CHAPTER 13

STRUCTURE OF THE INVESTMENT INDUSTRY

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LEARNING OUTCOMES

After completing this chapter, you should be able to do the following:

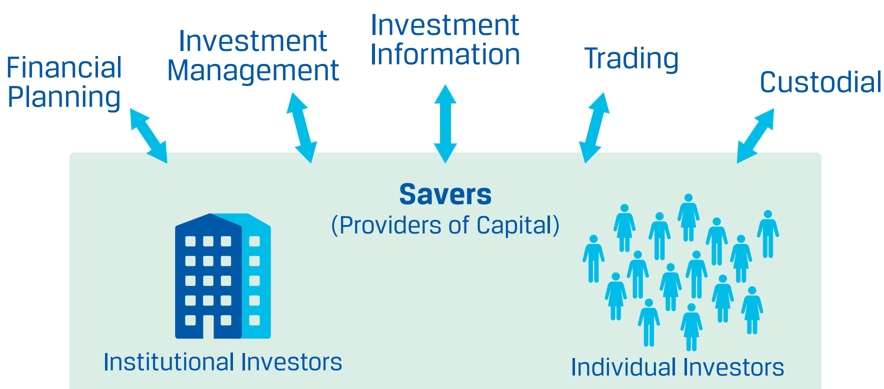
- **a** Describe needs served by the investment industry;
- **b** Describe financial planning services;
- **c** Describe investment management services;
- **d** Describe investment information services;
- **e** Describe trading services;
- **f** Compare the roles of brokers and dealers;
- **g** Distinguish between buy-side and sell-side firms in the investment industry;
- **h** Distinguish between front-, middle-, and back-office functions in the investment industry;
- **i** Identify positions and responsibilities within firms in the investment industry.

INTRODUCTION

1

The investment industry helps individuals, companies, and governments save and invest money for the future. Individuals save to ensure that money will be available to cover unforeseen circumstances, to buy a house, to cover their living expenses during retirement, to pay for college or university tuition, to fund such discretionary spending as travel and charitable gifts, and to pass wealth on to the next generation. Companies save to invest in future projects and to pay future salaries, taxes, and other expenses. Governments save when they collect tax revenues in advance or in excess of spending requirements or receive the money from bond sales before this money is spent.

The investment industry provides many services to facilitate successful saving and investing. This chapter discusses how investment professionals organise their efforts to help their clients meet their financial goals. It also describes how these efforts help ensure that only the individuals, companies, and governments with the best value-enhancing plans for using capital receive funding.



HOW THE INVESTMENT INDUSTRY PROMOTES SUCCESSFUL INVESTING

2

The investment industry provides services to those who have money to invest—individual and institutional investors who become providers of capital. Investing involves many activities that most individual and institutional investors cannot do themselves. Investors must

- determine their financial goals—in particular, how much money they will need to invest for future uses and how much money they can withdraw over time.
- identify potential investments.
- evaluate the risk and return prospects of potential investments.

- trade securities and assets.
- hold, manage, and account for securities and assets during the periods of the investments.
- evaluate the performance of their investments.

These activities generally require information, expertise, and systems that few individual and institutional investors have. Investors obtain assistance with these activities from investment professionals, either directly by hiring investment professionals or indirectly by investing in investment vehicles that the investment industry creates and oversees.

Some investment firms and professionals working in the investment industry specialise in providing a single service. Others provide a broad spectrum of investment services. For the sake of clarity, this discussion considers each service separately, even though most investment firms and professionals provide multiple services.

3 FINANCIAL PLANNING SERVICES

Investment clients often need advice to set their financial goals and determine how much money they should save for future expenses. Some clients also need advice about how much money they can spend on current expenses while still preserving their capital. **Financial planners** help their clients understand their current and future financial needs, the risks they face when investing, their ability to tolerate investment risks, and their preferences for capital preservation versus capital growth. This process is described further in the Investors and Their Needs chapter.

Financial planners create savings and investment plans appropriate for their clients' needs. The plans often require complex analyses that depend on expected rates of return and risks for various securities and assets, the client's capacity and tolerance for bearing risk, tax considerations, and projections of future expenses. Future expenses are often particularly difficult to forecast. They may depend on inflation and, in the case of retirement expenses, uncertain longevity and uncertain future health care expenses. Analyses related to pensions and health care are typically done by actuaries—professionals who specialise in assessing insurance risks using statistical models.

Many pension funds employ financial planners to help pension beneficiaries make better savings decisions. Some employers also contract with financial planning consultants to make financial planning services available to their employees and retirees. Increasingly, financial planners provide financial planning advice over the internet to retail investors.[1]

Various organisations require financial planning services to help them meet their investment objectives. For example, foundations and endowment funds—which are not-for-profit institutions with long-term investment objectives—sometimes hire

1 Recall from the Investment Industry: A Top-Down View chapter that retail investors are individual investors with a low amount of investable assets.

financial planners to help them create their payout policies. **Payout policies** specify how much money can be taken from long-term funds to use for current spending. The payout policies depend on the assumptions the financial planners make about future expected investment returns. Assuming high future expected returns allows for higher current spending. But if these assumptions prove to be overly optimistic, payouts will exceed the returns generated by the investments and the spending of the foundation or endowment fund will have to decrease over time.

INVESTMENT MANAGEMENT SERVICES 4

Once they have determined their financial goals, individual and institutional investors need to implement their savings and investment plans to be able to achieve these goals. They often require investment management services to do so. Investment management activities include asset allocation, investment analysis, and portfolio construction. Investment management is described further in the Investment Management chapter. The types of services investors have access to for help with investment management activities depend on the amount of investable assets they have.

