**Chapter Five: Nonbank Finance**

**5.1 Insurance Companies**

Insurance companies are in the business of assuming risk on behalf of their customers in exchange for a fee, called a *premium*. Insurance companies make a profit by charging premiums that are sufficient to pay the expected claims to the company plus a profit. Why do people pay for insurance when they know that over the lifetime of their policy, they will probably pay more in premiums than the expected amount of any loss they will suffer? Because most people are risk-averse: They would rather pay a **certainty equivalent** (the insurance premium) than accept the gamble that they will lose their house or their car. Thus, it is because people are risk-averse that they prefer to buy insurance and know with certainty what their wealth will be (their current wealth minus the insurance premium) than to incur the risk and run the chance that their wealth may fall.

Consider how people’s lives would change if insurance were not available. Instead of knowing that the insurance company would help if an emergency occurred, everyone would have to set aside reserves. These reserves could not be invested long-term but would have to be kept in an extremely liquid form. Furthermore, people would be constantly worried that their reserves would be inadequate to pay for catastrophic events such as the loss of their house to fire, the theft of their car, or the death of the family breadwinner. Insurance allows
us the peace of mind that a single event can have only a limited financial impact on our lives.

**Fundamentals of Insurance**

Although there are many types of insurance and insurance companies, all insurance is subject to several basic principles.

1. There must be a relationship between the *insured* (the party covered by insurance) and the *beneficiary* (the party who receives the payment should a loss occur). In addition, the beneficiary must be someone who may suffer potential harm. For example, you could not take out a policy on your neighbour’s teenage driver because you are unlikely to suffer harm if the teenager gets into an accident. The reason for this rule is that insurance companies do not want people to buy policies as a way of gambling.
2. The insured must provide full and accurate information to the insurance company.
3. The insured is not to profit as a result of insurance coverage.
4. If a third party compensates the insured for the loss, the insurance company’s obligation is reduced by the amount of the compensation.
5. The insurance company must have a large number of insureds so that the risk can be spread out among many different policies.
6. The loss must be quantifiable. For example, an oil company could not buy a policy on an unexplored oil field.
7. The insurance company must be able to compute the probability of the loss occurring.

The purpose of these principles is to maintain the integrity of the insurance process. Without them, people may be tempted to use insurance companies to gamble or speculate on future events. Taken to an extreme, this behavior could undermine the ability of insurance companies to protect persons in real need. In addition, these principles provide a way to spread the risk among many policies and to establish a price for each policy that will provide an expectation of a profitable return.

Despite following these guidelines, insurance companies suffer greatly from the problems of asymmetric information.

***Adverse Selection and Moral Hazard in Insurance***

Recall that adverse selection occurs when the individuals most likely to benefit from a transaction are the ones who most actively seek out the transaction and are thus most likely to be selected. We discussed adverse selection in the context of borrowers with the worst credit being the ones who most actively seek loans. The problem also occurs in the insurance market. Who is more likely to apply for health insurance, someone who is seldom sick or someone with chronic health problems? Who is more likely to buy flood insurance, someone who lives on a mountain or someone who lives in a river valley?

In both cases, the party more likely to suffer a loss is the party likely to seek insurance. The implication of adverse selection is that loss probability statistics gathered for the entire population may not accurately reflect the loss potential for the persons who actually want to buy policies.

The adverse selection problem raises the issue of which policies an insurance company should accept. Because someone in poor health is more likely to buy a supplemental health insurance policy than someone in perfect health, we might predict that insurance companies should turn down anyone who applies. Since this does not happen, insurance companies must have found alternative solutions. For example, most insurance companies require physical exams and may examine previous medical records before issuing a health or life insurance policy. If some previous illness is found to be a factor in the person’s health, the company may issue the policy but exclude this pre-existing condition. Insurance firms often offer better rates to insure groups of people, such as everyone working at a particular business, because
the adverse selection problem is then avoided.

