespoke standards set out in four standards[3] currently in issue that deal with the classification and measurement of financial assets and require that financial assets be classified in one of four categories[4]:

- Assets held for trading or designated at fair value, with changes in fair value reported in earnings
- Held-to-maturity investments
- Available-for-sale financial assets
- Loans and receivables

The specialized U.S. guidance and the singular IFRS guidance in relation to classification can drive differences in measurement (because classification drives measurement under both IFRS and U.S. GAAP).

U.S. GAAP

Under U.S. GAAP (ASC320), the legal form of the financial asset drives classification. For example:

- Debt instruments that are securities in legal form are typically carried at fair value under the available-for-sale category (unless they are held to maturity), even if there is no active market to trade the securities.
- Debt instruments that are not in the form of a security (for example, a corporate loan) are accounted for at amortized cost even though both instruments (the security and the loan) have similar economic characteristics.

IFRS

Under IFRS (IAS39 or IFRS 9 *if early adopted*), the legal form does not drive classification of debt instruments. Instead, the nature of the instrument (including whether there is an active market) is considered, along with whether it can be considered to be an originated loan or receivable. A financial asset can always be designated as at fair value through the profit or loss, so these are the two most noted treatments in IFRS debt funds.

Differences between IFRS and U.S. GAAP

Additional differences involve debt instruments that are carried at amortized cost. Both IFRS and U.S. GAAP use the effective interest method to calculate amortized cost and allocate interest income over the relevant period. The effective interest method is based on the effective interest rate calculated at initial recognition of the financial instrument, however:

- Under IFRS, the effective interest rate is calculated based on estimated future cash payments or receipts through the expected life of the financial instrument.
- Under U.S. GAAP, although certain exceptions apply, the effective interest rate generally is calculated based on the contractual cash flows through the contractual life of the financial assets.

For available-for-sale debt instruments, the impairment models for financial assets can result in different impairment triggers and different impairment measurement criteria. In considering whether a decline in fair value is other than temporary, the following apply:

- U.S. GAAP looks to (1) management's intent and ability to hold the security and (2) expectations of recovery of the cost basis in the security. The impairment trigger drives the measurement of the impairment loss.
- Under IFRS, the impairment triggers for available-for-sale debt instruments and loans and receivables are the same; however, the available-for-sale impairment loss is based on fair value, whereas impairment of loans and receivables is calculated by discounting estimated cash flows (excluding credit losses that have not been incurred) by the original effective interest rate.

Further differences apply under the available-for-sale-debt instrument classification. Under U.S. GAAP, the total change in fair value of available-for-sale debt securities (net of associated tax effects) is recorded within other comprehensive income (OCI). Under IFRS, the total change in fair value is bifurcated, with the portion associated with foreign exchange gains/losses on the amortized cost basis separately recognized in the income statement. The remaining portion of the total change in fair value is recognized in OCI, net

of tax effect.

Measuring Debt Instruments at Fair Value

As noted earlier, both U.S. GAAP (under the “held for trading” or “available for sale” financial asset classifications) and IFRS (in IAS39, under the “at fair value through profit or loss” and “available for sale” categories; or in IFRS 9, under the “at fair value through profit or loss” category) have recognition and measurement criteria that would allow for (strategy and investment objective of the fund permitting) the portfolio of debt instruments to be initially recognized and then subsequently measured and presented at fair value. This is generally applied by debt funds when the strategy is to “trade” debt (or, under U.S. GAAP, where debt instruments are “debt securities” as defined) when and if opportunities arise so that the portfolio of debt instruments is actively managed to derive the best return and capital appreciation opportunities for the investors in the debt fund itself.

Fair value is defined under, and should be recognized and measured in accordance with, IFRS 13, “Fair Value” (for IFRS), and with ASC 820, “Fair Value Measurement and Disclosures” (for U.S. GAAP). These standards result in very similar results when assessing the fair value of debt instruments, a result of the IASB’s and FASB’s (the respective accounting standard setters for IFRS and U.S. GAAP) continued focus on convergence between IFRS and U.S. GAAP.

In applying these respective standards, the valuation models used and subsequent required disclosures depend on where the fair value assessment that is made sits in respect of the fair value hierarchy.

The three-level fair value hierarchy ranks the valuation of instruments based on observability in the market of the inputs used in the valuation model:

- The most transparent price is the price of a debt instrument listed on an actively traded exchange (at which the debt fund could execute the trade). This is referred to as a valuation using Level 1 inputs.
- Valuations that make use of publically available broker quotes or prices for the debt instrument directly or indirectly, or quoted prices where trading activity of the debt instrument is inactive on the exchange, are considered to be less transparent and liquid. They are referred to as valuations using Level 2 inputs.
- The most nontransparent valuations are those for which a valuation technique/model is selected by the preparer of the valuation, and inputs into the valuation model are based on and adjusted for information about the debt instrument and its issuer that are not observable in the market. These are referred to as Level 3 prices.

Where the underlying debt instruments within a debt fund’s portfolio are Level 1 (listed), fair-valuing these is as simple as obtaining the quoted price per the exchange as of the reporting date (bid, mid, or ask, or anywhere in the range, as determined appropriate by the valuation preparer or the policy of the fund) and applying that investment held in the portfolio.

Level 2 fair values tend to be inactive exchange prices that are used or where there are observable transactions in the market in the same debt (or very similar debt in terms of

credit rating, maturity date, coupon rate, and so on) but which are not traded through an exchange as such.

Level 3 fair values are those fair value models in which estimates and judgments are made over the suitability of inputs and adjustments to those inputs in correlating the fair value to that of a listed debt instrument (for example). The generally accepted model for evaluating the fair value of most debt instruments is usually a form of the discounted cash flow model (DCF model), which seeks to evaluate the net present value of the series of expected cash flows that will be generated by the debt instrument. The expected cash flows are discounted by a rate that is determined by risk-adjusting the risk-free market rate for a premium (or discount) to reflect the uncorrelated risk between risk-free debt instruments (typically sovereign debt) and the debt instruments being valued. Significant judgment and estimates can be made in these models regarding the timing and probability of the series of cash flows, the choice of risk-free rate, the assessment of the premium required with that risk-free rate, and so on—hence the additional disclosures both IFRS and U.S. GAAP require for Level 3 investments.