4.1 Services for High-Net-Worth and Institutional Clients

Some high-net-worth and institutional clients rely on investment professionals to take care of the entire investment process, from identifying potential investments to implementing the investments and evaluating their performance; others use the services of investment professionals selectively. Many investment professionals receive authority from their clients to trade securities and assets on their behalf. Those who have such discretionary authority are often called **investment managers** or **asset managers**. Depending on the context, these terms may refer to the individuals who make investment decisions or to the investment firms for which they work.

4.1.1 *Investment Management Activities*

Investment managers perform various activities for their clients. The following are the three major activities:

- asset allocation
- investment analysis
- portfolio construction

Asset allocation indicates the proportion of a portfolio that should be invested in various asset classes to help meet financial goals. Asset classes typically include cash, equity and debt securities, and alternative investments (such as private equity, real estate, and commodities). Equity and debt securities may be further divided, such as into foreign and domestic. To determine the appropriate allocation to each of the various asset classes, investment managers must assess the risk and return characteristics of many potential investments.

Investment analysis involves estimating the fundamental value of potential investments and identifying attractive securities and assets. An investment's fundamental value, also called intrinsic value, indicates the price that investors would pay for the investment if they had a complete understanding of the investment's characteristics. A widely used approach to estimating the fundamental value of an investment is to estimate the present value of all the cash flows that the investment will generate in the future. Recall from the Equity Securities chapter that the value of a common share can be estimated as the present value of all the cash flows, such as dividends, that the investor expects to receive from the common share in the future. Provided that it fits the client's needs, a potential investment is appealing when its current price is below its estimated fundamental value.

Portfolio construction is the activity that brings everything together. It requires investment managers to invest in the attractive securities and assets they identified through their investment analysis, taking into account the client's requirements and appropriate asset allocation. To do so, investment managers must trade securities and assets; hold, manage, and account for these securities and assets during the periods of investment; and evaluate the performance of these investments.

The investment managers who provide assistance to high-net-worth and institutional investors typically work for investment firms. Clients pay management fees to their investment managers for their services. The size of these fees typically depends on the total assets under management. Clients may also pay performance fees that depend on the investment performance of the portfolio.

4.1.2 *Passive and Active Investment Management*

Investment managers may suggest passive or active investment management, or both. **Passive investment managers** seek to match the return and risk of an appropriate benchmark. Benchmarks include broad market indices that cover an entire asset class, indices for a specific industry, and benchmarks that are customised to the needs of a specific client.

Passive investment strategies are the least costly strategies to implement because they involve buying and holding securities based only on their characteristics rather than on analyses of their future return prospects. Index investing is a widely used passive investment strategy and is discussed further in the Investment Vehicles chapter.

In contrast, **active investment managers** try to predict which securities and assets will outperform or underperform comparable securities and assets. The managers then act on their opinions by buying the securities and assets that they expect to outperform and selling (or simply not buying) the securities and assets that they expect to underperform. Active investment strategies are more expensive than passive investment strategies because they require greater resources, so investment clients hire active investment managers only when they believe that these managers have the skill to outperform the market after taking into consideration all fees and commissions.

Active investment managers collect and analyse as much relevant information and data as they can reasonably obtain to predict which securities and assets will outperform or underperform their peers in the future. They often need the help of investment information service providers to gather the required information and data.

4.2 Services for Retail Clients

Retail investors do not typically have access to the same level of service as high-net-worth and institutional investors. Many retail clients obtain assistance and advice on investment management activities, including asset allocation, investment analysis, and portfolio construction from investment professionals who work for financial institutions or brokers; more information about brokers is provided in Section 6.1.

Some investment professionals receive commissions from the firms that sell mutual funds and life insurance policies for the trades and contracts they recommend. Others are fee-only professionals who accept payments only from their clients. Unlike brokers and agents, who are paid commissions on the trades and contracts they recommend, fee-only professionals do not have incentives to generate commissions by recommending specific products or excessive trades. Retail clients may implement their investment plans by passive investing in pooled investment vehicles, such as mutual funds, that are professionally managed. Types and characteristics of pooled investment vehicles are discussed in the Investment Vehicles chapter. Retail investors may also need investment information to implement their investment plans.

INVESTMENT INFORMATION SERVICES 5

Many investors and investment managers obtain investment research, financial data, and consultancy services from firms that specialise in providing these services. These companies include investment research providers, credit rating agencies, financial news services, financial data vendors, and investment consultants. This section introduces these types of firms and discusses the various business models that they use to generate revenue.

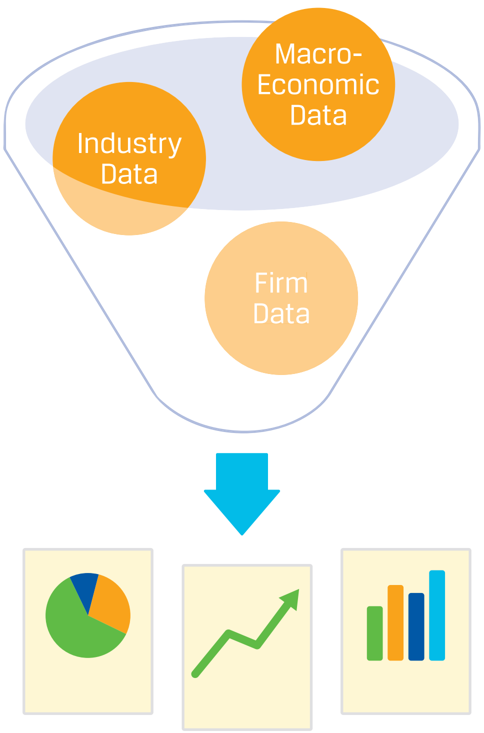
5.1 Investment Research Providers

Many investors use research reports when making investment decisions. These reports often help them gain deeper insight into the risk and return prospects of potential investments.