In addition to the adverse selection problem, moral hazard plagues the insurance industry. Moral hazard occurs when the insured fails to take proper precautions to avoid losses because losses are covered by insurance. For example, moral hazard may cause you not to lock your car doors if you will be reimbursed by insurance if the car is stolen.

One way that insurance companies combat moral hazard is by requiring a **deductible.** A deductible is the amount of any loss that must be paid by the insured before the insurance company will pay anything. For example, if new auto covers cost Br 200,000 and the auto owner has Br20,000 deductibles, the owner will pay the first Br 20,000 of the loss and the insurance company will pay Br 180,000. In addition to deductibles, there may be other terms in the insurance contract aimed at reducing risk. For example, a business insured against fire may be required to install and maintain a sprinkler system on its premises to reduce the loss should a fire occur. Although contract terms and deductibles help with the moral hazard problem, these issues remain a constant difficulty for insurance companies.

***Selling Insurance***

Another problem common to insurance companies is that people often fail to seek as much insurance as they actually need. Human nature tends to cause people to ignore their mortality, for example. For this reason, insurance, unlike many banking services, does not sell itself. Instead, insurance companies must hire large sales forces to sell their products. The expense of marketing may account for up to 20% of the total cost of a policy. A good sales force can convince people to buy insurance coverage that they never would have pursued on their own yet may need.

Insurance is unique in that agents sell a product that commits the company to a risk. The relationship between the agent and the company varies: *Independent agents* may sell insurance for a number of different companies. They do not have any particular loyalty to any one firm and simply try to find the best product for their customer.

*Exclusive agents* sell the insurance products for only one insurance company. Most agents, whether independent or exclusive, are compensated by being paid a commission. The agents themselves are usually not at all concerned with the level of risk of any one policy because they have little to lose if a loss occurs. (Rarely are commissions influenced by the claims submitted by an agent’s customers.) To keep control of the risk that agents are incurring on behalf of the company, insurance companies employ **underwriters,** people who review and sign off on each policy an agent writes and who have the authority to turn down a policy if they deem the risk unacceptable. If underwriters have questions about the quality of customers, they may order an independent inspector to review the property being insured or request additional medical information. A final decision to accept the policy may depend on the inspector’s report.

**Types of Insurance**

Insurance is classified by which type of undesirable event is insured. The most common types are life insurance and property and casualty insurance. In its simplest form, life insurance provides income for the heirs of the deceased. Many insurance companies offer policies that provide retirement benefits as well as life insurance. In this case, the premium combines the cost of the life insurance with a savings program. The cost of life insurance depends on such factors as the age of the insured, average life expectancies, the health and lifestyle of the insured (whether the insured smokes, engages in a dangerous hobby such as skydiving, and so on), and the insurance company’s operating costs.

Property and casualty insurance protects property (houses, cars, boats, and so on) against losses due to accidents, fire, disasters, and other calamities. Marine insurance, for example, which insures against the loss of a ship and its cargo, is the oldest form of insurance, predating even life insurance. Property and casualty policies tend to be short-term contracts subject to frequent renewal. Another significant distinction between life insurance policies and property and casualty policies is that the latter do not have a savings component. Property and casualty premiums are based simply on the probability of sustaining the loss. That is why car insurance premiums are higher if a driver has had speeding tickets, has caused accidents, or lives in a high-crime area. Each of these events increases the likelihood that the insurance company will have to pay a claim.

1. ***Life Insurance***

Life is assumed to unfold in a predictable sequence: You work for a number of years while saving for retirement; then you retire, live off the fruits of your earlier labor, and die at a ripe old age. The problem is that you could die too young and not have time to provide for your loved ones, or you could live too long and run out of retirement assets. Either option is very unappealing to most people. The purpose of life insurance is to relieve some of the concern associated with either eventuality. Although insurance cannot make you comfortable with the idea of a premature death, it can at least allow you the peace of mind that comes with knowing that you have provided for your heirs. Life insurance companies also want to help people save for their retirement. In this way, the insurance company provides for the customer’s whole life.

