PART 1

The Basic Tools of Finance

PART 1

Overview

Welcome to the study of corporate finance: a field that is rewarding financially and intellectually, with unmatched career opportunities that are as intellectually challenging as they are financially rewarding. In this book we try to explain how financial managers apply a few key principles as they weigh the marginal costs and marginal benefits of important business decisions. When managers take actions that have higher benefits than costs, they create value for shareholders. Our goals in introducing you to these principles are not only to impart useful knowledge, but also to convey our enthusiasm for our chosen field, as well as help you to explore whether a career in corporate finance is right for you.

Part 1 comprises three chapters, which lay the foundation for further work. Chapter 1 describes the roles that corporate finance experts play in a variety of businesses and industries. Most of what corporate finance professionals do on a day-to-day basis falls within one of the basic functions described in the chapter. We recommend that you revisit the list of five key functions as you work through this book. Most of the chapters place a heavy emphasis on just one or two of these functions and it is a useful exercise to map the key concepts from each chapter back to the five functions outlined in Chapter 1.

It has been said that accounting is the language of business, and certainly it is true that financial managers need to master basic accounting concepts and principles in order to do their jobs well. Chapter 2 offers a broad overview of the most important sources of accounting information – firms' financial statements. Our focus in this chapter is *not* on how accountants construct these statements. Instead, our goal is to illustrate why these statements are important to financial managers and why finance places so much emphasis on cash flow rather than on measures of earnings, such as net income or earnings per share. We also demonstrate how companies can use the information from financial statements to track their performance over time or to benchmark their results against those achieved by other firms. We also show how the emergence of harmonized accounting standards worldwide has made the task of comparing companies across national boundaries much easier.

Chapter 3 introduces one of the most fundamental concepts in finance called the time value of money. Simply put, the time value of money says that money today is worth more than money in the future. The reasoning behind this statement is straightforward. If you have money in hand today, you can invest it and earn interest, so receiving the money now is better than having to wait for it. Because business decisions typically involve costs and benefits that are spread out over many months and years, managers need a way to evaluate cash flows that the firm pays or receives at different times. For example, a firm spends €1 million today to purchase an asset that will generate a stream of cash receipts of €225 000 over the next several years. Do the costs of this investment outweigh its benefits, or are the benefits great enough to justify the costs? Chapter 3 explains how managers can make valid cost/benefit comparisons when cash flows occur at different times and using different rates of interest.

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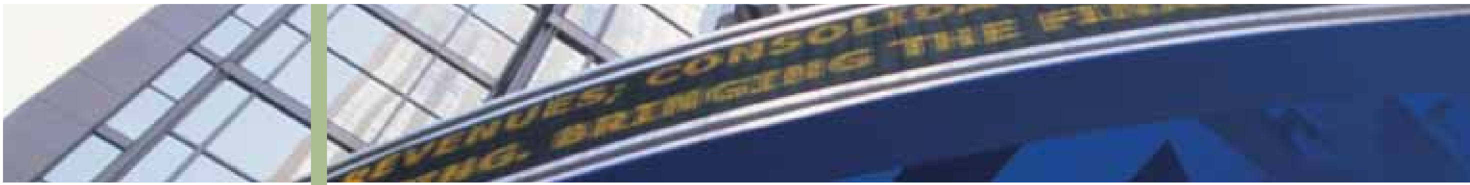

Chapter 1

The Scope of Corporate Finance

OPENING FOCUS

Apple succeeds with iTunes where others had failed

Ever since global sales of recorded music peaked in 1999, leading music companies have struggled to solve the difficult problem of how to set prices for their products that can compete with the same products for *free*! In 1999, the start-up company Napster pioneered file-sharing programs that allow music lovers to download song tracks over the internet for free. By 2004, some 900 million music files were available for sharing worldwide. Music companies' sales had been sliced by more than 20 per cent from their peak five years before. The challenge for music companies was this: to provide music on demand, at a price customers were willing to pay, while continuing to earn a profit. The recording industry may never discover how to make money selling music electronically – but Apple Computer did.

In April 2003, Apple launched a service called Apple iTunes Music Store from which customers could choose from among 500 000 music tracks provided by five major record labels. Steve Jobs, Apple's founder and chief executive officer (CEO), persuaded music companies to allow Apple to sell current and classic songs for 99 cents per track. The service was an immediate hit, selling 1 million songs during its first week alone and more than 70 million during its first 12 months. One customer reportedly spent more than €300 000! The service requires users to download songs using Apple's own software, directly promoting sales of Apple's stylish iPod MP3 player. This device retails for about $300, holds up to 7500 tracks, and has been widely applauded for its compact design and ease of use. Today, Apple sells more iPods than computers, and iPod sales reached $1800 million during 2006.

Perhaps surprisingly, the iTunes Music Store itself has thus far proven only marginally profitable for Apple. The company pays each record label between 60 and 65 cents per track. It spends an additional 25 cents in credit card fees and distribution costs, so the service yields a gross profit margin of only about 10 cents per song. On the other hand, iTunes clearly spurs iPod sales, which are very profitable and have allowed the company to rebrand itself from a computer company to one that is seen as a design house. And by keeping download prices so low, Apple both encourages the continued rapid growth of the music download market and discourages competitors from entering the market. In any case, the music companies don't seem to mind. They are at least receiving *some* revenue from songs downloaded over the internet.

Stories in the popular press tend to focus on the success of iTunes and iPod themselves. However, financial managers behind the scenes at Apple played a number of crucial roles in driving the success of the business. In this chapter, we explain how financial specialists interact with experts in fields as diverse as engineering, marketing, communications and law to help companies create wealth for their shareholders. We describe the types of activities that occupy financial managers day to day, and highlight some of the most promising career opportunities for finance students. The work that financial analysts do is intellectually challenging, as well as economically rewarding.