Firms that provide research reports assemble information and opinions that most investors cannot easily produce themselves. To produce the reports, these firms employ data collectors, financial reporters, and expert analysts. Research reports can be particularly valuable when they are written by industry experts who understand the financial implications of new industrial technologies—for example, the fracking technologies that oil and gas drillers now increasingly use to extract hydrocarbons.

Most research reports are largely based on publicly available information. These reports summarise information from lengthy disclosures, saving investors considerable time. Many reports also present financial analyses that estimate the fundamental value of securities.

Investors often get research reports from their brokers, who purchase them or produce them internally in their research departments. Brokers give research to their clients to better serve them, to attract new clients, and to encourage their clients to trade. Investors may also purchase reports directly from independent research firms, or they may obtain reports from research firms that issuers pay to produce reports about their securities.



5.2 Credit Rating Agencies

Credit rating agencies specialise in providing opinions about the credit quality of bonds and of their issuers. A high bond credit rating (or rating) indicates that the credit rating agency believes that the issuer—for example, a company—has a high probability of making all future payments of principal and interest when due.

Most credit rating agencies do not charge investors for their ratings, although they may charge them for the detailed reports on which the ratings are based. Instead, companies pay credit rating agencies to rate their securities; they are willing to do so because having a rating generally makes a security more marketable. An obvious conflict of interest thus arises because companies are likely to direct their business to those credit rating agencies that will provide higher ratings. Equally, the credit ratings agencies may give companies high ratings to secure future business. If they lose their independence, credit rating agencies run the risk that investors may no longer respect their ratings. Such a situation would have a negative effect not only on credit rating agencies but also on the economy in general and the investment industry in particular because flows of capital would be reduced.

5.3 Data Vendors

To invest and trade successfully, most investors need current and accurate data about companies and market conditions. Many **data vendors** provide such data, including historical data and real-time data.

Exhibit 1 shows examples of historical data that may be of interest to investors and how investors may use these data to make decisions.

Exhibit 1 Examples and Potential Uses of Historical Data

Type of Data	Examples	Potential Uses
Macroeconomic data	Information about economic activity and international trade.	Investment professionals use macroeconomic data to better understand the environment in which companies operate and compete.
Accounting data	Information about a company's financial statements, including the balance sheet, income statement, and cash flow statement.	Investment professionals use accounting data to assess a company's financial performance and to estimate the fundamental value of its securities, such as common shares.
Historical market data	Information about past market prices and trading volumes.	Investment professionals use historical market data to evaluate the performance of their investments and to help them identify securities that may outperform in the future.

The following are important real-time data resources used by investment professionals:

- Newsfeeds, which provide real-time news about companies and markets that investors need to know because such news may affect the value of the companies' securities.
- Market data feeds, which provide real-time information about market quotes and orders, as well as recent trades, that is helpful for investors who want to trade.

Access to investment data was once very expensive and thus restricted to investment firms and institutional investors. The growth of information technologies, particularly those involving the internet, has substantially reduced the cost of accessing data, so more investment data are now available to the general public. In many countries, some data, such as regulatory disclosures by issuers, can be freely accessed via the internet. Other data are only available on a subscription basis from data vendors.

The widespread availability of investment data has greatly changed the investment industry landscape; whereas access to data used to be a key driver of investment profits, now investment profits increasingly depend on the ability to analyse data.

6 TRADING SERVICES

Brokers, dealers, clearing houses, settlement agents, custodians, and depositories provide various services that facilitate investment by helping buyers and sellers of securities and investment assets arrange trades with each other and by holding assets for clients.

6.1 Brokers

Brokerage services are provided to clients who want to buy and sell securities; they include not only execution services (that is, processing orders on behalf of clients) but also investment advice and research.

Brokerage services are provided by brokerage firms or brokers. **Brokers** are agents who arrange trades for their clients. They do not trade with their clients. Instead, they search for traders who are willing to take the other side of their clients' orders. Brokers help their clients by reducing the cost of finding counterparties for their clients' trades.

Brokers provide many different trading services. First and foremost, brokers find sellers for their clients who want to buy and buyers for their clients who want to sell. For highly liquid securities, the search usually involves only routing (directing) a client's order to an exchange or to a dealer. Exchanges arrange trades by matching buy and sell orders and are discussed in The Functioning of Financial Markets chapter; dealers are discussed in the next section. For less liquid securities and assets, brokers may spend substantial resources looking for suitable counterparties.

For complex trades, such as real estate transactions, for which effective negotiation is essential to successful investment, brokers often serve as professional negotiators. In such transactions, skilled negotiators can increase the probability of arranging trades with favourable financial terms.

Clients pay commissions to their brokers for arranging their trades. The commissions vary widely but typically depend on the value or quantity traded. It is worth noting that commissions have decreased over the past 30 years, primarily because of deregulation, technological progress, and increased competition among brokers.