The basic products of life insurance companies are life insurance proper, disability insurance, annuities, and health insurance. Life insurance pays off if you die, protecting those who depend on your continued earnings. As mentioned, the person who receives the insurance payment after you die is called the *beneficiary* of the policy. Disability insurance replaces part of your income should you become unable to continue working due to illness or an accident.

An **annuity** is an insurance product that will help if you live longer than you expect. For an initial fixed sum or stream of payments, the insurance company agrees to pay you a fixed amount for as long as you live. If you live a short life, the insurance company pays out less than expected. Conversely, if you live unusually long, the insurance company may pay out much more than expected. Notice one curiosity among these various types of insurance: Although predicting any one individual’s life expectancy or probability of being disabled is very difficult, when many people are insured, the actual amount to be paid out by the
insurance company can be predicted very accurately.

The **law of large numbers** says that when many people are insured, the probability distribution of the losses will assume a normal probability distribution, a distribution that allows accurate predictions. This distribution is important: Because insurance companies insure so many millions of people, the law of large numbers tends to make the company’s predictions quite accurate and allows companies to price the policies so that they can earn a profit.
Life insurance policies protect against an interruption in the family’s stream of income. The broad categories of life insurance products are *term*, *whole life*, and *universal life*.

**Term Life** The simplest form of life insurance is the *term insurance policy*, which pays out if the insured dies while the policy is in force. This form of policy contains no savings element. Once the policy period expires, there are no residual benefits. As the insured ages, the probability of death increases, so the cost of the policy rises.

Some term policies fix the premiums for a set number of years, usually five or ten. Alternatively, *decreasing term policies* have a constant premium, but the amount of the insurance coverage declines each year.

Term policies have been historically hard to sell because once they expire, the policyholder has nothing to show for the premium paid. This problem is solved with whole life policies.

**Whole Life** A *whole life insurance* policy pays a death benefit if the policyholder dies. Whole life policies usually require the insured to pay a level premium for the duration of the policy. In the beginning, the insured pays more than if a term policy had been purchased. This overpayment accumulates as a cash value that can be borrowed by the insured at reasonable rates.

Survivorship benefits also contribute to the accumulated cash values. When members of the insured pool die, any remaining cash values are divided among the survivors. If the policyholder lives until the policy matures, it can be surrendered for its cash value. This cash value can be used to purchase an annuity. In this way, the whole life policy is advertised as covering the insured for the duration of his or her life.

**Universal Life** Universal life policies combine the benefits of the term policy with those of the whole life policy. The major benefit of the universal life policy is that the cash value
accumulates at a much higher rate.

The universal life policy is structured to have two parts, one for the term life insurance and one for savings. One important advantage that universal life policies have over many alternative investment plans is that the interest earned on the savings portion of the account is tax-exempt until withdrawn. To keep this favourable tax treatment, the cash value of the policy cannot exceed the death benefit.

**Annuities** If we think of term life insurance as insuring against death, the annuity can be viewed as insuring against life. One risk people have is outliving their retirement funds. If they live longer than they projected when they initially retired, they could spend all of their money and end up in poverty. One way to avoid this outcome is by purchasing annuities. Once an annuity has been purchased for a fixed amount, it makes payments as long as the beneficiary lives.

Annuities are particularly susceptible to the adverse selection problem. When people retire, they know more about their life expectancy than the insurance company knows. People who are in good health, have a family history of longevity, and have attended to their health all of their lives are more likely to live longer and hence to want to buy an annuity more than people in poor or average health. To avoid this problem, insurance companies tend to price individual annuities expensively.

Most annuities are sold to members of large groups where all employees covered by a particular pension plan automatically receive their benefit distribution by purchasing an annuity from the insurance company. Because the annuity is automatic, the adverse selection problem is eliminated.

**Assets and Liabilities of Life Insurance Companies** Life insurance companies
derive funds from two sources. First, they receive premiums that represent future
obligations that must be met when the insured dies. Second, they receive premiums paid into pension funds managed by the life insurance company. These funds are long-term in nature.
Since life insurance liabilities are predictable and long-term, life insurance companies can invest in long-term assets.