Sources: Multiple *Financial Times* articles from April 2003 to December 2006, downloaded from that company's paid internet service, FT.com (http://www.ft.com).

LEARNING OBJECTIVES

After studying this chapter you should be able to:

- Demonstrate an appreciation of how finance interacts with other functional areas of any business, see the diverse career opportunities available to finance students and outline the main professional financial qualifications available in business.
- Describe how modern companies obtain funding from financial intermediaries and markets, and discuss the five basic functions that modern financial managers must perform.
- Assess the costs and benefits of the three principal forms of business organization and explain why limited liability companies, with publicly traded shares, dominate economic life in most countries.
- Define agency costs and explain how shareholders monitor and encourage corporate managers to maximize shareholder wealth by choosing business opportunities for which the marginal benefits outweigh the marginal costs.

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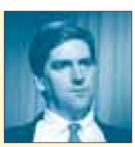
1.1 THE ROLE OF CORPORATE FINANCE IN MODERN BUSINESS

The example in the Opening Focus illustrates not only how managers conduct business in a modern, knowledge-based economy, but also shows the vital role that financial managers play in creating wealth. This story provides important insights into the theory and practice of corporate finance. Modern business involves people with many different skills and backgrounds working together towards common goals. Financial experts play a major role in achieving these goals. The importance (and status) of the finance function and the financial manager within business organizations has risen steadily over the past two decades. Business professionals in many different functional areas now recognize that competent financial professionals can do more than just keep the books and manage the firm's cash. Financial managers can create value in their own right.

This book focuses on the practising financial manager who is an integral part of the management team in a modern company. On the job, a financial manager must constantly apply financial tools to solve real business problems. Throughout this text, we highlight the one simple question that managers should ask when contemplating all business decisions: do the marginal benefits (MB) of taking a certain action outweigh the marginal costs (MC) of this action? For instance, at Apple Computer, the finance organization had to estimate the marginal benefits and costs of launching iTunes. By taking actions that generate benefits in excess of costs, firms generate wealth for their investors. Managers should take only those actions where the MB is at least equal to the MC.

As an introduction to what a financial manager's job entails, the next section discusses how various functional disciplines interact with financial managers. It describes the kinds of jobs that people with financial training generally take. Throughout this book, we assume that the managers we describe work for large, publicly traded corporations, but we maintain this assumption for convenience only. The skills and knowledge needed to contribute effectively towards achieving corporate business objectives are the same as those needed to be a successful entrepreneur, to manage family businesses, or to run a non-profit organization. Successful financial managers must be able to creatively manage both people and money.

SMART PRACTICES VIDEO



Tom Cole, Deutsche Bank, Leveraged Finance Group

'To be good at finance you have to understand how businesses work.'

See the entire interview at **www.cengage.co.uk/megginson**

How finance interacts with other functional business areas

Financial professionals interact with experts in a wide range of disciplines to drive successful businesses. Working with Apple's computer scientists, financial managers analysed the business potential of the iTunes service, as well as the sales potential of the iPod player. Financial managers:

- studied the economics of downloading music over the internet
- developed a strategy for providing a fee-based service that would attract customers
- negotiated licensing agreements with entertainment moguls from the recording industry
- worked with technical authorities to ensure that customers could seamlessly download songs.

Apple's financial managers also advised public relations professionals, who were asked to present the new service to a sceptical press and to answer journalists' questions about the service's financial aspects. Additionally, the company's financial managers worked with accounting and information systems staff. Together, they developed payment systems that allow the company to collect large numbers of small-denomination purchases by customers who use credit cards. As the iTunes service grows, financial managers must ensure that Apple will have the cash it needs to continue expanding the business, plus any follow-on services that might develop later.

In sum, although Apple's iPod was primarily a marketing and technology-driven project, the firm's financial organization played pivotal roles in every stage of the deal – from the initial assessment and funding of research, through the actual roll-out of iTunes, to managing the cash flows generated by the service, and then accumulating the capital needed to fund follow-on projects. In more ways than most people imagine, modern finance helps make high technology possible.

Career opportunities in finance

This section briefly surveys career opportunities in finance. Though different jobs require different specialized skills, the basic tools of corporate finance are vitally important for all business professionals, whether they work in industrial corporations, on Wall Street, or in the offices of a commercial bank or life insurance company. Three other skills that all finance jobs require are (a) good written, verbal and online communication and presentation skills; (b) teamwork; and (c) proficiency with computers and the internet. For an increasing number of finance jobs, an in-depth knowledge of international business has also become a prerequisite for career success.

We classify finance career opportunities as follows:

- corporate finance
- commercial banking
- investment banking
- money management
- consulting.[1]

Finance graduates in the European context can typically earn salaries that are at a premium over the average graduate. The exact salary you can attain will depend not only on the economic environment, but also on personal negotiating skills – and on how well you master the knowledge presented in this text!

SMART PRACTICES VIDEO

Joshua Haines, Senior Credit Analyst, The Private Bank

'Most of the basic finance concepts that I learned in my first finance class I still use today.'