Brokers often also ensure that their clients settle their trades. Such assurances are essential when exchanges arrange trades between strangers who do not have credit arrangements with each other. For such trades, brokers guarantee the settlement of their clients' trades.

Individual brokers may work for large brokerage firms or the brokerage arms of investment banks or at exchanges. Some brokers match clients personally. Others use specialised computer systems to identify potential trades and help their clients fill their orders. Many simply route their clients' orders to exchanges or to dealers.

Block brokers help investors who want to trade large blocks of securities. Large block trades are hard to arrange because finding a counterparty willing to buy or sell a large number of securities is often quite difficult. Investors who want to trade a large block often have to offer price concessions to encourage other investors to trade with them.

Often, buying a large number of securities requires paying a premium on the current market price, and selling a large number of shares requires offering a discount on the current market price.

Prime brokerage refers to a bundle of services that brokers provide to some of their clients, usually investment professionals engaged in trading. In addition to the typical brokerage services mentioned, a prime broker helps these professionals finance their positions. Although the trades may be arranged by other brokers, prime brokers clear and settle them. Thus, prime brokerage allows the netting of collateral requirements across all their trades and the lowering of costs of financing to the trader.

6.2 Dealers

Dealers make it possible for their clients to trade without having to wait to find a counterparty; they are ready to buy from clients who want to sell and to sell to clients who want to buy. Dealers thus participate in their clients' trades, in contrast to brokers who do not trade with their clients but only arrange trades on behalf of their clients.

Dealers profit when they can buy securities for less than they sell them—that is, when the price at which they buy securities (called the bid price) is lower than the price at which they sell them (called the ask price or offer price). If dealers can arrange trades simultaneously with buyers and sellers, they will make risk-free profits. Dealers risk losses if prices fall after they purchase but before they can sell or if prices rise after they sell but before they can repurchase.

Dealers provide liquidity to their clients by allowing them to buy and sell when they want to trade. In effect, dealers match buyers and sellers who want to trade the same instrument at different times and are thus unable to trade directly with each other. In contrast, brokers must bring a buyer and a seller together to trade at the same time and place. Dealers are often called **market makers** because they are willing to make a market (that is, trade on demand) in specified securities at their bid and ask prices.

Dealers may organise their operations within investment banks, hedge funds, or sole proprietorships. Almost all investment banks have dealing operations ready to buy and sell currencies, bonds, stocks, and derivatives if no other counterparty can be found. Some dealers rely on individuals to make trading decisions; others primarily use computers.

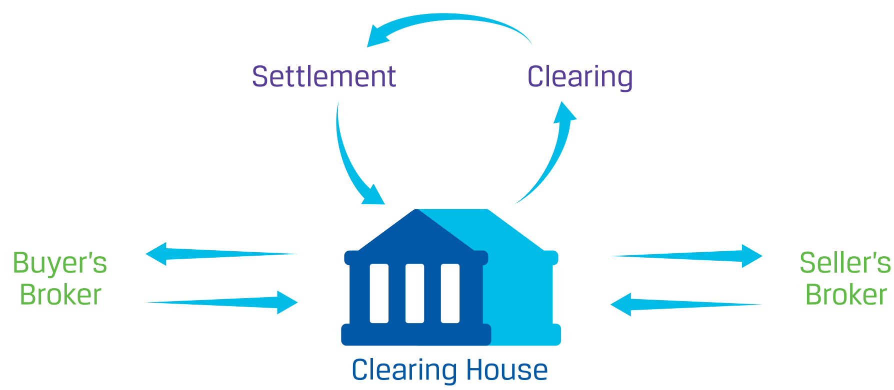
Many dealers also broker orders, and many brokers also deal with their clients in a process called internalisation. Internalisation is when brokers fill their clients' orders by acting as **proprietary traders** rather than as agents—that is, by trading directly with their clients rather than by arranging trades with others on behalf of their clients. Because the distinction between broker and dealer is not always clear, many practitioners often use the term broker/dealer to refer to them jointly.

Broker/dealers face a conflict of interest with respect to how they fill their clients' orders. When acting as brokers, they must seek the best price for their clients' orders. When acting as dealers, however, they profit most when they sell to their clients at high prices or buy from their clients at low prices. This trading conflict of interest is most serious when clients allow their brokers to decide whether to trade their orders with other traders or to fill them internally. Consequently, when trading with broker/dealers, some clients may specify that they do not want their orders to be internalised. Or they may choose to trade only via brokers who do not also act as dealers.

Primary dealers are dealers with which central banks trade when conducting monetary policy. Recall from the Macroeconomics chapter that monetary policy refers to central bank activities that aim to influence the money supply, interest rates, and credit availability in an economy. Central banks sell bonds to primary dealers to decrease the money supply. The primary dealers then sell the bonds to their clients. Central banks buy bonds from primary dealers to increase the money supply, the primary dealers buy bonds from their clients and sell them back to the central banks.

6.3 Clearing Houses and Settlement Agents

Clearing houses and settlement agents settle trades after they have been arranged. **Clearing** refers to all activities that occur from the arrangement of the trade to its settlement. **Settlement** consists of the final exchange of cash for securities.



Clearing houses arrange for the final settlement of trades. The members of a clearing house are the only traders for whom the clearing house will settle trades. Thus, brokers and dealers who are not members of the clearing house must arrange to have a clearing member settle their trades at the clearing house.