The challenge in providing financial reporting at fair value is often the level of detail in the disclosure requirements of IFRS and U.S. GAAP, respectively, in helping the users of the financial statements understand the risks inherent in the debt instrument portfolio upon which they need to make investment decisions or other decisions related to the debt fund.

Measuring Debt Instruments at Amortized Cost

This recognition and measurement treatment is used in both U.S. GAAP (non-debt security debt instruments) and IFRS (under IAS 39, “held-to-maturity” debt instrument assets and “originated loans and receivables”; and, under IFRS 9 (paragraph 4.1.2). In IFRS 9, the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows, and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding).

Typically, these are debt instruments within a fund’s portfolio that are intended to be held for the contractual life thereof. The fund’s objective is not necessarily linked to any capital appreciation objectives (such as an objective focused on a lower-risk, quality portfolio delivering regular interest payments/distribution streams) or instruments designated as originated debt: The fund is an initial counterparty to the issuer in the original issuance of the debt, and the intention of the debt fund (in delivering the same objective) is to hold this debt until the debt matures. The debt fund generally does not seek to trade this debt because the intention is to realize the asset through receipt of the coupon payments and repayment of the principal at maturity date.

Challenges

Serious consideration and challenge are often posed to the debt funds following these measurement criteria for their debt instrument portfolio. The rules can be complex (particularly under IFRS). For instance, although the debt fund might have the objective to hold an investment to maturity, it might also have a minimum credit rating criteria that, if breached, could force it to sell an investment that might (not *always*) then taint the remainder of the held-to-maturity portfolio of debt instruments and require them to be fair-valued going forward. In addition, a fund must be able to hold the investment to maturity. Therefore, if the fund was open-ended (that is, faced subscriptions and redemptions) or the maturity of a limited-life fund was shorter than that of the debt instrument's maturity, consideration of the debt fund's ability to comply with the held-to-maturity requirements of IFRS would need to again be seriously considered.

As noted earlier, U.S. GAAP's challenges lie in determining whether each debt instrument held in the portfolio is a "debt security" in accordance with ASC320.

When recognizing and measuring debt instruments under this approach, the debt instruments are initially measured at cost when acquired and then subsequently at amortized cost using the effective interest method.

Amortized cost is the amount at which the debt instrument is measured at initial recognition, minus principal repayments and plus or minus any unamortized original premium or discount. Take note of the differences between U.S. GAAP and IFRS in determining the cash flows and duration thereof to be assessed.

The *effective interest rate* in a financial instrument is the rate that exactly discounts the expected cash flows associated with the debt instrument through maturity or the next repricing date to the net carrying amount at initial recognition (a constant rate on the carrying amount). It is effectively the internal rate of return of the debt instrument for that period.

Effective Interest Rate: An Example

The effective interest rate is the rate of return that provides a level yield on a financial asset through to maturity date (or the next repricing date).

Consider the following example:

A fund buys a bond with a maturity value of £100,000 and an interest coupon of 5 percent, payable annually in arrears. The bond has exactly 5 years to maturity. The fund buys the bond at a discount of £8,212—in other words, it pays £91,788.

The cash flows from this bond are as follows:

Period	Cash Flow
0	–91,788
1	5,000
2	5,000
3	5,000
4	5,000
5	105,000

Putting these figures into the IRR function gives an effective interest rate of 7 percent.

This means that, in the first year, the fund's financial statements will show debt instrument income of £6,428 (£91,788 × 7%) on the bond investment. £5,000 of this represents the interest (coupon) received: The remaining £1,428 represents amortization of the purchase discount. Thus, at the end of year 1, the bond (on an amortized cost basis) will be shown on the balance sheet at £93,216 (£91,788 + £1,428).

Over the 5-year period, this position accumulates as follows:

Period	Credit to P&L	Amortization Amount	Carrying Value
0			91,788
1	6,428	1,428	93,216
2	6,528	1,528	94,744
3	6,635	1,635	96,379
4	6,749	1,749	98,128
5	6,872	1,872	100,000

The computation of effective interest rate must take into account all the contractual terms of the debt instrument, including prepayment options. It includes fees and costs where these are integral to the loan, but it does not take into account any expected credit losses. Amortization often is over the period to maturity, but in some cases, a shorter period might be appropriate (such as in U.S. GAAP—see the previous notes). For example, if a bond can be redeemed early, this will likely happen.

Sometimes estimates of future cash flows will change—for example, a financial asset might carry interest at a variable rate. In such cases, the effective interest rate is recalculated, and there is a cumulative catch-up through the profit and loss account.

This measurement method can, in itself, cause problems for debt fund valuers when given a large portfolio of instruments. These assessments will need to be made for each instrument, and the appropriate amortization must be passed through the profit and loss of the debt fund each period. This can prove complex in debt funds that carry a large number

of positions.

In addition, regardless of whether U.S. GAAP or IFRS is applied, the fair value of such instruments is normally expected to be disclosed in the notes to the financial statements of the debt fund, even though it is not measured as such in the primary financial statements or NAV of the fund. These fair values might need to be derived based on the methodologies discussed earlier, a further complexity for financial statement preparers of debt funds to contend with.

Summary

The whole-scale reduction in interest rates available to investors through risk-free investments (such as Treasury bills) has prompted investors to seek this type of return elsewhere. Debt funds have proven to be a genuine and successful alternative to some of the traditional asset classes. However, what is clear is that a wide range of product offerings is available (based on the strategies and types of debt instruments invested into), along with a wide range of structuring opportunities for these debt fund products. Comparability between debt product offerings can be difficult, depending on the reporting GAAP adopted in the financial statements—which itself can depend on the strategy and types of investments held by the debt fund. This can lead to difficulties in benchmarking debt fund managers during the life of different debt funds of the same vintage.

About the Authors

Roland Mills and **Stephanie Coxon** both represent PricewaterhouseCoopers in Guernsey, Channel Islands.