See the entire interview at **www.cengage.co.uk/megginson**

Corporate finance Corporate (or what was traditionally called managerial) finance is concerned with the duties of the financial manager in a business. These managers handle the financial affairs of many types of businesses – financial and non-financial, private and public, large and small, profit seeking and not-for-profit. They perform such varied tasks as budgeting, financial forecasting, cash management, credit administration, investment analysis, and funds procurement. In recent years, changing economic and regulatory

[1] The basic job descriptions and duties are generally taken from the online resources *Careers in Business* (http://www.careers-in-business.com), *Careers in Finance* (http://www.careers-in-finance.com), and other career websites such as Monster.com (http://www.monster.com) that highlight the finance profession. Students seeking more detailed descriptions of the varying careers open to finance graduates, as well as in-depth analyses of the specific jobs and responsibilities of different positions, should join the Financial Management Association and obtain a copy of the paperback book entitled *Careers in Finance* (Financial Management Association International: Tampa, Florida, 2003). Salary levels for typical posts can be derived from *Financial Times* advertisements.

environments have increased the importance and complexity of the financial manager's duties. The globalization of business has also increased demand for people able to assess and manage the risks associated with volatile exchange rates and rapidly changing political environments. The major focus of this book is on the corporate finance function. In early 2007, advertisements in the *Financial Times* for trainee analysts suggested salaries of around €40 000 were routinely available.

Table 1.1 summarizes key facts relating to various entry-level and senior-level corporate finance positions.

Commercial banking Commercial banking is paradoxically an industry in decline in terms of the total number of entities, but one that has an increasing demand for graduates. Bank numbers, driven by consolidation worldwide, continue to decline. However, the value of banking products has increased very greatly, and so banks continue to hire large numbers of new business and finance graduates each year, and banking remains a fertile training ground for managers who later migrate to other

TABLE 1.1
Career opportunities in corporate finance

POSITION	DESCRIPTION
Financial analyst	Primarily responsible for preparing and analysing the firm's financial plans and budgets. Other duties include financial forecasting, performing financial ratio analysis, and working closely with accounting.
Capital budgeting manager	Responsible for evaluating and recommending proposed asset investments. May be involved in the financial aspects of implementing approved investments.
Cash manager	Responsible for maintaining and controlling the firm's daily cash balances. Frequently manages the firm's cash collection, short-term borrowing and banking relationships.
Project finance manager	In large firms, arranges financing for approved asset investments. Coordinates consultants, investment bankers and legal advisers.
Credit analyst/manager	Administers the firm's credit policy by analysing or managing the evaluation of credit applications, extending credit, and monitoring and collecting accounts receivable.
Assistant treasurer	Mid-level position in large firms, responsible for overseeing cash management (including banking relationships) and risk management/insurance needs.
Controller	Upper-mid-level position responsible for formulating and implementing integrated financial plans for companies or divisions. This includes supervising the firm's (or division's) accounting and treasury operations and providing foreign exchange exposure management.
Chief financial officer	Top management position charged with developing financial strategies for creating shareholder wealth. Responsible for developing policies covering all aspects of financial management, including dividends, capital structure, securities issuance, mergers and acquisitions, and international expansion. Often a member of the firm's board of directors.

fields. The key aptitudes required in most entry-level banking jobs are the same as in other areas. In addition to people, computer and international skills, apprentice bankers must master cash flow valuation along with financial and credit analysis.

Most commercial banks offer at least two basic career tracks – consumer and commercial banking. Consumer banking serves the financial needs of a bank's individual customers in its branch network, increasingly via electronic media such as the internet. Commercial banking, on the other hand, involves extending credit and other banking services to corporate clients, ranging from small, family-owned businesses to multinational behemoths. In addition, a great many technologically intensive support positions in banking require excellent finance skills and intimate knowledge of telecommunications and computer technology. Table 1.2 describes career opportunities in commercial banking.

TABLE 1.2
Career opportunities in commercial banking

POSITION	DESCRIPTION
Credit analyst	Entry-level position entails analysis of the creditworthiness of a corporate or individual loan applicant. Involves financial and ratio analysis of financial statements, making projections of future cash flows and often visiting applicants' businesses (corporate loan applicants). Generally a job for immediate graduates, but MBAs sometimes hired.
Corporate loan officer	Responsible for developing new loan business for the bank and for servicing existing accounts. Often called upon to help develop a long-term financing plan for customers and to work with borrowers encountering financial distress. Also expected to market other bank services (cash management, leasing, trust services) to clients.
Branch manager	For graduate trainees who select the retail side of commercial banking, this is an early position of real responsibility. Must manage personnel and customers of a bank branch and spearhead searches for new depositors and borrowers.
Trust officer	Responsible for providing financial advice and products to bank customers – often wealthy ones. Can involve estate planning and/or managing investment assets. Must have (or develop) knowledge of probate law, estate planning, investment planning and personal taxes.
Mortgage banker	Involves making and servicing mortgage loans to homebuyers and businesses. More senior positions involve arranging mortgages for larger real estate developments and commercial properties, as well as securitizing and selling mortgages to syndicators of mortgage-backed securities.
Leasing manager	One of many specialist positions responsible for managing banks' equipment leasing operations and developing new products and services. Other areas include buying accounts receivable and data processing services.
Operations officer	Generic classification for many specialist positions requiring knowledge of both banking and information-processing technology. For example, an electronic banking manager would develop the banks' internet presence and business strategy. Other positions are responsible for internal data processing; coordinating the bank's computer links to ATMs, other banks and the regulatory authorities; and ensuring security of the bank's electronic transactions.

Investment banking Along with consulting, investment banking is the career of choice for many highly qualified finance students because of its high income potential and the interesting nature of the work itself. When students consider finance as a career they typically are thinking of the work of an investment banker. Investment banking involves three main types of activities:

- Helping corporate customers obtain funding by selling securities such as shares and bonds to investors.
- Providing advice to corporate clients on strategic transactions such as mergers and acquisitions.
- Trading debt and equity securities for customers or for the firm's own account.

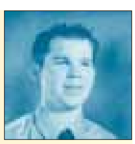
Investment banking was and remains extraordinarily profitable, and a small number of (mostly US-based) institutions have come to dominate the industry worldwide. But it remains a highly volatile industry. Investment banking is also notorious for being extremely competitive and for demanding long working hours from its professionals (especially the junior ones).