Reliable settlement of all trades promotes liquidity because it reassures investors that their trades will be settled and thus allows strangers to confidently contract with each other without worrying much about **settlement risk**, which is the risk that counterparties will not settle their trades. A secure clearing system thus greatly increases the number of counterparties with whom a trader can safely arrange a trade.

6.4 Custodians and Depositories

Custodians are typically banks and brokerage firms that hold money and securities for safekeeping on behalf of their clients. Thus, they play an important role in reducing the risk that securities may be lost or stolen. Security ownership records were once commonly held as actual paper certificates in secure vaults. Now, securities are almost exclusively held in book-entry form as secure computer records. The conversion of evidence of security ownership from physical certificates (called immobilisation) and electronic corporate ownership records (called dematerialisation) into standardised book-entry records greatly reduces the costs of clearing and settling trades.

Custodians may also offer other services for their clients, including trade settlement and collection of interest and dividends. The fees they charge their clients often depend on the type of services they provide to them.

Depositories act not only as custodians but also as monitors. They are often regulated and their role is to help

- prevent the loss of securities and payments through fraud, deficient oversight, or natural disaster.
- ensure that securities cannot be pledged more than once by the same borrower as collateral for loans.
- ensure that securities said to be purchased are actually purchased.

Having reputable third-party custodians and depositories hold all assets managed by an investment manager helps prevent investment fraud, such as Ponzi schemes, which use money contributed by new investors to pay purported returns to existing investors rather than to purchase additional securities.

Most individual and many smaller institutional investors hold securities in brokerage accounts that provide them with custodial services. Their brokers, in turn, hold the securities with custodians and depositories for safekeeping.

6.5 Comparison of Providers of Trading Services

Brokers	■ Act as agents ■ Find sellers for clients who want to buy and buyers for clients who want to sell ■ Serve as professional negotiators ■ Ensure clients will settle their trades
Dealers	■ Participate in their clients' trades ■ Allow clients to trade when they want by being ready to buy when their clients want to sell and to sell when their clients want to buy ■ Provide liquidity because they are willing to trade on demand ■ Often are proprietary traders
Clearing houses	■ Arrange for final settlement of trades ■ Promote liquidity by reassuring investors that their trades will be settled
Settlement agents	■ Arrange final exchange of cash for securities

(continued)

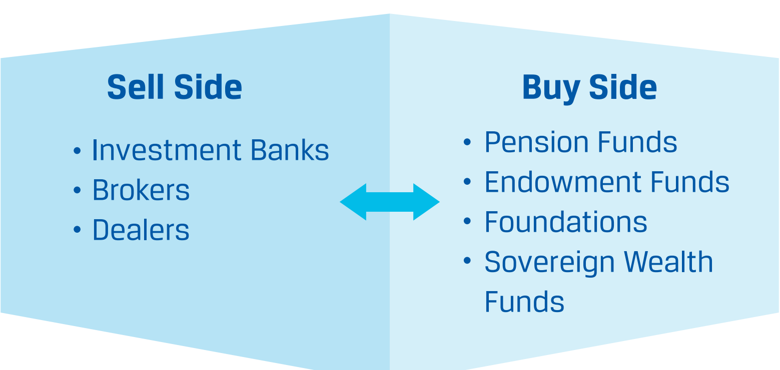
Custodians	■ Hold money and securities for safekeeping on behalf of clients ■ May offer other services for clients, such as trade settlement and collection of interest and dividends
Depositories	■ Act not only as custodians but also as monitors to prevent the loss of securities and fraud ■ Often are regulated

7 ORGANISATION OF FIRMS IN THE INVESTMENT INDUSTRY

In this chapter so far, we have discussed how firms in the investment industry serve their clients and facilitate trading. What gives the investment industry recognisable structure is how participants are grouped and how some of the firms organise their activities. In practice, a distinction is often made between buy-side and sell-side firms. When structuring their activities, many sell-side firms distinguish between the front, middle, and back office.

7.1 Buy-Side and Sell-Side Firms

Practitioners classify many firms in the investment industry by whether they are on the sell side or the buy side. **Sell-side firms** primarily provide investment products and services; they are typically investment banks, brokers, and dealers. Buy-side participants purchase these investment products and services from sell-side firms. For example, such institutional investors as pension plans, endowment funds, foundations, and sovereign wealth funds, as well as insurance companies, are all considered buy-side participants. **Buy-side firms** include firms that manage portfolios for clients and/or themselves. Practitioners also sometimes use the term buy side to refer to consultants who provide services only to buy-side firms. For example, many buy-side consultants help buy-side institutional investors evaluate investment performance.



However, the buy-side/sell-side classification does not apply to all firms in the investment industry. For example, it is not relevant for the investment information services presented in Section 5. In addition, the buy-side/sell-side classification is somewhat arbitrary and not easily applied to many large, integrated firms. For example, many investment banks have divisions or wholly owned subsidiaries that provide investment management services, which are buy side. These functions are on the buy side, even though investment banks are sell-side firms.