1. ***Health Insurance***

Individual health insurance coverage is very vulnerable to adverse selection problems. People who know that they are likely to become ill are the most likely to seek health insurance coverage. This causes individual health insurance to be very expensive. Most policies are offered through company-sponsored programs in which the company pays all or part of the employee’s policy premium. Most life insurance companies also offer health insurance. Health insurance premiums may account for a significant portion of total premium income.

1. ***Property and Casualty Insurance***

Property and casualty insurance was the earliest form of insurance. It began in the Middle Ages when merchants sent ships off to foreign ports to trade. A merchant, though willing to accept the risk that the trading might not turn a profit, was often unwilling to accept the risk that the ship might sink or be captured by pirates. To reduce such risks, merchants began to band together and insure each other’s ships against loss. The process became more sophisticated as time went on, and insurance policies were written that were then traded in the major commercial centers of the time.

**Property and Casualty Insurance Today** Property and casualty insurance protects against losses from fire, theft, storm, explosion, and even neglect. **Property insurance** protects businesses and owners from the impact of risk associated with owning property. This includes replacement and loss of earnings from income producing property as well as financial losses to owners of residential property.

**Casualty insurance** (or **liability insurance**) protects against liability for harm the insured may cause to others as a result of product failure or accidents. For example, part of your car insurance is property insurance (which pays if your car is damaged) and part is casualty insurance (which pays if you cause an accident). Property and casualty insurance is different from life insurance. First, policies tend to be short-term, usually for one year or less. Second, whereas life insurance is limited to insuring against one event, property and casualty companies insure against many different events. Finally, the amount of the potential loss is much more difficult to predict than for life insurance. These characteristics cause property and casualty companies to hold more liquid assets than those of life insurance companies. The wide range of losses means that property and casualty firms must maintain substantial liquidity. Property insurance can be provided in either **named-peril policies** or **open peril policies.** Named-peril policies insure against loss only from perils that are specifically named in the policy, whereas open-peril policies insure against all perils except those specifically excluded by the policy. For example, many homeowners in low-lying areas are required to buy flood insurance. This insurance covers only losses due to flooding, so it is a named-peril policy. A homeowner’s insurance policy, which protects the house from fire, hurricane, tornado, and other damage, is an example of an open-peril policy.

Casualty or liability insurance protects against financial losses because of a claim of negligence. Liability insurance is bought not only by manufacturers who might be sued because of product defects but also by many types of professionals, including physicians, lawyers, and building contractors. Whereas the risk exposure in property insurance policies is relatively easy to predict, since it is usually limited to the value of the property, liability risk exposure is much more difficult to determine.

**Reinsurance** One way that insurance companies may reduce their risk exposure is to obtain **reinsurance.** Reinsurance allocates a portion of the risk to another company in exchange for a portion of the premium. Reinsurance allows insurance companies to write larger policies because a portion of the policy is actually held by another firm. Smaller insurance firms obtain reinsurance more frequently than large firms. You can think of it as insurance for the insurance company.

Since the originator of the policy usually has more to lose than the reinsurer, the moral hazard and adverse selection problems are small. This means that little specific information about the risk being reinsured is required. As a result of the simplified information requirements, the reinsurance market consists of relatively standardized contracts.

**Credit Default Swaps**

A CDS is insurance against default on a financial instrument, usually some kind of securitized bond. Typically, the holder of debt will buy a CDS from an investment or insurance company, such as AIG to shift the risk of default to a third party. When the probability of default is low, the cost of the CDS is similarly low. By lowering the risk of these insured bonds with default insurance, the market price of the bonds would increase.

**Monoline Insurance** Instead of providing credit insurance with CDSs, an insurance company may supply it directly, just as with any insurance policy. However, insurance regulations do not allow property/casualty insurance companies, life insurance companies, or insurance companies with multiple lines of business to underwrite credit insurance. **Monoline insurance companies,** which specialize in credit insurance alone, are therefore the only insurance companies that are allowed to provide insurance that guarantees the timely repayment of bond principal and interest when a debt issuer defaults.