On the other hand, investment banking offers lucrative rewards for those who master the game. Most graduates hired by investment banks are assigned duties as financial analysts. In early 2007, starting salaries in the main European financial centres for entry-level analyst positions ranged from €40 000 upwards, plus bonuses that might average half of starting salaries. Employees who advance in the investment banking business find that their incomes often rise rapidly – sometimes exponentially.

In many ways, investment banking is a star system, like professional sports, where a handful of top producers receive seven-figure compensation packages, while regular employees earn merely comfortable incomes. Success in this industry demands good analytical and communication skills. Much of the growth in investment banking over the foreseeable future is likely to come from two sources – ongoing development of new financial products and services, and the continued internationalization of corporate finance.

SMART PRACTICES VIDEO

Bill Eckmann, Investment Banker



'Besides finance, there are three subject areas that have really helped me at the beginning of my career in investment banking.'

See the entire interview at **www.cengage.co.uk/megginson**

Money management The past 25 years have been very good for stock market investors and finance professionals employed in the money management industry. This industry includes investment advisory firms, mutual fund companies, pension fund managers, trust departments of commercial banks and the investment arms of insurance companies. In fact, the money management industry encompasses any person or institution that acts as a **fiduciary** – someone who invests and manages money on someone else's behalf. Two powerful economic and demographic trends have created a rapidly growing demand for money management services. In the USA there has been a demographic bulge of those born in the 1940s and 1950s moving towards retirement, while in Europe we have seen significant new wealth creation in traditionally peripheral countries such as Ireland, Greece and the Iberian nations.

fiduciary
Someone who invests and manages money on someone else's behalf.

The second major force fuelling the growth of the money management industry has been the *institutionalization of investment*. Whereas in the past, individuals owned most financial assets (especially shares), today institutional investors dominate the markets. Of course, these money managers are not the final owners of the securities they invest in, but they do make almost all key investment decisions for their clients. This trend towards professional management of institutionally owned financial assets has created employment opportunities in the money management industry and this trend is likely to continue. Table 1.3 lists career opportunities in money management.

TABLE 1.3
Career opportunities in money management

POSITION	DESCRIPTION
Securities analyst	Prepares company-specific and industry-wide analyses for various classes of publicly traded securities (especially shares and bonds). Also involves written and verbal presentations of research and recommendations.
Portfolio management, sales	Markets mutual fund shares to individual and/or institutional investors. Also supports pension fund's sales pitch to corporations, as needed. Stockbrokers develop their own client bases.
Portfolio manager	Selects and manages financial assets for inclusion in portfolios designed to meet specific investment preferences (such as growth, income, international and emerging markets). Relative performance of managers is continuously monitored and publicized.
Pension fund manager	Prudently manages assets held by employees' pension fund, controls appropriate administration expenses (trustee and consultant fees, brokerage commissions, etc.), allocates assets among investment managers and diversifies assets by type of security.
Financial planner	Provides budgeting, insurance, investment, retirement planning, estate planning and tax advice to individuals.
Investment adviser	Works for one of the many firms that specialize in providing investment advice, performance evaluation and quantitative analysis to the money management industry. Requires strong quantitative skills.

Consulting As the name implies, consultants are hired by companies to analyse firms' business processes and strategies and then recommend how practices should change to make firms more competitive. Firms also hire consultants to implement recommendations. Consulting positions offer a unique opportunity early in your career to work with a broad range of businesses. In return, consultants can expect to spend the majority of their working life away from their base in clients' offices.

The above summaries certainly do not represent an exhaustive survey of financial career opportunities. Instead, they illustrate how you can establish a rewarding and satisfying career using the principles of corporate finance covered in this text. We now answer a perplexing question: What exactly should financial managers manage?

CONCEPT REVIEW QUESTIONS

1. What is the 'marginal benefits greater than or equal to marginal costs' decision rule, and why should financial managers constantly seek to apply it to business decisions?
2. Think of another company or product besides Apple's iPod and note the connections between other functional areas and finance.
3. List and briefly describe five main career paths open to finance graduates.
4. Based on your own personal attributes and desires, which of these paths would you prefer?

Real World

Financial theory and financial practice can sometimes be at odds, as you will see throughout this book. Each informs the other, however, and over time the theory and practice do evolve together. A great example of this is Dimensional Fund Advisers. DFA is a fund management company that was set up in the early 1980s to seek to exploit a phenomenon called the 'small cap' effect. This was the fact that, all other things being equal, the returns on smaller firms tend to be higher than those on larger firms. Over the years DFA has added strategies to its portfolio of funds. Each new strategy is informed by financial research, and DFA employs large numbers of analysts, fund managers and academics to both monitor and conduct research of their own.

Source: Authors' own research; DFAus.com website.

1.2 CORPORATE FINANCE ESSENTIALS

Every business requires money to operate, and corporate finance seeks to acquire and manage this money. This section presents several basic concepts involved with the financial management of companies, beginning with a description of debt and equity capital, the two principal types of long-term funding for all businesses.

Debt and equity: The two flavours of capital

debt capital Borrowed money.

Even a casual reader of the financial section of a newspaper or watcher of the business news on television might conclude that businesses have access to many different types of long-term funding, or capital. In fact, only two broad types of capital exist – debt and equity. **Debt capital** includes all of a company's long-term borrowing from creditors. The borrower is obliged to pay interest, at a specified annual rate, on the full amount borrowed (called the loan's 'principal'), as well as to repay the principal amount at the debt's maturity. All of these payments must be made according to a fixed schedule, and creditors have a legally enforceable claim against the firm. If the company defaults on any of its debt payments, creditors can take legal action to force repayment. In some cases, this means that the creditors can force the borrowing firm into bankruptcy. Companies are forced out of business, and their assets are sold (liquidated) to raise cash, and the cash is then used to repay creditor claims. Recent developments in debt capital have greatly increased the complexity of the types available.

equity capital An ownership interest usually in the form of ordinary or preference shares.