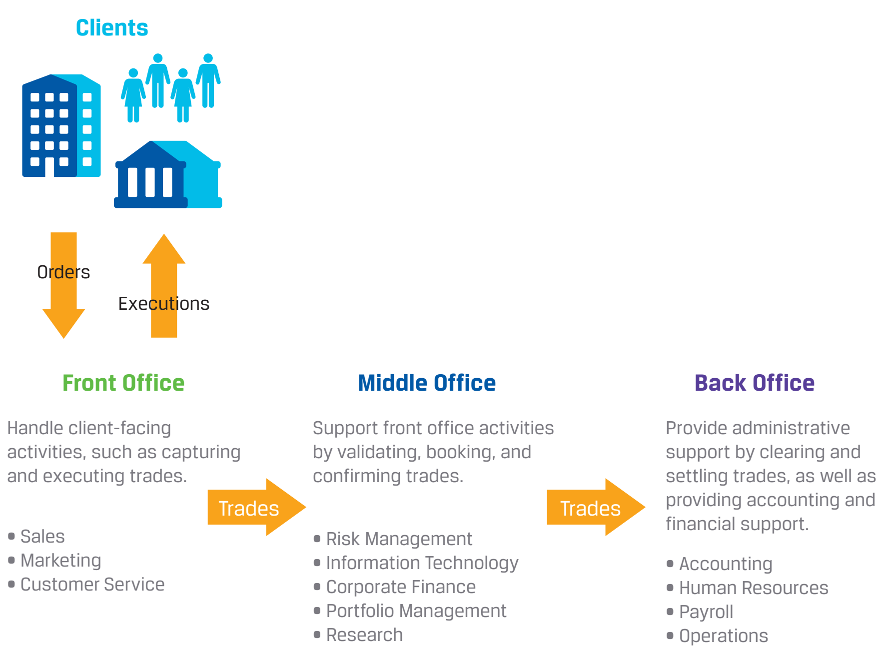
7.2 Front, Middle, and Back Offices

Most sell-side firms organise their activities along similar lines. Activities are classified by whether they are in the front office, the middle office, or the back office.

The **front office** consists of client-facing activities that provide direct revenue generation. The sales, marketing, and customer service departments are the most important front-office activities. Some practitioners consider the trading department to be a front-office activity, especially if the traders regularly interact with clients. Some consider research to be a front-office activity because it generates revenue from clients.

The **middle office** includes the core activities of the firm. Risk management, information technology (IT), corporate finance, portfolio management, and research are generally considered middle-office activities, especially if these departments do not interact directly with clients. IT activities are particularly important because most firms in the investment industry need to process and retrieve vast quantities of data efficiently and accurately. Risk management activities are also critical because they help ensure that the firm and its clients are not intentionally, inadvertently, or fraudulently exposed to excessive risk.

The **back office** houses the administrative and support functions necessary to run the firm. These functions include accounting, human resources, payroll, and operations. For brokerage firms and banks that provide custodial services, the accounting department is especially important because it is responsible for clearing and settling trades and for keeping track of who owns what.



Some activities are not easily classified as front, middle, or back office. For example, compliance activities are relevant to the entire organisation. A firm's compliance department ensures that the firm and its clients comply with the many laws and regulations that govern the investment industry.

The terms front office, middle office, and back office are generally not used when describing buy-side firms. However, the main departments of buy-side investment management firms are similar to those of sell-side firms. These departments include sales and client relations, investment research and portfolio management, trading, compliance, accounting, and administration.

7.3 Leadership Titles and Responsibilities

Exhibit 2 provides an example of major leadership titles and responsibilities in the investment industry. Titles used by different firms may vary.

Exhibit 2 Leadership Titles and Responsibilities

Title	Responsibility
Chief executive officer (CEO)	Manages the firm.
Chief financial officer (CFO)	Responsible for financing the firm and for financial reporting.
Chief operating officer (COO)	Responsible for the day-to-day management of the firm.
Chief investment officer (CIO)	Responsible for any investment advice that the firm provides to its clients and for the investment decisions that the firm makes for itself and on behalf of its clients.
Head trader	Responsible for all trading operations. At firms that engage in proprietary trading, the head trader is responsible for all positions, risks, and profits.
Chief accountant (also known as finance controller)	Responsible for the accounting and financial systems.
Treasurer	Responsible for cash management, including the investment of receipts and payment of invoices.
Chief risk officer	Responsible for identifying and managing the risks to which the firm and its clients are exposed.
Chief compliance officer	Responsible for ensuring that the firm complies with all constraints placed on it by laws, regulations, and clients.
Chief audit executive	Leads the internal audit department, which is responsible for providing independent assessments of the firm's operational systems as well as suggestions for improvement.
General counsel	Leads the legal department, which reviews and helps write contracts, responds to or initiates lawsuits, and interprets regulations, among many other activities.

At many firms, especially smaller ones, some people hold multiple titles and responsibilities. For example, the chief investment officer of a smaller investment management firm may also be the chief executive officer.

7.4 Investment Staff

Firms in the investment industry employ many types of investment professionals. Examples include the following:

- Portfolio managers at buy-side firms make investment decisions for one or more portfolios.
- Buy-side, sell-side, and independent research analysts produce the investment research that portfolio managers use to make decisions.
- Research assistants assist research analysts with the collection and analysis of investment information.
- Buy-side traders interact with sell-side firms to trade orders created by their portfolio managers.
- Sales traders at sell-side firms help arrange trades for their buy-side clients.
- Sales managers manage sales for regions, products, or customer types.
- Salespeople identify potential clients and sell them the firm's products and services.
- Sales assistants provide administrative support to the salespeople.
- Client service agents and their assistants answer client questions and help clients open, close, and manage their accounts.

Investment professionals who interact with clients may also be known as account executives and account managers at many firms.

Research assistant is often the entry-level position for investment professionals interested in becoming portfolio managers. Assistants who acquire strong expertise in a particular area and who can write well may be promoted to research analysts. Those analysts who demonstrate excellent investment judgment often become portfolio managers. Likewise, sales assistants and account services assistants are entry-level positions for investment professionals interested in sales or account services.