Roland is a director and provides assurance and other services to private equity and private debt funds, private equity and private debt fund management structures, and private equity and debt fund managers themselves. He is primarily involved in the assurance line of business and specializes in the asset management industry, with a focus on the private equity and alternatives fund sectors, in particular.

Roland leads PwC’s Global Private Equity IFRS Industry Accounting Group and sits on PwC’s Global IFRS Asset Management Industry Accounting Group. These groups comment on, identify, and develop industry-specific views and interpretations of IFRS for the private equity industry and the wider asset-management industry.

Stephanie is a senior manager and provides assurance and other services to a wide portfolio of asset-management clients, both funds and fund managers themselves. She is primarily involved in providing assurance services to private equity and both public and private debt funds and fund managers.

Stephanie also has significant experience in listing debt funds and other alternative investment products on exchanges in London and, more widely, across Europe.

Endnotes

1. The LPA basis of preparation is widely used by UK, Scottish, and Channel Island limited partnerships. The respective laws do not require the limited partnerships to prepare financial statements that are “true and fair” in accordance with a stated GAAP (whether IFRS, UK, or U.S. GAAP). The LPA basis of preparation is typically based on one of those GAAPs, but the general partners, as permitted to in accordance with the LPA (hence the LPA basis designation), carve out parts of GAAP that are considered unnecessary to the users, that are costly to produce, and that have no additional benefit or that are not in keeping with the investors’ expected reporting of performance. In recent years, this has included carve-outs (within debt funds) of the IFRS 7 and IFRS 13 disclosures surrounding fair value sensitivities, the detailed risk management disclosures required by IFRS, or certain other aspects that the GP determined appropriate.

2. U.S. GAAP guidance for financial instruments is located in numerous ASC Topics, including ASC 310, “Receivables”; ASC 320, “Investments—Debt and Equity Securities”; ASC 470, “Debt”; ASC 480, “Distinguishing Liabilities from Equity”; ASC 815, “Derivatives and Hedging”; ASC 820, “Fair Value Measurement”; ASC 825, “Financial Instruments”; ASC 860, “Transfers and Servicing”; and ASC 948, “Financial Services—Mortgage Banking.”

3. IFRS guidance for financial instruments is located in IAS 32, “Financial Instruments: Presentation”; IAS 39, “Financial Instruments: Recognition and Measurement”; IFRS 7, “Financial Instruments: Disclosures”; and IFRS 13, “Fair Value Measurement.”

4. IFRS 9, “Financial Instruments,” is currently available to be early adopted. IFRS 9 introduces a single classification and measurement model for financial assets that is dependent on both the entity’s business model objective for managing financial assets and the contractual cash flow characteristics of financial assets. Three permissible classifications exist for financial assets under IFRS 9: amortized cost, fair value through the profit or loss, and fair value through other comprehensive income. In February 2014, the IASB finalized the effective date of IFRS 9 as January 1, 2018.

15. Mezzanine Debt Private Equity Funds

Yasir Aziz and Ramon Louw, Deloitte

Introduction

This chapter considers private equity (PE) funds that primarily invest in mezzanine debt and considers the market for this type of asset class.

The chapter begins by introducing mezzanine debt and outlines the key features of this method of investing. It also explores why companies consider mezzanine as a method of funding growth and introduces some differences between European and U.S. funds.

The accounting for mezzanine debt focuses on the key financial instruments used as part of mezzanine lending, usually provided to give the holder of the instrument some flexibility in the way he or she invests.

What Is Mezzanine Debt?

Mezzanine debt, or mezzanine capital, refers to debt that sits between senior debt (which is generally secured against the assets of the borrower) and equity that can give holders the rights to an ownership share of the business (see Figure 15.1).

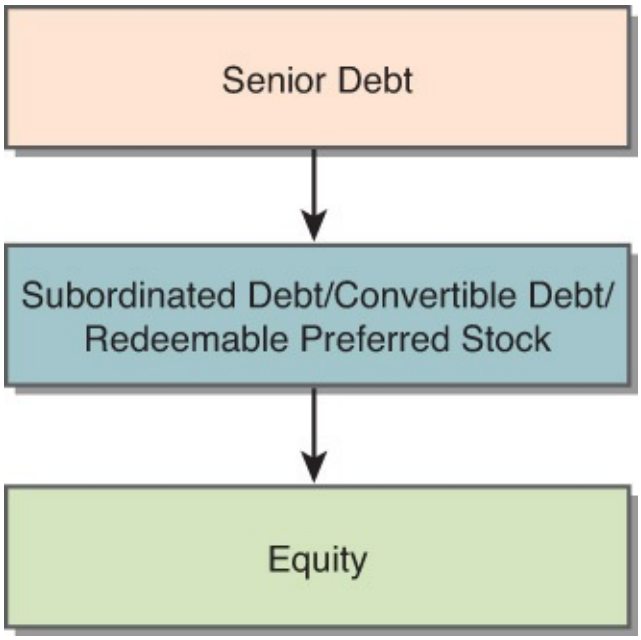


Figure 15.1 Mezzanine debt structure

This middle layer of the capital structure is a hybrid structure that represents a mixture of debt (either secured or unsecured) and other instruments (such as preferred stock, options, warrants, and payment in kind). Mezzanine debt often involves a series of complicated financial instruments packaged by the lender to the borrower to both diversify the risk profile of the loan and give the lender options in different scenarios. Mezzanine debt generally refers to both the debt and the other instruments introduced by the lender.

Why Mezzanine?

Investors look to this type of investment to diversify the risk profiles of their investments because mezzanine debt can provide returns that are not highly correlated with other asset classes (such as equities or bonds). Mezzanine debt offers flexibility to structure the debt to best suit the needs of both the lender and the borrower because these deals are privately negotiated with a high degree of customization. Mezzanine debt structures typically contain multiple instruments, to give the holder the rights to convert the debt into an equity interest within the company.