The owners of the business contribute **equity capital**, which is expected to remain permanently invested in the company. The two basic sources of equity capital are (ordinary) shares and preference shares. When we hear that LMVH's shares have fallen, or that British Airways' have risen, we are hearing about how the market values ordinary shares. As discussed in greater depth in Section 1.3 and in Chapter 5, ordinary shareholders bear most of the firm's business and financial risk, because they receive returns on their investments only after creditors and preference shareholders are paid in full. Similar to creditors, preference shareholders are promised a fixed annual payment on their invested capital. Unlike debt, preference shareholders' claims are not legally enforceable, so these investors cannot force a company into bankruptcy if a preference share dividend is missed. If a company falls into bankruptcy and has to be liquidated, preference shareholders' claims are paid off before any money is paid back to common stockholders. Preference shares are not as common as ordinary shares, and their characteristics can usually be replicated by other financial instruments.

Financial intermediation and modern finance

In the modern economy companies can obtain debt capital by selling securities – effectively legally binding promises to pay – either directly to investors or through what are called financial intermediaries. A **financial intermediary** is an institution that raises capital by issuing liabilities against itself, and then using the funds raised in this way to make loans to companies and individuals. Commercial banks are the most well known of these institutions. Borrowers, in turn, repay intermediaries, meaning that debtors have no direct contact with the savers who actually funded the loans. Commercial banks issue liabilities such as demand deposits (checking or current accounts) to companies and individuals, and then loan funds to corporations, governments and households. While banks in the United States are prohibited from making equity investments, banks in other countries are allowed to purchase the shares of corporate customers. Other significant financial intermediaries include insurance companies, savings and loan institutions, and credit unions.

financial intermediary
An institution that raises capital by issuing liabilities against itself, and then lends that capital to corporate and individual borrowers.

In addition to making loans, modern financial intermediaries provide a variety of financial services to businesses. By allowing companies and individuals to place their money in demand deposits, banks eliminate the need for everyone to hold large amounts of cash to purchase goods and services. Banks also act as the backbone of a nation's payments system by:

- Collecting payment on cheques sent to their corporate customers.
- Making payment on the cheques written by their customers to other parties.
- Providing information-processing services to small and medium-sized businesses.
- Handling large-volume transactions such as payroll disbursements.

The growing importance of financial markets Although modern financial intermediaries are generally very efficient, the role of these intermediaries as providers of debt capital to corporations has declined for decades. Instead, corporations have increasingly turned to capital markets for external financing, principally because the rapidly declining cost of information-processing makes it much easier for large numbers of investors to obtain and evaluate financial data for thousands of potential corporate borrowers and issuers of ordinary or preference shares. New types of financial intermediaries – especially pension funds and mutual funds – have come to prominence as corporate finance has shifted towards greater reliance on market-based external funding. These intermediaries are major purchasers of securities issued by non-financial companies.

When companies sell securities to investors in exchange for cash, they are said to raise capital in **primary market transactions**. In such transactions, firms actually receive directly the proceeds from issuing securities, so these are true capital-raising events. Once firms issue securities, investors can sell them to other investors. Trades between investors (called **secondary market transactions**) generate no new cash flow for the firm, so these are not true capital-raising events. Most stock market transactions are secondary market trades, whereas a much larger percentage of bond market transactions involve capital-raising primary offerings.

primary market transactions
Sales of securities to investors by a corporation to raise capital for the firm.

secondary market transactions
Trades between investors that generate no new cash flow for the firm.

US markets are the most important capital markets in global finance. Over the last 15 years, US issuers have generally accounted for over 60 per cent of the total value of securities issued by corporations around the world each year. To put these 'market share' numbers in perspective, the United States represents only about 30 per cent of world gross domestic product (GDP) and only about one-eighth of the total value of world trade (exports plus imports). According to *Investment Dealers Digest* (January 2006), in 2005 global issues of securities, both debt and equity, totalled

$6.514 billion (up from $5.767 billion in 2004), of which $3.822 billion, or 58 per cent was from US issuers ($3.450 billion, or 59 per cent in 2004).

corporate finance The activities involved in managing money in a business environment.

external financing function Raising capital to support companies' operations and investment programmes.

capital budgeting function Selecting the best projects in which to invest the resources of the firm, based on each project's perceived risk and expected return.

financial management function Managing firms' internal cash flows and their mix of debt and equity financing, both to maximize the value of the debt and equity claims on firms and to ensure that companies can pay off their obligations when they come due.

corporate governance function Developing ownership and corporate governance structures for companies that ensure that managers behave ethically and make decisions that benefit shareholders.

risk management function Managing firms' exposures to all types of risk, both insurable and uninsurable, in order to maintain optimum risk–return trade-offs and thereby maximize shareholder value.

venture capitalists Professional investors who specialize in high-risk/high-return investments in rapidly growing entrepreneurial businesses.

initial public offering (IPO) Corporations offer shares for sale to the public for the first time; the first public sale of company shares to outside investors.