**5.2 Pension Funds**

A **pension plan** is an asset pool that accumulates over an individual’s working years and is paid out during the nonworking years.

**Types of Pensions**

Pension plans can be categorized in several ways. They may be defined-benefit or defined-contribution plans, and they may be public or private.

1. ***Defined-Benefit Pension Plans***

Under a **defined-benefit plan,** the plan sponsor promises the employees a specific benefit when they retire. The payout is usually determined with a formula that uses the number of years worked and the employee’s final salary. For example, a pension benefit may be calculated by the following formula:



In this case, if a worker had been employed for 35 years and the average wages during the last three years were Br 50,000, the annual pension benefit would be

 0.02 x Br 50,000 x 35 = Br 35,000 per year

The defined-benefit plan puts the burden on the employer to provide adequate funds to ensure that the agreed payments can be made. External audits of pension plans are required to determine whether sufficient funds have been contributed by the company. If sufficient funds are set aside by the firm for this purpose, the plan is **fully funded.** If more than enough funds are available, the plan is **overfunded.**

Often, insufficient funds are available and the fund is **underfunded.** For example, if Abebe contributes Br 100 per year into his pension plan and the interest rate is 10%, after 10 years, the contributions and their interest earnings would be worth Br 1,753.2. If the defined benefit on his pension plan is Br 1,753 or less after 10 years, the plan is fully funded because his contributions and earnings will cover this payment in full. But if the defined benefit is Br 2,000, the plan is underfunded because his contributions and earnings do not cover this amount. Underfunding is most common when the employer fails to contribute adequately to the plan. Surprisingly, it is not illegal for a firm to sponsor an underfunded plan.

1. ***Defined-Contribution Pension Plans***

As the name implies, instead of defining what the pension plan will pay, defined-contribution plans specify only what will be contributed to the fund. The retirement benefits are entirely dependent on the earnings of the fund. Corporate sponsors of defined-contribution plans usually put a fixed percentage of each employee’s wages into the pension fund each pay period. In some instances, the employee also contributes to the plan. An insurance company or fund manager acts as trustee and invests the fund’s assets. Frequently, employees are allowed to specify how the funds in their individual accounts will be invested. For example, an employee who is a conservative investor may prefer government securities, while one who is a more aggressive investor may prefer to have his or her retirement funds invested in
corporate stock. When the employee retires, the balance in the pension account can be transferred into an annuity or some other form of distribution.

Defined-contribution pension plans are becoming increasingly popular. Many existing defined-benefit plans are converting to this form, and virtually all new plans are established as defined-contribution. One reason the defined-contribution plan is becoming so popular is that the onus is put on the employee rather than the employer to look out for the pension plan’s performance. This reduces the liability of the employer. One problem is that plan participants may not understand the need to diversify their holdings. For example, many firms actively encourage employees to invest in company stock. The firm’s motivation is to better align employee interest with that of stockholders. The downside is that employees suffer twice should the firm fail. First, they lose their jobs, and second, their retirement portfolios evaporate. The collapse of Enron Inc. brought this issue forcibly to the public’s attention. Another problem with defined-contribution plans is that many employees are not familiar enough with investments to make wise long-term choices.

**Private and Public Pension Plans**

Private pension plans, sponsored by employers, groups, and individuals, have grown
rapidly as people have become more concerned about the viability of Social Security
and more sophisticated about preparing for retirement. In the past, private pension
plans invested mostly in government securities and corporate bonds. Although these
instruments are still important pension plan assets, corporate stocks, mortgages, open
market paper, and time deposits now play a significant role.

An alternative to privately sponsored pension plans are the public plans, though
in many cases there is very little difference between the two. A **public pension plan**
is one that is sponsored by a governmental body. The public plan in Ethiopia is the Social Security. The amount of the Social Security benefits a retiree receives is based on the person’s earnings history.