The conversion can provide for control of the company if the borrower defaults on the loan. The hybrid[1] nature of these instruments has two key differences compared to traditional debt:

- The lender is exposed to increased risk if the borrower defaults on the loan because mezzanine debt is lower down the capital structure than traditional senior debt.
- The lender can benefit from some of the upside if the borrower exceeds certain performance thresholds because the lender's instruments can then be converted into equity. These equity ownerships are often referred to as "equity kickers" or "sweeteners" because they allow the lender to benefit from the upside of the borrower's success.

Mezzanine lenders look for a higher return than traditional debt providers as compensation for the additional risk they face, but lenders are typically more willing to lend (that is, they have fewer or looser covenant requirements to secure a loan) to borrowers because

mezzanine debt lenders can structure the debt to meet the risk appetite of the lender and the cash servicing ability of the borrower.

Main Uses of Mezzanine

Mezzanine debt has three main uses:

1. It provides companies that have high growth potential with the finances they need to grow. This might be to launch a new product line, to expand into new geographies, or to alleviate cash flow issues.
2. Mezzanine finance has been a large part of private equity investing because mezzanine debt lenders typically work with traditional PE funds when arranging buyout of investments. They plug the gap between the amount of debt banks are willing to lend to the PE house to finance the transaction and how much is required to complete the transaction.
3. Finally, when borrowers cannot secure traditional lending (because they do not have a long history of transactions or do not meet covenant criteria), mezzanine financing can be more highly tailored and often can be packaged to meet the needs of both the borrower and the lender. A key feature of mezzanine financing is payment in kind (PIK) interest. This is generally compound interest that accrues on an instrument but is payable only at maturity. This eases the cash flow burden on the borrower in return for a higher rate of interest payable on the loan.

As mentioned, mezzanine financing can “fill the gap” between the amount that can be raised using traditional financing and the amount required. For example, if financing is required to purchase an entity for $100m and the acquirer can raise $60m in senior debt (through secured borrowings from the bank) instead of offering the remaining $40m required as equity shares, then mezzanine financing can be used to limit the equity given out on the transaction by organizing $20m in mezzanine financing and issuing only $20m in equity.

Because of the higher risks involved in providing mezzanine financing, this form of financing attracts higher reward. Senior loans returns are generally capped at the rate of interest they provide the loans (6 to 8 percent), with potential for low-percentile gains by selling the loan at a premium (see Figure 15.2). With mezzanine financing, the equity sweeteners allow the lender to enjoy the upside of the success of the business (with typical returns of 8 to 12 percent).

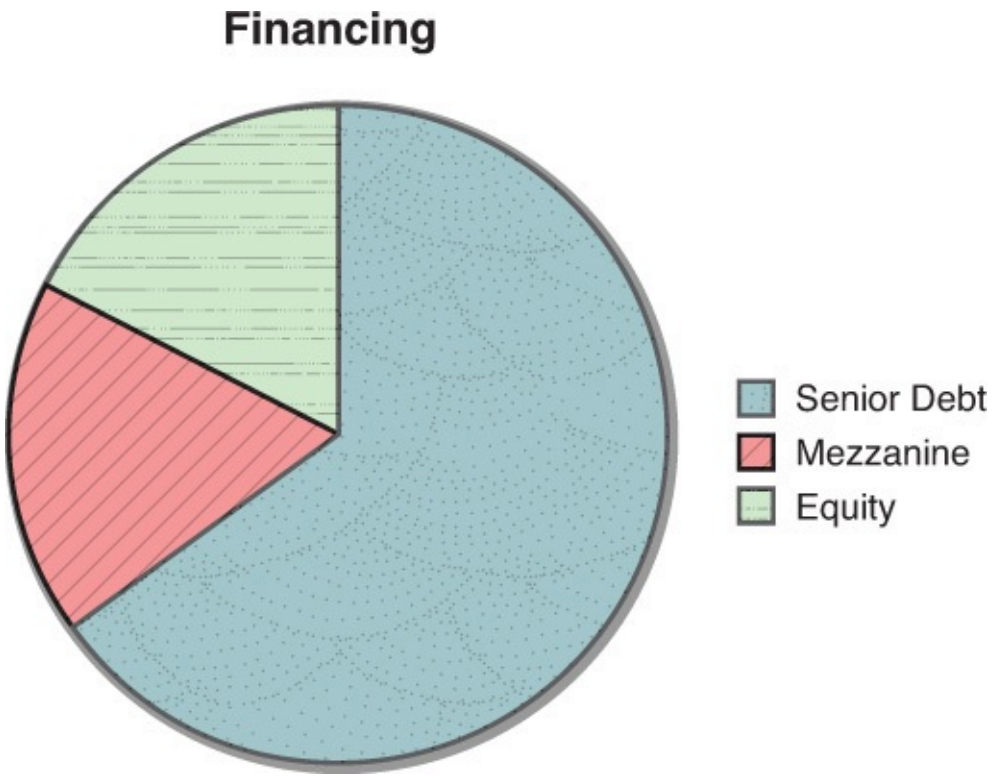


Figure 15.2 Typical capital structure

A business owner might want to retain equity in the business for a number of reasons, such as maintaining overall control, but remember that debt can be a cheaper form of financing than equity. This reduces the overall cost of capital for the business owners and, therefore, can be an attractive form of investment.

A well-run organization often has a mixture of debt and equity throughout the capital structure and uses senior debt, equity, mezzanine financing, and other financial instruments to build up an appropriate risk profile. Table 15.1 shows an introduction to mezzanine financing to bridge the gap between what can be raised from senior lending (in the example, assuming 60 percent of the capital structure) and the equity. The overall weighted average cost of capital (WACC) is reduced here because debt is cheaper than equity. (Even though mezzanine financing is at a higher cost of capital than senior debt, it is still cheaper than equity.)