The five basic corporate finance functions

Although **corporate finance** is defined generally as the activities involved in managing cash flows (money) in a business environment, a more complete definition would emphasize that the practice of corporate finance involves five basic functions:

- Raising capital to support companies' operations and investment programmes (the **external financing function**).
- Selecting the best projects in which to invest firms' resources, based on each project's perceived risk and expected return (the **capital budgeting function**).
- Managing firms' internal cash flows, their working capital, and their mix of debt and equity financing, both to maximize the value of firms' debt and equity claims and to ensure that companies can pay off their obligations when due (the **financial management function**).
- Developing company-wide ownership and corporate governance structures that give incentives to managers to behave ethically and make decisions that benefit shareholders (the **corporate governance function**).
- Managing firms' exposures to all types of risk, both insurable and uninsurable, to maintain an optimal risk–return trade-off and therefore maximize shareholder value (the **risk management function**).

The following discussions provide a brief overview of the modern financial manager's five principal functions.

External financing Businesses raise money to support investment and other activities in one of two ways: either externally from shareholders or creditors, or internally by retaining and reinvesting operating profits. Although companies raise about two-thirds of their required funding internally each year, this section focuses on the external financing role – as does much of this book.

As we discuss in the next section, sole proprietorships and partnerships face very limited external funding opportunities, but companies enjoy richer and more varied opportunities to raise money externally. They can raise capital either by selling equity (ordinary or preference shares), or by borrowing money from creditors. When corporations are young and small, they usually must raise equity capital privately, either from friends and family, or from professional investors such as **venture capitalists**. These professionals specialize in making high-risk/high-return investments in rapidly growing entrepreneurial businesses. Once firms reach a certain size, they may decide to go public by conducting an **initial public offering (IPO)** – selling shares to outside investors and listing the shares for trading on a stock exchange. After IPOs, companies have the option of raising cash by selling additional stock in the future.

Capital budgeting The capital budgeting function represents firms' financial managers' single most important activity, for two reasons. First, managers typically evaluate very large investments in the capital budgeting process. Secondly, companies can prosper in a competitive economy only by seeking out the most promising new products, processes and services to deliver to customers. Companies such as Intel, British Airways, Shell, Samsung and Diageo regularly make huge outlays of money in capital investments. The pay-offs from these investments drive the value of their firms and the wealth of their shareholders. For these and other companies, the annual capital investment budget may run to several billion euros, so the consequences of flawed capital budgeting processes are serious indeed. Not only may the monies be wasted if incorrect decisions are made, but, more crucially, the company may find itself incorrectly positioned for future market or industry trends. A good analogy is the soccer industry – how much money should be paid to purchase a new player? Will he be a complete failure, or will the player be good, but unbalance the team and leave the whole less than the sum of its parts. Even for smaller companies, although the absolute value of the funds may not be as great, the importance is perhaps even higher.

The capital budgeting process breaks down into three steps:

1. *identifying* potential investments
2. *analysing* the set of investment opportunities and identifying those that create shareholder value, and
3. *implementing* and monitoring the investments selected in Step 2.

The long-term success of almost any firm depends on mastering all three steps. Not surprisingly, capital budgeting is also the area where managers most frequently and explicitly apply the marginal benefit versus marginal cost (MB ≥ MC) decision rule. Step 2 essentially describes precisely this kind of cost/benefit analysis. We cover capital budgeting in Part 3 of this book.

Financial management Financial management involves managing firms' operating cash flows as efficiently and profitably as possible. A key element of this process, known as the capital structure decision, is finding the right mix of debt and equity securities to issue that maximizes the firm's overall market value. A second part of the financial management function is ensuring that firms have enough working capital on hand for day-to-day operations. Managing working capital involves obtaining seasonal financing, building up enough inventories to meet customer needs, paying suppliers, collecting from customers and investing surplus cash, all while maintaining adequate cash balances. Managing working capital effectively requires not only technical and analytical skills, but also people skills. Almost every component of working capital management involves building and maintaining relationships with customers, suppliers, lenders and others.

Corporate governance Recent corporate scandals – such as financial collapses at Enron, Arthur Andersen, WorldCom and Parmalat – clearly show that establishing good corporate governance systems is paramount. Governance systems determine who benefits most from company activities; then they establish procedures to maximize firm value and to ensure that employees act ethically and responsibly. Good management does not develop in a vacuum. It results from corporate governance systems that hire and promote qualified, honest people, and that motivate employees to achieve company goals through salary and other incentives.

Developing corporate governance systems presents quite a challenge in practice because conflicts inevitably arise among shareholders, managers and other stakeholders. A firm's shareholders want managers to work hard and to protect shareholders' interests. But rarely is it in the interest of any *individual* shareholder to spend the time and money needed to ensure that managers act appropriately. If individual shareholders conducted this type of oversight, they would personally bear all the costs of monitoring management, but would share the benefits with all other shareholders. This is a classic example of the **collective action problem** that arises in most relationships between shareholders and managers. Likewise, though managers may wish to maximize shareholder wealth, they do not want to work harder than necessary, especially if others are going to reap most of the benefits. Finally, managers and shareholders may decide together to run a company to benefit themselves at the expense of creditors or other stakeholders who do not generally have a voice in corporate governance.

As you might expect, a variety of governance mechanisms designed to mitigate conflicts of interest have evolved over time. Strong boards of directors play a vital

collective action problem
When individual shareholders expend time and resources monitoring managers, bearing the costs of monitoring management while the benefit of their activities accrues to all shareholders.

role in any well-functioning governance system, because boards must hire, fire, pay and promote senior managers. Boards must also develop *fixed* (salary) and *contingent* (bonus and equity-based) remuneration packages that align managers' incentives with those of shareholders. In addition, a firm's auditors play a governance role by certifying the accuracy of financial statements. In the United States, accounting scandals and concerns about auditors' conflicts of interest prompted Congress to pass the **Sarbanes-Oxley Act of 2002 (SOX)**.