**5.3 Mutual Funds**

Suppose that you decide that you want to begin investing for retirement. You would probably want to hold some money in a diversified portfolio of stocks. You might want to put some money in bonds. You might even want to hold stock in some foreign companies. Now suppose your budget will only let you invest Br 25 per week. How are you going to build this retirement fund? You will probably not want to buy individual stocks, and with only Br 25 to spend at a time, you will not be able to buy bonds. The solution to your problem is to invest in mutual funds.

Mutual funds pool the resources of many small investors by selling them shares in the fund and using the proceeds to buy securities. Through the asset transformation process of issuing shares in small denominations and buying large blocks of securities, mutual funds can take advantage of volume discounts on brokerage commissions and can purchase diversified portfolios of securities. Mutual funds allow small investors to obtain the benefits of lower
transaction costs in purchasing securities and to take advantage of a reduction in risk by diversifying their portfolios.

**The Growth of Mutual Funds**

***The First Mutual Funds***

The origins of mutual funds can be traced back to the mid to late 1800s in England and Scotland. Investment companies were formed that pooled the funds of investors with modest resources and used the money to invest in a number of different securities. These investment companies became more popular when they began investing in the economic growth of the United States, mostly by purchasing American railroad bonds.

The first fund in which new shares were issued as new money was invested—the dominant structure seen today—was introduced in Boston in 1824. This fund allowed for continuous offering of shares, the ability to cash out of the fund at any time, and a set of restrictions on investments aimed at protecting investors from losses.

The stock market crash of 1929 set mutual fund growth back for several decades because small investors distrusted stock investments generally and mutual funds in particular.

**Benefits of Mutual Funds**

There are five principal benefits that attract investors to mutual funds:
1. Liquidity intermediation
2. Denomination intermediation
3. Diversification
4. Cost advantages
5. Managerial expertise

***Liquidity intermediation***means that investors can convert their investments into cash quickly and at a low cost. If you buy a CD or a bond, there can be early redemption penalties or transaction fees imposed if you need your funds before the securities mature. Additionally, if you bought a Br10,000 CD, you must redeem the whole security even if you only require Br 5,000 to meet your current needs. Mutual funds allow investors to buy and redeem at any time and in any amount. Some funds are designed specially to meet short-term transaction requirements and have no fees associated with redemption, whereas others are designed for longer-term investment and may have redemption fees if they are held only a short time.

***Denomination intermediation***allows small investors access to securities they would be unable to purchase without the mutual fund. For example, most money market securities are only available in large denominations, often in excess of $100,000. By pooling money, the mutual fund can purchase these securities on behalf of investors.

***Diversification*** is an important advantage to investing in mutual funds. Your risk can be lowered by holding a portfolio of diversified securities rather than a limited number. Small investors buying stocks individually may find it difficult to acquire enough securities in enough different industries to capture this benefit. Additionally, mutual funds provide a low-cost way to diversify into foreign stocks.

Significant ***cost advantages***may accrue to mutual fund investors. Institutional investors negotiate much lower transaction fees than are available to individual investors. Additionally, large block trades of 100,000 shares or more trade according to a different fee structure than do smaller trades. By buying securities through a mutual fund, investors can share in these lower fees.

One of the main features that has driven mutual fund growth has been access to ***managerial******expertise****.* Many investors prefer to rely on professional money managers to select their stocks. The failure of mutual funds to post greater-than-average returns should not come as a surprise given the existing market efficiency. Still, the financial markets remain something of a mystery to a large number of investors. These investors are willing to pay fees to let someone else choose their stocks.

The increase in the number of defined-contribution pension plans has also been a factor in mutual fund growth. In the past, most pension plans either invested on behalf of the employee and guaranteed a return or required employees to invest in company stock. Now, most new pension plans require the employee to invest his or her own pension dollars. With pension investments being made every payday, the mutual fund provides the perfect pension conduit.

**Mutual Fund Structure**

Mutual fund companies frequently offer a number of separate mutual funds. They are called *complexes* and are defined as a group of funds under substantially common management, composed of one or more families of funds. The advantage to investors of fund complexes is that investments can usually be transferred among different funds within a family very easily and quickly. Additionally, account information can be summarized by the complex to help investors keep their assets organized.