Companies that provide investment management services also employ many other types of professionals besides investment professionals. These include professionals working in accounting, information services, marketing, and legal services.

SUMMARY

You should now have a good idea of who the main participants are in the investment industry and what roles they fulfil. Ways in which the various participants interact have also been described, and you should be able to visualise the basic structure of the industry based on the description of these interactions. Some important points to remember include the following:

- The investment industry provides many services to facilitate successful saving and investing.
- Investing involves many activities that most individual and institutional investors cannot do themselves. Investors obtain assistance with these activities either directly or indirectly.
- Financial planning helps investors set their financial goals and determine how much money they should save for future expenses and/or how much money they can spend on current expenses while still preserving their capital.
- Investment management assists retail, institutional, and high-net-worth investors in implementing their savings and investment plans to be able to achieve their financial goals. The three major investment management activities are asset allocation, investment analysis, and portfolio construction.
- Many investors and their investment managers rely on investment information services to obtain investment research, financial data, and consultancy services that help them make decisions.
- Brokers act as agents, arrange trades for their clients, and ensure that clients settle their trades. For complex trades, they often serve as professional negotiators.
- Dealers participate on the opposite side of their clients' trades and are willing to trade on demand, thus providing liquidity.
- After a trade has been agreed on, clearing houses arrange for final settlement of the trade, and then settlement agents organise the final exchange of cash for securities.
- Custodians and depositories hold money and securities for safekeeping on behalf of their clients and help prevent loss from securities investment fraud.
- Sell-side firms are typically investment banks, brokers, and dealers that provide investment products and services. Buy-side participants are typically investors and investment managers that purchase investment products and services.
- The front office of a sell-side firm consists of client-facing activities that provide direct revenue generation. The middle office includes the core activities of the firm, such as risk management, information technology, corporate finance,

portfolio management, and research. The back office houses the administrative and support functions necessary to run the firm, such as accounting, human resources, payroll, and operations.

- Firms in the investment industry employ many types of investment professionals. Leadership titles and responsibilities vary among firms. At many firms, especially smaller ones, some people hold multiple titles and responsibilities.

CHAPTER REVIEW QUESTIONS

1 Investment professionals who create savings and investment plans appropriate for their clients' needs are *most likely*:

A dealers.

B financial planners.

C investment research providers.

2 Investment managers that determine the proportion of a client's money that should be invested in cash, equities, and fixed income are performing which of the following activities?

A Asset allocation

B Investment analysis

C Portfolio construction

3 When investment managers identify attractive securities based on fundamental values, the investment managers are performing which of the following activities?

A Asset allocation

B Investment analysis

C Portfolio construction

4 Passive managers will *most likely*:

A sell securities that are expected to outperform.

B sell securities that are expected to underperform.

C match the return and risk of a broad market index.

5 Credit rating agencies are *best* described as providing:

A custodial services.

B financial planning services.

C investment information services.

6 Real-time data about companies and market conditions are usually supplied by:

A data vendors.

B credit rating agencies.

C investment research providers.

7 Credit rating agencies provide:

A historical accounting data.

B opinions about an issuer's credit quality.

C real-time news about companies and markets.

8 Which of the following statements is *most* accurate? Brokers trade:

A with clients by buying and selling the traded securities.

B on behalf of clients in exchange for a commission that typically depends on the value or quantity traded.

C on behalf of clients in exchange for a fee that is usually based on assets under management.

9 Which of the following parties *most likely* arranges trades on behalf of clients who want to trade large blocks of securities?

A Block brokers

B Prime brokers

C Primary dealers

10 Which of the following services is *most likely* provided by brokers?

A Finding counterparties for their clients' trades

B Collecting interest and dividends for clients' securities

C Eliminating settlement risk by acting as a settlement intermediary

11 Which of the following parties *most likely* acts as a custodian and as a monitor?

A Depositories

B Clearing houses

C Primary dealers

12 Which of the following statements is *most* accurate? Dealers:

A match buyers and sellers.

B serve as trade negotiators.

C provide liquidity in securities markets.

13 Sell-side firms are *best* described as firms that:

A sell insurance products to retail clients.

B sell investment data, research, and consulting services.

C provide investment products and services.

14 Practitioners *most likely* use the term buy side to refer to:

A dealers who provide investment products and services.

B investors who purchase investment products and services from the sell side.

C firms that only provide investment data, research, and consulting services.

15 An example of a middle office activity is:

A sales.

B accounting.

C risk management.

16 Front office activities within a sell-side firm *most likely* include:

A core activities of the firm.

B administrative and support activities.

C client-facing, revenue-producing activities.

17 Which of the following titles *best* describes the person responsible for leading the legal department and interpreting regulations?

A Chief risk officer

B General counsel

C Chief compliance officer

18 Which of the following titles *best* describes the person in a firm responsible for providing independent assessments of the firm's operational systems?

A Chief risk officer

B Chief audit executive

C Chief operating officer

ANSWERS

1 B is correct. Financial planners are investment professionals who create savings and investment plans appropriate for their clients' needs. In particular, they help their clients set their financial goals and determine how much money they should save for future expenses and/or how much money they can spend on current expenses while still preserving their capital. A is incorrect because dealers are agents who provide trading services for their clients by participating directly in each trade. C is incorrect because investment research providers research and compile data about industries, companies, and technologies and document the results in investment reports. They provide information services and do not interact with clients regarding their investment planning needs.