Sarbanes-Oxley Act of 2002 (SOX)
Act of Congress that established new corporate governance standards for US public companies, and that established the Public Company Accounting Oversight Board (PCAOB).

Just as all companies struggle to develop effective corporate governance systems, so do countries. Governments everywhere strive to establish legal frameworks for corporate finance that encourage both competitive businesses to develop and efficient financial markets to run properly. For example, a nation's legal system should allow mergers and acquisitions that increase economic efficiency, but block takeovers that significantly reduce competition. Commercial laws should provide protection for creditors and minority shareholders and limit opportunities for managers or majority shareholders to transfer corporate wealth from investors to themselves.

Risk management Historically, risk management has identified the unpredictable 'acts of nature' risks (fire, flood, collision and other property damage) to which firms are exposed and has used insurance products or self-insurance to manage those exposures. Today's risk management function identifies, measures and manages many more types of risk exposures, including predictable business risks. These exposures include losses that could result from adverse interest rate movements, commodity price changes and currency value fluctuations. The techniques for managing such risks are among the most sophisticated of all corporate finance practices. The risk management task attempts to quantify the sources and magnitudes of firms' risk exposure and to decide whether to simply accept those risks or to manage them.

SMART CONCEPTS
See the concept explained step-by-step at **www.cengage.co.uk/megginson**

Some risks are easily insurable, such as the risk of loss caused by fire or flood, employee theft or injury to customers by the company's products. Other corporate risks can be reduced through diversification. For example, rather than use a sole supplier for a key production input, a company may choose to contract with several suppliers, even if it means purchasing the input at slightly more than the lowest possible price. However, the focus of modern risk management is on the market-driven risks mentioned earlier, relating to interest rates, commodity prices and currency values. Many financial instruments – called derivatives because they derive their value from other, underlying assets – have been developed over the past two decades for use in **hedging** (i.e. offsetting) many of the more threatening market risks. These financial instruments are described in depth in Chapter 16.

hedging
Procedures used by firms to offset many of the more threatening market risks.

We discuss each of the five major finance functions in this textbook, and we hope you come to share our excitement about the career opportunities that corporate finance provides. Never before has finance been as fast-paced, as technological, as international, as ethically challenging or as rigorous as it is today. These trends have helped make it one of the most popular majors for undergraduate students in US and international business schools.

Real World

Finance specialism in MBA programmes has proved very popular over the years, with some universities offering deep specialization in aspects of finance. And this appears to have paid off. A report in early 2007 noted that over 40 per cent of MBA graduates from the London Business School were opting for careers in finance.

Source: Adapted from 'Brisk demand for graduates from across the board', *Financial Times*, 29 January 2007.

CONCEPT REVIEW QUESTIONS

5 What is a financial intermediary? Why do you think these institutions have steadily been losing 'market share' to capital markets as the principal source of external financing for corporations?

6 List the five basic corporate finance functions. What is the general relationship among them?

7 Which of the five basic corporate finance functions might be considered 'non-traditional'? Why do you think these functions have become so important in recent years?

8 Do you consider that good corporate governance is something that can be legislated for or is it something that is emergent?

1.3 LEGAL FORMS OF BUSINESS ORGANIZATION

Companies exist so that people can organize to pursue profit-making ventures in a formal, legally secure manner. Although companies are organized in numerous ways, only a handful of forms have generally succeeded, and variations of these forms appear throughout the world. This section briefly examines how companies organize themselves legally, and discusses the costs and benefits that accrue to each major form.

Historically, three key legal forms of business organization in the developed world have been prominent: sole proprietorships, partnerships and companies/corporations. These have recently been joined by a fourth type in the United States, limited liability companies, or LLCs. Sole proprietorships are the most common form of organization. However, companies are by far the dominant form in terms of sales, assets and total profits. In addition to these classic forms, other 'hybrid' organizational forms exist.

Sole proprietorships

As the name implies, a sole proprietorship is a business with a single owner. In fact, in a proprietorship no legal distinction arises between the business and the owner. The business is the owner's personal property, it exists only as long as the owner lives and chooses to operate it, and all business assets belong to the owner personally. Furthermore, the owner/entrepreneur bears personal liability for all debts of the business and pays income taxes on the business's earnings.

Sole proprietorships are by far the most common type of business worldwide. Simplicity and ease of operation constitute the proprietorship's principal benefits. However, this organizational form suffers from severe weaknesses that usually limit the firm's long-term growth potential. These include the following:

- *Limited life.* By definition, a proprietorship ceases to exist when the founder dies or retires. Although entrepreneurs can pass the business assets on to their children (or sell them to someone else of their choice), the value of their business – such as business contracts and relationships – tie personally to the entrepreneurs.
- *Limited access to capital.* Proprietorships can obtain operating capital from only two sources – reinvested profits and owners' personal borrowing. In practice, both of these sources are easily exhausted.
- *Unlimited personal liability.* A sole proprietor is personally liable for all debts of the business, including any judgements awarded to plaintiffs in successful lawsuits. A single adverse verdict can impoverish even the most successful family business.

Partnerships

A (general) partnership is essentially a proprietorship with two or more owners who have joined their skills and personal wealth. As with sole proprietorships, no legal distinction exists between the business and its owners, each of whom can execute contracts binding on all the others, and each of whom is personally liable for all partnership debts. This is known as **joint and several liability**. Though owners are not required to formalize the terms of their partnerships in written partnership agreements, most do create such documents. In the absence of partnership agreements, businesses dissolve whenever one of the partners dies or retires. Furthermore, unless a partnership agreement specifies otherwise, each partner shares equally in business income and each has equal management authority. As with proprietorships, partnership income is taxed only once, at the personal level – a definite benefit in favour of these simple forms.

joint and several liability
A legal concept that makes each partner in a partnership legally liable for all the debts of the partnership.