	Estimated Cost of Capital (%)	Capital Structure Including Mezzanine Debt	Capital Structure without Mezzanine Debt	Capital Structure without Debt
Senior Debt	7	60	60	—
Mezzanine Debt	15	20	—	—
Equity	25	20	40	100
Weighted Average Cost of Capital (WACC)		12.2%	14.2%	25.0%

Table 15.1 Worked Example for Different Capital Structures

Key Features of Mezzanine Debt

The key features of mezzanine debt are as follows:

- Mezzanine financing generally falls between senior debt and equity within the capital structure of a company.
- Returns on mezzanine debt are driven by both cash coupons (interest payments over the life of the loan or PIK interest that accrues on the loan) and the potential of warrants/options supplementing the return paid to the investor.
- Mezzanine debt is made up of complex financial instruments that can provide downside protection for the lender in case the borrower defaults on the loan, but it also provides sweeteners to allow the lender to enjoy the upside if the business does well.
- Mezzanine financing is usually provided for a shorter period of time than traditional financing (often before the debt hits maturity) and is often refinanced before the debt matures.
- Obtaining mezzanine financing can be less onerous than securing traditional financing, but it often comes at a higher rate of interest.

European and U.S. Mezzanine Debt: Similarities and Differences

Not surprisingly, the most developed markets for mezzanine financing are Europe and the United States. The nature of the loans is similar in both jurisdictions, but there are some differences in the actual structures of the loans:

- **Capital structure—**Mezzanine loans tend to not be secured in the U.S., whereas residual security can provide some protection on European loans (although this collateral might rank junior to bank loans).
- **Repayments—**With the interest repayments, mezzanine loans tend to be at a fixed rate in the U.S., whereas they are floating rates in Europe.
- **Length—**European mezzanine loans are often for longer periods than their U.S. counterparts with the average term of 7–10 years versus a term of 6–8 years for U.S. mezzanine loans.
- **Size—**The deal size in Europe tends to be larger than in the U.S., reflecting the greater demand for smaller loans in the U.S.
- **Equity upside—**Both U.S. and European loans introduce the same type of instruments as sweeteners, with warrants used frequently.
- **Covenants—**The U.S. generally has looser covenant requirements than Europe, highlighting the appetite for mezzanine financing as well as higher overall expected returns in the U.S. (but with a larger default rate because the loans are riskier).

Rise of Mezzanine Debt within Private Equity

Private equity managers have been attracted to mezzanine lending funds because they can provide a more diversified product offering and exploit investment opportunities beyond typical buyouts. There has also been a need to provide debt in the market due to the lack of financing from traditional lenders.

Structuring of a Mezzanine Fund

Mezzanine PE funds are structured in the same way as traditional PE funds. The funds are set up as limited partnerships and are based either onshore or offshore; the funds can be either private funds or listed. This fund has a general partner (GP) that can be onshore or offshore and an onshore advisor.

The considerations for each of these elements are similar to those when setting up a regular PE fund, including frequency of reporting, where the investor base originates, tax structures employed, and regulatory concerns.

Mezzanine funds have lifespans similar to those of traditional PE funds: They are set up as 10-year funds, with the option to extend them for two 1-year periods. This allows the investment team to utilize the funds it raises.

Accounting for Mezzanine Instruments

This section highlights the various investment instruments and accounting considerations.

Investment Instruments

Accounting for mezzanine debt often involves a myriad of financial instruments that are structured to give the lender options in exit routes when considering the various scenarios.

Typical investments held by a mezzanine fund include debt instruments, equity, and derivatives to give the lender options for obtaining equity at a point in the future or to allow the lender to control the entity if it needs to.

Payment in Kind (PIK) Notes

With these debt instruments, instead of paying out a cash coupon, the amounts are aggregated and are typically paid on maturity of the loan. So instead of having regular interest payments throughout the life of the loan, PIK notes accrue interest. The sum of the principal plus the accrued interest is then due on maturity. A simple operational example of the typical cash flows of a PIK note follows:

> Lender gives $100m PIK note to the borrower to be repaid in 5 years at 5 percent coupon:

Year	Opening Balance ($m)	Accrued Interest (5%)	Closing Balance ($m)	Repayment ($m)
Year 1	100.00	5.00	105.00	—
Year 2	105.00	5.25	110.25	—
Year 3	110.25	5.51	115.76	—
Year 4	115.76	5.79	121.55	—
Year 5	121.55	6.08	127.63	**127.63**

Warrants often are attached as part of the PIK loan, which gives the lender the ability to purchase shares.

Arrangement Fee

An arrangement fee is a fee that is paid to the lender for arranging a particular debt. The lender uses its expertise in developing the makeup of the mezzanine debt arrangement, which can be complicated. For the borrower, this fee is an expense (Cr Cash and Dr Expense). Such fees (relating to the creation or acquisition of a financial asset) are an integral part of generating an ongoing involvement with the resulting financial instrument. As such, they are deferred and recognized as an adjustment to the effective interest rate for the lender.

Warrants

A warrant represents the lender’s right to purchase a set number of shares of equity, at a set price from the borrower, within a specific period or on a specific date. It is similar in nature to an option, in which the holder of these instruments has the right, but not the obligation, to buy or sell an underlying equity instrument. An option can be issued by an existing equity holder or by the company issuing the equity. A warrant is issued by the underlying business and, therefore, is dilutive to the company’s shares; share options, on the other hand, are generally not unless the company issues, for example, share options to employees that require an issue of new shares upon exercise.

Warrants are generally used as part of mezzanine finance loans to allow the lender to enjoy in any equity upside by providing the ability to convert warrants into equity at a predetermined price.

The holder of the warrant has a fixed amount of time to exercise the warrant to purchase a fixed amount of equity at a predetermined price. For example, warrants might allow the holder to purchase 100,000 shares in a company at a fixed price of $2.50 within a certain amount of time (generally when the mezzanine loan expires). At the discretion of the lender, at any time between when the warrant is issued and the expiration date, the lender can purchase 100,000 shares at $2.50 a share. Logically, the lender would exercise these warrants only if the equity of the business is worth more than $2.50 a share. It is important to note that the company issuing the warrants has the ability to change the strike terms of the warrant.