In this section we will look at how mutual funds are structured and at the types of investments the funds hold.

1. ***Open-Versus Closed-End Funds***

Mutual funds are structured in two ways. The first funds were what are now called **closed-end funds.** In a closed-end fund, a fixed number of nonredeemable shares are sold at an initial offering and are then traded in the over-the-counter market like common stock. The market price of these shares fluctuates with the value of the assets held by the funds. The market value of the shares may be above or below the value of the assets held by the fund, depending on the market’s assessment of how likely managers are to pick stocks that will increase fund value.

The problem with closed-end funds is that once shares have been sold, the fund cannot take in any more investment dollars. Thus, to grow the fund managers must start a whole new fund. The advantage of closed-end funds to managers is that investors cannot make withdrawals. The only way investors have of getting money out of their investment in the fund is to sell shares.

Today, the closed-end fund has been largely replaced with the **open-end fund.** Investors can contribute to an open-end fund at any time. The fund simply increases the number of shares outstanding. Another feature of open-end funds is that the fund agrees to buy back shares from investors at any time. Each day the fund’s net asset value is computed based on the number of shares outstanding and the net assets of the fund. All shares bought and sold that day are traded at the same net asset value.

Open-end mutual funds have a couple of advantages that have contributed to the growth of mutual funds. First, because the fund agrees to redeem shares at any time, the investment is very liquid. This liquidity intermediation has great value to investors. Second, the open-end structure allows mutual funds to grow unchecked. As long as investors want to put money into the fund, it can expand to accommodate them.

**Organizational Structure**

Regardless of whether a fund is organized as a closed-or an open-end fund, it will have the same basic organizational structure. The investors in the fund are the shareholders. In the same way that shareholders of corporations receive the residual income of a company, the shareholders of a mutual fund receive the earnings, after expenses, of the mutual fund.
The board of directors oversees the fund’s activities and sets policy. They are also responsible for appointing the investment advisor, usually a separate company, to manage the portfolio of investments and a principal underwriter, who sells the fund shares.

The investment advisors manage the fund in accordance with the fund’s stated objectives and policies. The investment advisors actually pick the securities that will be held by the fund and make both buy and sell decisions. It is their expertise that determines the success of the fund.

In addition to the investment advisors, the fund will contract with other firms to provide additional services. These will include underwriters, transfer agents, and custodians. Contracts will also be arranged with an independent public accountant. Large funds may arrange for some of these functions to be done in-house, whereas other funds will use all outside companies.

**Investment Objective Classes**
Four primary classes of mutual funds are available to investors. They are (1) stock funds (also called equity funds), (2) bond funds, (3) hybrid funds, and (4) money market funds.

1. ***Equity Funds***

Equity funds share a common theme in that they all invest in stock. After that, they can have very different objectives.

1. ***Bond Funds***

Strategic income bonds are the most popular and invest in a combination of corporate bonds to provide a high level of current income. The quality of the bonds in these funds will often be lower than in some other classes, but their yields will be higher. Investors are trading safety for greater returns. Corporate bond funds, the next most popular fund type, invest primarily in high-grade corporate bonds.

Government bonds are also popular. These are essentially default risk-free, but will have relatively low returns. Bonds are not as risky as stocks, and so it is not usually as important that investors diversify across a large number of different bonds. Additionally, it is relatively easy to buy and sell bonds through the secondary market. As a result, it is not surprising that bond mutual funds hold only about a third of the assets held by stock mutual funds. Still, many investors value the liquidity intervention and automatic reinvestment features provided by bond mutual funds.

1. ***Hybrid Funds***

Hybrid funds combine stocks and bonds into one fund. The idea is to provide an investment that diversifies across different types of securities as well as across different issuers of a particular type of security. Thus, if an investor found a hybrid fund that held the percentage of stocks and bonds he wanted, he could own just one fund instead of several. Despite this apparent convenience, most investors still prefer to choose separate funds.