2 A is correct. Investment managers are performing asset allocation when they determine the proportion of a client's money to invest in various asset classes, such as cash, equity securities, and debt securities. B is incorrect because investment analysis is when investment managers determine the value of potential investments and identify attractive securities. C is incorrect because portfolio construction is the process of trading, holding, and managing the assets according to the client's asset allocation requirements.

3 B is correct. When investment managers identify attractive securities based on fundamental values, they are performing investment analysis. A is incorrect because asset allocation is the process of determining the proportion of a portfolio to invest in various asset classes. C is incorrect because portfolio construction is the process of trading, holding, and managing the assets according to the asset allocation requirements.

4 C is correct. Passive managers seek to match the return and risk of an appropriate benchmark, such as a broad market index. A and B are incorrect because it is active, not passive, managers who trade securities to beat the benchmark. Note that active managers will *buy* securities that are expected to *outperform* and *sell* securities that are expected to *underperform*.

5 C is correct. Credit rating agencies are investment information services providers that specialise in providing opinions about the credit quality of bonds and of their issuers. A is incorrect because custodians, not credit rating agencies, are firms that hold money and securities on behalf of their clients for safekeeping. B is incorrect because credit rating agencies do not provide financial planning services.

6 A is correct. Real-time data about companies and market conditions are usually supplied by data vendors. B and C are incorrect because credit rating agencies and investment research providers do not supply real-time data about companies and market conditions. Credit rating agencies supply opinions about the credit quality of bonds and their issuers. Investment research providers supply research reports about companies.

7 B is correct. Credit rating agencies provide opinions about an issuer's credit quality. A and C are incorrect because data vendors, not credit rating agencies, provide historical accounting data and real-time news about companies and markets.

8 B is correct. Brokerage services primarily include placing trade orders for securities on behalf of clients, otherwise described as acting as an agent to execute trade orders. Clients pay commissions to brokers for finding buyers or sellers for their securities, and these commissions typically depends on the value or quantity traded. A is incorrect because trading with a client by buying and selling the traded security, also described as "making a market" in a security, describes the function of an investment dealer, not a broker. C is incorrect because neither brokers nor dealers are usually compensated by collecting a fee based on assets under management, which would describe how investment (or asset) managers are typically compensated.

9 A is correct. Brokers who help arrange trades of large blocks of securities for clients by finding counterparties willing to buy or sell a large number of securities are referred to as block brokers. B is incorrect because prime brokers usually offer brokerage services to investment professionals, as well as a bundle of other services, including financing clients' investment positions. C is incorrect because primary dealers do not typically trade for clients on a brokerage basis. Their role is to facilitate monetary policy transactions that are initiated by central banks.

10 A is correct. Brokers are agents who arrange trades for their clients by finding counterparties to take the other side of their clients' trades. B is incorrect because collecting interest and dividends for clients' securities is a function most likely provided by custodians. C is incorrect because eliminating settlement risk by acting as a settlement intermediary is a role that is performed by a clearing house, not a broker.

11 A is correct. Depositories usually act as a custodian and a monitor. They tend to be regulated and monitor counterparties to prevent fraud, monitor securities pledges, and monitor security settlement, among other activities. B and C are incorrect because clearing houses and primary dealers do not monitor counterparties or take custody of assets. Clearing houses arrange for the final settlement of trades. Primary dealers trade with clients and facilitate monetary policy transactions that are initiated by central banks.

12 C is correct. Dealers provide liquidity in securities markets by trading on demand; they buy when their clients want to sell and sell when their clients want to buy. A and B are incorrect because matching buyers and sellers and serving as trade negotiators are services provided by brokers, not by dealers.

13 C is correct. Sell-side firms provide investment products and services. Brokers, dealers, and investment banks are considered sell-side firms. A is incorrect because insurance companies typically sell insurance products and buy investment products and services. B is incorrect because firms that provide only investment data, research, and consulting services are neither buy- or sell-side firms. These firms are investment information services providers.

14 B is correct. Practitioners typically use the term buy side to refer to investors who purchase investment products and services from the sell side. A is incorrect because it is sell-side, not buy-side, firms that provide investment products and services. C is incorrect because the classifications of buy side and sell side are not usually applied to independent firms, such as the ones that provide investment data, research, and consulting services.

15 C is correct. Risk management is classified as a middle office activity. A is incorrect because sales is classified as a front office activity. B is incorrect because accounting is classified as a back office activity.

16 C is correct. Front office activities in a sell-side firm include activities that directly produce revenue and typically have direct client contact. Examples include sales and customer services. A is incorrect because core activities of the firm are performed by the middle office. B is incorrect because the back office of a firm is responsible for support and administrative functions.

17 B is correct. A firm's general counsel is usually the head of the legal department, which is responsible for arranging contracts, interpreting regulations, and handling lawsuits. A is incorrect because the chief risk officer is responsible for identifying and managing potential risks to clients and the firm. C is incorrect because the chief compliance officer is usually the person responsible for ensuring that the firm follows internal policies and regulations or constraints placed on the firm by laws, regulations, and clients.

18 B is correct. The firm's chief auditor, or chief audit executive, is responsible for leading the firm's auditing department, assessing the firm's operational systems, and suggesting ways for the firm to improve them. A is incorrect because the chief risk officer is responsible for identifying and managing potential risks to clients and the firm. C is incorrect because the firm's chief operating officer is responsible for the day-to-day management of the firm.