When exercising a warrant, the issuing business has its share capital increased as more shares are introduced through the exercise of the warrant. To account for this, the issuing

company records the cash received. Following the example, if the exercise price is $2.50 for a share that has a nominal value of $1.00, the following entries are noted:

Dr	Cash (100,000 × $2.50)	$250,000
Cr	Share Capital (100,000 × $1.00)	$100,000
Cr	Share Premium (100,000 × ($2.50 – $1.00))	$150,000

To calculate the value of the business that is attributable to equity holders, an enterprise value is calculated (similar to calculating enterprise value in traditional PE funds). From this enterprise value, the value of debt is removed. The remainder of the value (if any) is attributable to the equity holders and any warrant holders. As a simple example, if the enterprise value of a business is calculated as $500m (using an earnings-based approach, for example) and the fair value of all the debt instruments (including all senior loans, junior loans, mezzanine debt, and any other outstanding loans) is $150m, the value that is left over for equity holders is $350m. Assuming 100m shares in issue, the equity is worth $3.50 per share. In this instance, it would be in the interest of the warrant holder to convert its warrants into equity because the exercise price ($2.50) is lower than the market value of the equity ($3.50); therefore, the lender would earn an additional $100,000 in this transaction. The warrants in this scenario are said to be “in the money” and so are valued at $100,000. In reality, the warrant holder would convert only when the exit process began and either a buyer was found or the holder was confident that one would be found. Even where a warrant is “in the money,” if there is no exit, the holder cannot get its money out of the investment, so converting the warrants would not be attractive.

However, if, for example, the enterprise value from the example was calculated at $300m, the analysis would be different because the fair value of the debt would remain at $150m and so the value attributable to equity holders would be $150m. In this instance, each share would be valued at $1.50, so the warrants held by the lender would be worthless because they are below the exercise price of $2.50. In this scenario, the warrants have no value because they are not worth exercising (they are said to be “out of the money”).

Where the warrant conditions get complicated (in terms of when the warrants are in the money and when they are out of the money), they should be valued using a recognized option pricing model technique such as the Black–Scholes model.

Accounting for Financial Assets

Financial assets and financial liabilities are measured using IFRS 9 (or IAS 39, if IFRS 9 is not yet adopted, because IFRS 9 will eventually fully replace IAS 39[2]), which aims to simplify the classification criteria in relation to financial instruments.

Accounting under IFRS

The new IFRS 9 standard seeks to enhance the ability of investors and other users of financial information to understand the accounting of financial assets while reducing complexity. For financial assets, the available-for-sale and held-to-maturity categories currently in IAS 39 are not included in IFRS 9.

The first step when applying IFRS 9 is to determine whether the instrument meets the

definition of a financial asset. As part of the definition of a financial asset, the definition includes financial instruments that have a “contractual right” to receive cash from another entity on favorable terms. This means that outstanding loans would meet the definition of a financial asset.

When the classification is established, the standards require all financial assets to be initially measured at fair value. This is determined by applying the guidance contained in IFRS 13, which explains how to measure fair value. For the outstanding loans, the most appropriate valuation technique is the income approach, which involves discounting the contractual cash flows to present value.

After initial recognition, IFRS 9 requires all assets to be measured either at fair value (either through profit and loss [FVTPL] or through other comprehensive income [FVTOCI]) or amortized cost. An asset can be measured at amortized cost if it meets *both* of the following tests (IFRS 9:4.1.2):

- **Business model test—**This test ensures that the purpose of the entity holding the asset is to collect the contractual cash flows relating to the instrument rather than to sell the instrument before its maturity to gain fair value increases. This estimation is made at a higher level of aggregation, not individually instrument by instrument.
- **Cash flow characteristics test—**This test looks at the ability to accurately predict the cash flows and ascertains that the cash flows received are payments of principal and interest on the principal outstanding.

If these two tests are met, an entity is able to measure the financial assets at amortized cost by estimating an effective interest rate (EIR) based on the contractual cash flows and by unwinding the discount over the life of the asset. In the previous example, if no repayments are assumed on the $100m loan over the 5 years, the effective interest rate is the same as the contractual rate (5 percent) because this is the rate that discounts the expected receipt of funds to the purchase price (in the example, the lender would expect $127.63m back from a loan made of $100m, so the total discount of $27.63m over 5 years is achieved at a rate of 5 percent per annum). If there were to be scheduled repayments (of interest or capital), movements in the value of the loan expected to be recovered would result in a difference between the EIR and the contractual interest rate.

If these two tests are not met, the asset is carried at fair value, which results in the loan being discounted at a market rate instead of the EIR to determine the fair value. The changes in the fair value at each reporting period will go through the profit and loss statement. Even if an instrument meets the two amortized cost tests, IFRS 9 contains an option to designate a financial asset as measured at FVTPL if doing so eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as an “accounting mismatch”) that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases ([IFRS 9, paragraph 4.1.5).

Where you just meet the business model test, the assets are carried a fair value through other comprehensive income, where changes to the fair value of the asset are taken through other comprehensive income until you sell the asset, after which the gains and losses are taken to the profit and loss statement.

Where you meet the conditions for amortized cost or FVTOCI, you can elect to measure the financial instruments at FVTPL.

Figure 15.3 details the decision making at each stage and the reporting options available.