1. ***Money Market Funds***

Customers who had MMMF accounts could simply direct the broker to take funds out of this account to buy stocks or to deposit funds in this account when they sold securities. All MMMFs are open-end investment funds that invest only in money market securities. Most funds do not charge investors any fee for purchasing or redeeming shares.

An important feature of MMMFs is that many have check-writing privileges. They
often do not charge a fee for writing checks or have any minimum check amount as long as the balance in the account is above the stated level. This convenience, along with market interest rates, makes the accounts very popular with small investors.

The money invested in MMMFs is in turn invested in money market instruments. Commercial paper and certificates of deposit are by far the largest component of these
funds, followed by treasury securities and repurchase agreements.

**Fee Structure of Investment Funds**

All mutual fund accounts are subject to a variety of fees. One of the primary factors that an investor should consider before choosing a mutual fund is the level of fees the fund charges. The fees are taken out of portfolio income before it is passed on to the investor. Since the investor is not directly charged the fees, many will not realize that they have even been subtracted.

The usual fees charged by mutual funds are the following:

* A *contingent deferred sales charge* imposed at the time of redemption is an alternative way to compensate financial professionals for their services. This fee typically applies for the first few years of ownership and then disappears.
* A *redemption fee* is a back-end charge for redeeming shares. It is expressed as a dollar amount or a percentage of the redemption price.
* An *exchange fee* may be charged when transferring money from one fund to another within the same fund family.
* An *account maintenance fee* is charged by some funds to maintain low balance accounts.
* *Other* *fees*, if any, are deducted from the fund’s assets to pay marketing and
advertising expenses or, more commonly, to compensate sales professionals.

**Regulation of Mutual Funds**

As part of government regulation, all funds must provide two types of documents free of charge: a prospectus and a shareholder report. A mutual fund’s prospectus describes the fund’s goals, fees and expenses, and investment strategies and risks; it also gives information on how to buy and sell shares. Government requires a fund to provide a full prospectus either before an investment or together with the confirmation statement of an initial investment.

Annual and semi-annual shareholder reports discuss the fund’s recent performance and include other important information, such as the fund’s financial statements. By examining these reports, an investor can learn if a fund has been effective in meeting the goals and investment strategies described in the fund’s prospectus. In addition, investors are sent a yearly statement detailing the tax status of distributions received from the fund. Mutual fund shareholders are taxed on the fund’s income directly, as if the shareholders held the underlying securities themselves. Similarly, any tax-exempt income received by a fund is generally passed on to the shareholders as tax exempt.

Government may believe that independent directors play a critical role in the governance of mutual funds. To this effect, it may adopt substantive rules designed to enhance the independence of investment company directors and provide investors with more information to assess directors’ independence. These rules require that:

* Independent directors constitute at least a majority of the fund’s board of directors.
* Independent directors select and nominate other independent directors.
* Any legal counsel for the fund’s independent directors be an independent legal counsel.

In addition, government rules may require that mutual funds publish extensive information about directors, including their business experience and fund shares held. This system of overseeing the interests of mutual fund shareholders may help the industry avoid systemic problems and contribute significantly to public confidence in mutual funds.

**Conflicts of Interest in the Mutual Fund Industry**

Many of the corporate governance breakdowns observed recently were due to the principal–agent relationship. If these funds take advantage of investors or fail to provide the returns they should, people will find themselves unable to retire or having to scale back their retirement plans. No one argues that mutual funds can or should guarantee any specific return. They should, however, treat all investors equally and accurately disclose risk and fees. They must also follow the policies and rules they publish as governing the management of each fund.

***Sources of Conflicts of Interest***

Conflicts of interest arise when there is asymmetric information and the principal’s and agent’s interests are not closely aligned. The governance structure of mutual funds creates such a situation. Investors in a mutual fund are the shareholders. They elect directors, who are supposed to look out for their interest. The directors in turn select investment advisors, who actually run the mutual fund. However, given the large number of shareholders in the typical fund, there is a free-rider problem that prevents them from monitoring either the directors or the investment advisers.