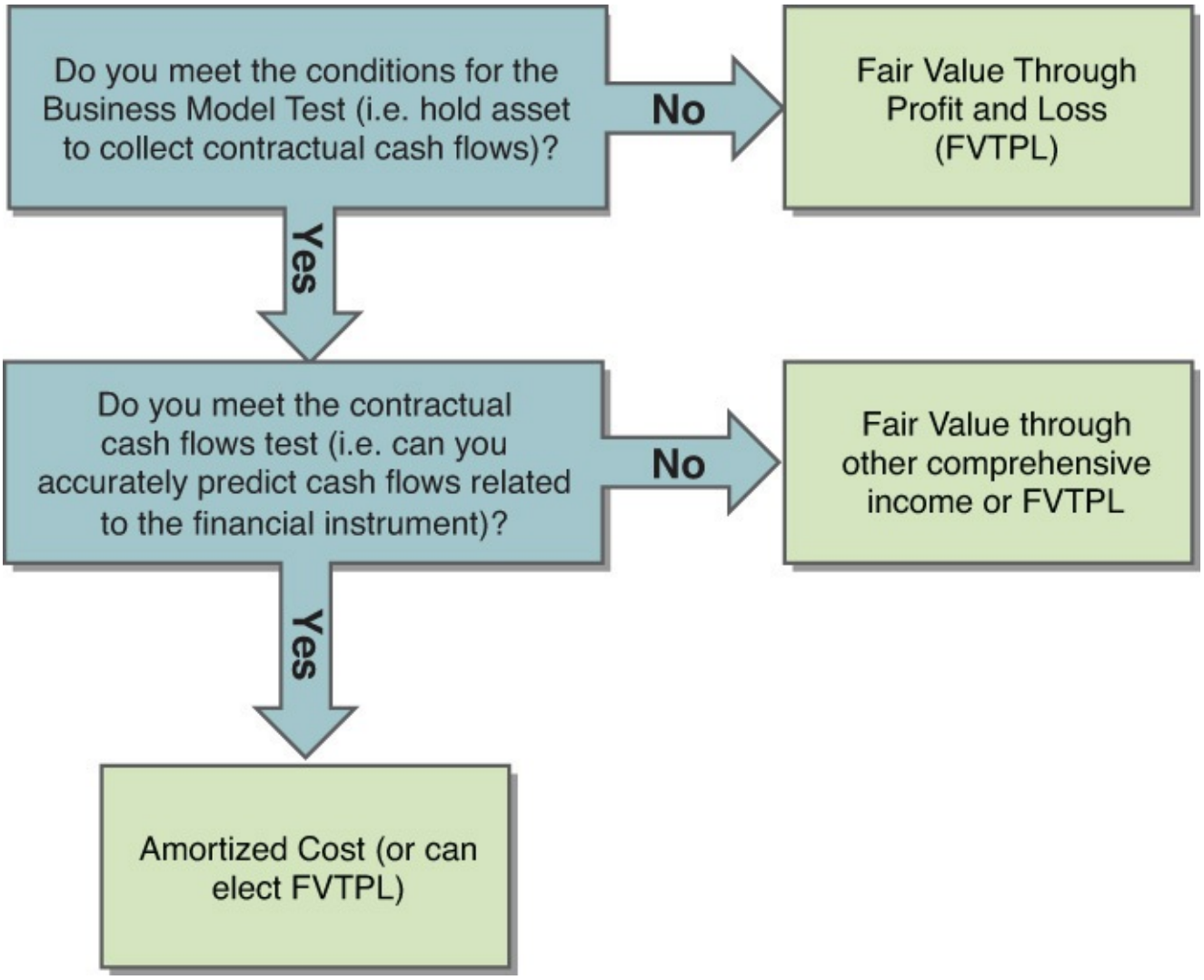


Figure 15.3 IFRS 9 reporting decision flow chart

Challenges to Applying the Business Model Test

For private equity funds that have financial assets, debate arises over whether the business model test is met. PE funds might intend to sell financial assets before their maturity if they believe they can refinance or restructure loans in the future beneficially for themselves. The key judgment criteria is the intention when making the loans. If the intention of the lender is to hold the asset to maturity, the business model test is passed. This judgment needs to be considered individually by each PE fund in each reporting period.

Arrangement Costs

For arrangement costs, when an asset is subsequently measured at amortized cost (that is, it meets the two tests highlighted earlier), the transaction costs that are directly attributable to the purchase of the asset are amortized over the life of the asset as part of the EIR. Following the example, if the directly attributable cost of making the loan were $2m, this would reduce the amount receivable and adjust the EIR of the loan to recognize a portion of the arrangement costs each year over the life of the loan. When an asset is held at FVTPL or FVTOCI, any transaction costs are expensed at the start of the loan and cannot be spread over the life of the loan. In practice, determining transaction costs and what costs are "directly attributable" can be complicated. The examples provided in IFRS 9 go through various examples of when costs are attributable and when they aren't.

Interaction between the Investment Entity Exemption and IFRS 9

It is important to note that when an entity meets the definition of an investment entity, it measures its debt investments at FVPL or FVTOCI, in accordance with the requirements of IFRS 9 or IAS 39, "Financial Instruments: Recognition and Measurement." An aspect of the investment entity criteria to consider for debt funds is the requirement to manage investments and report their performance on a fair value basis. Because an investment entity's business model is generally not to hold investments to collect the contractual cash flows, the amortized cost method might not be appropriate.

U.S. GAAP Considerations

At the time of this writing, FASB has tentatively decided to abandon the approach it had developed with the IASB for assessing the business model in which financial assets are managed and the contractual cash flow characteristics mentioned earlier.

Table 15.2 highlights a few key differences between U.S. GAAP and IFRS, relevant to debt instruments.

Subject	U.S. GAAP	IFRSs
Classification categories: HTM or the amortized cost classification	An investment that meets the definition of a debt security and that management has the intent and ability to hold to maturity is classified as HTM. An investment in a debt security that is not traded in an active market can be classified as HTM if it meets certain conditions. Investments in debt securities that are classified as HTM are accounted for at amortized cost.	Under paragraph 4.1.2 of IFRS 9, the amortized cost classification is not limited to investments in debt securities, but generally applies when both of the following conditions are met: • The asset is held within a business model whose objective is to hold assets to collect contractual cash flows. • The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding. In accordance with paragraph 4.1.3 of IFRS 9, interest is defined as "consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time."
Classification categories: required reclassification of HTM or amortized cost securities	An entity is required to reassess the appropriateness of classifying its debt securities as HTM as of each reporting date. If an entity (1) no longer has the ability to hold securities to maturity, (2) sells or transfers one or more HTM debt securities before maturity for reasons that materially contradict the entity's stated intent to hold those securities until maturity, or (3) has a pattern of such sales, the entity must reclassify its remaining HTM debt securities. In scenarios (2) and (3), an entity must reclassify its remaining HTM debt securities as AFS.	An entity is required to reclassify all affected financial assets only when it changes its business model for managing the affected financial assets. However, IFRS 9 does not include a tainting provision that would require an entity to reclassify debt securities that it holds and accounts for at amortized cost when it sells other debt securities accounted for at amortized cost.

Classification categories: trading or the FVTPL classification	A trading security is one that is bought and held principally for the purpose of selling in the near term. However, ASC 320-10-25-1 states that "an entity is not precluded from classifying [a] security as trading...simply because [it] does not intend to sell [the security] in the near term." In addition, an entity may elect to account for an investment in a debt or equity security at fair value, with changes recognized in net income under ASC 825.	An investment in an equity instrument is accounted for at FVTPL unless (1) it is not held for trading and the holder elects at initial recognition to account for its equity investment at FVTOCI, (2) the investment provides the holder with significant influence over the investee, in which case the investment is accounted for under the equity method of accounting in accordance with IAS 28, or (3) the investment results in consolidation. All debt-instrument financial assets that do not provide cash flows that are SPPI or that are not held within a "hold-to-collect" business model are accounted for at FVTPL. In addition, an entity may irrevocably elect at initial recognition to account for debt-instrument financial assets at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.
Classification and measurement of loan receivables	Generally, loan receivables are classified as either held for sale (HFS) or held for investment (HFI). Depending on their classification, loan receivables are measured at either (1) the lower of cost or fair value (for HFS loans) or (2) amortized cost (for HFI loans). Loan receivables are also eligible for election of the fair value option under ASC 825-10, in which case they would be carried at fair value, with changes in fair value recognized in earnings.	A debt instrument (a loan receivable or debt security) that (1) is held within a business model whose objective is to collect the contractual cash flows and (2) has contractual cash flows that are solely payments of principal and interest on the principal amount outstanding generally must be classified and measured at amortized cost. All other debt instruments held must be classified and measured at fair value through profit or loss. Debt instruments are eligible for the fair value option in IFRS 9 if an accounting mismatch would otherwise arise. In such a case, they would be carried at fair value, with changes in fair value recognized in profit or loss.

Table 15.2 GAAP Differences

Valuation of Mezzanine Loans for PE Houses

Mezzanine loans need to be considered individually by the PE fund to determine a fair value. Mezzanine debt often is provided by a third party (other than the equity provider), so the loans need to be considered on a standalone basis. The price at which the mezzanine loan was issued is a good indication of fair value at the date of investment.

The cash flows for mezzanine loans can be predicted easily, so the most common way of valuing mezzanine loans is through a discounted cash flow (DCF) approach (see Chapter 6, "Private Equity Valuations: Taking Valuations to a Level Higher" for further details on the DCF approach to investment valuations). The DCF approach looks at the total expected cash flows through the life of the loan and discounts them back at the appropriate discount rate to arrive at the net present value of the investment.

Unit of Account for Mezzanine Instruments

Judgment must be exercised at the fund level to determine the appropriate unit of account, an accounting term that determines the level at which an asset is aggregated or disaggregated for fair value recognition (see Chapter 6). The accounting standards internationally (IFRS 9 and ASC 946) outline the need for users to determine the level (the applicable unit of account) at which they fair value investments where the investment is made up of a number of different financial instruments. For mezzanine loan funds, judgment needs to be applied regarding the level at which the valuation takes place. The two following examples are ways in which the unit of account can be applied:

- **At the instrument level—**If the unit of account is determined at the instrument level, each instrument that the fund holds in the underlying business is valued separately and the sum of each of these values is determined to be the value of the investment in the underlying business.
- **At the underlying business level—**If the unit of account is determined at the business level, a fair value is determined (using recognized business valuation models such as earnings multiple basis) and then attributed to each of the instruments the fund holds.

In essence, one method builds up a fair value by looking at the constituent parts, whereas the other method takes a more holistic view of the investments and so applies when the fund intends to exit all positions in the same investment simultaneously.

Because of the complex nature of applying the appropriate unit of account, be sure to consult with professional advisers to determine the correct accounting and financial reporting treatment. In practice, this relies on assessment and judgment on a case-by-case basis, looking at the facts and circumstances of a wide variety of factors to determine the correct treatment. However, this determination and analysis is not specific to mezzanine PE funds—it applies to all companies that report under IFRS and is a key consideration and area of judgment.

Summary

Mezzanine debt allows lenders to structure their investments into start-up companies or companies in the initial growth phase of their development that may not have access to traditional forms of debt. Arranging debt is cheaper for a growing business than providing additional equity to new investors, so it is more desirable.

Mezzanine debt offers lenders both protection against the risk of their investment declining in value and the potential to benefit from the success of the business through securing additional equity in the successful business.

About the Authors

Yasir Aziz is a senior manager in the Deloitte Investment Management and Private Equity Audit group in London. He has more than seven years' experience in investment management providing both advisory and assurance services, focusing on private equity. His client base is made up of both European and U.S. private equity groups and range from traditional buy-out private equity funds to debt funds, venture capital, hybrid PE structures, and others. The clients he advises are large mature multinational organizations who have raised multiple to start-up funds looking to raise their first fund.

Yasir is a qualified chartered accountant with the Institute of Chartered Accountants in England and Wales and specializes in the audit of private equity funds and corporates, including providing regulatory reviews and controls assurance engagements within the industry. Yasir also has particular experience in performing valuation reviews, including review of valuation policies and best practices.

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Both Yasir and Ramon have extensive experience in leading engagements with some of the most prominent private equity groups in the UK and internationally, where they have provided assurance services and advised on private equity structures for UK, European, and U.S. PE houses. They also have wide experience in financial reporting in UK, U.S., and International standards, corporate governance in asset management and alternative asset management, and advising on the impact of accounting regulations on private equity.

Endnotes

1. In this chapter, *hybrid* refers to the flexible nature of the different financial instruments a lender can use when determining how to package the appropriate type of instruments to match its risk profile while generating a suitable return. This contrasts the accounting definition of *hybrid* referred to in IFRS 9:4.3 that relates to the treatment of an embedded derivative contained in a host contract.

2. The effective date for IFRS 9 has been pushed back a number of times due to consultations and exposure drafts; the current mandatory effective date for IFRS 9 has been set to periods beginning January 1, 2018.

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In an increasingly competitive world, it is quality of thinking that gives an edge—an idea that opens new doors, a technique that solves a problem, or an insight that simply helps make sense of it all.

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