In addition to the tax benefits and ease of formation that partnerships share with proprietorships, partnerships allow a large number of people to pool their capital and expertise to form much larger enterprises. Partnerships enjoy more flexibility than proprietorships. Industries in which partnerships are a very important form of organization include accounting, consulting, engineering, law and medicine.

The drawbacks of partnerships resemble closely those of sole proprietorships and include the following:

- *Limited life.* Firms' lives can be limited, particularly if only a few partners are involved. Because partnerships are long-term, multi-person business associations, they are also plagued with instability problems as partners leave and others join the business.
- *Limited access to capital.* Firms remain limited to retained profits and personal borrowings if the partnership wants to expand or make capital investments.
- *Unlimited personal liability.* This disadvantage is even worse because the partners are subject to joint and several liability. If one partner makes an unwise or illegal decision, *all* the partners have to pay.

As firms grow larger, the competitive disadvantages of the proprietorship and partnership forms become increasingly severe. Almost all successful companies eventually become corporations. The recent history of the security brokerage industry in the United States shows this very clearly. All the major Wall Street brokerage firms were organized as partnerships before 1970, but during that year Merrill Lynch became a corporation and listed its own shares on the New York Stock Exchange. Over the next three decades, all of the large brokerage houses except Goldman Sachs either switched from partnership to corporate status or were acquired by other financial companies. The last major holdout, Goldman Sachs, finally adopted the corporate form and executed a very successful IPO in May 1999.

Limited partnerships In many ways, limited partnerships combine the best features of the (general) partnership and the corporate organizational forms. Most of the participants in the partnership (the limited partners) have the limited liability of corporate shareholders, but their share of the profits from the business is taxed as partnership income. In any limited partnership (LP), one or more general partners, each of whom has unlimited personal liability, must oversee the firm's activities. Because the general partners operate the business and they alone are legally exposed to the risk of ruin, they usually receive a greater share of partnership income than their capital contribution alone would merit. The **limited partners** must be totally passive. They contribute capital to the partnership, but they cannot have their names associated with the business, and they cannot take any active role in its operation, even as employees. In return for this passivity, limited partners do not face personal liability for the business's debts. This means limited partners can lose their equity

limited partners
One or more totally passive participants in a limited partnership, who do not take any active role in the operation of the business and who do not face personal liability for the debts of the business.

investment in the business, but successful plaintiffs (or tax authorities) cannot look to the limited partners personally for payment of their claims above and beyond the limited partners' initial investments. Best of all, limited partners share in partnership income, which is taxed only once, as ordinary personal income for the partners.

Limited partnerships can provide tax benefits to the limited partners during the early years of the business. Disadvantages of LPs include lack of liquidity (that is, limited partnership interests may be difficult to sell) and problems with monitoring and disciplining the general partner(s). In the United States, in some cases registering an LP with the Securities and Exchange Commission allows (in very limited circumstances) secondary market trading of partnership interests, which reduces or eliminates the problem of low liquidity.

Corporations

By law, a corporation is a separate legal entity with many of the same economic rights and responsibilities as those enjoyed by individuals. Corporations can sue and be sued; they can own property and execute contracts in their own names; they can be tried and convicted for crimes committed by their employees. This organizational form has several key competitive advantages over other forms, including the following:

- *Unlimited life.* Once created, corporations have a perpetual life unless they are explicitly terminated.
- *Limited liability.* Firms' shareholders cannot be held personally liable for the firms' debts, although CEOs and chief financial officers (CFOs) can be held personally liable in the USA under the Sarbanes-Oxley Act if the debts result from improper accounting practices or fraudulent acts.
- *Individual contracting.* Corporations can contract individually with managers, suppliers, customers and ordinary employees, and each individual contract can be renegotiated, modified or terminated without affecting other stakeholders.
- *Unlimited access to capital.* The company itself, rather than its owners, can borrow money from creditors. It can also issue various classes of preference and other shares to equity investors. Furthermore, the ownership claims (ordinary and preference shares) of a public company can be freely traded among investors without obtaining permission from other investors. A **public company** has its shares listed for trading on a public securities market.

A **corporation** (or company) is a legal entity owned by the shareholders who hold its ordinary shares. Shares carry voting rights, and shareholders vote at annual meetings to elect **boards of directors**. These boards are then responsible for hiring and firing managers and setting overall corporate policies. The rules dictating voting procedures and other aspects of corporate governance appear in the firm's **corporate charter**, the legal document created at the company's inception to govern the firm's operations. (In the UK this is called the memorandum and articles of association; in Germany 'Gesellschaftsvertrag'; in France, 'statuts'.) The charter can be changed only by a shareholder vote. One important characteristic of the USA is that incorporation takes place at the state level. While most state incorporations are very similar, certain states such as Delaware and Florida are perceived to be more 'director friendly'. Elsewhere in the world there exist small legal jurisdictions such as Gibraltar, the Channel Islands and Aruba that have very flexible incorporation requirements, and some of these states derive a large percentage of their income from incorporation.

As explained in Chapter 5, those who hold shares own the firm's equity securities. These investors are called **shareholders** or stockholders (the terms are interchangeable). Often they are called **equity claimants** because they hold ownership claims.

public company
A corporation, the shares of which can be freely traded among investors without obtaining the permission of other investors and whose shares are listed for trading in a public securities market.

corporation
A separate legal entity with many of the same economic rights and responsibilities as those enjoyed by individuals.

boards of directors
Elected by shareholders to be responsible for hiring and firing managers and setting overall corporate policies.

corporate charter
The legal document created at the corporation's inception to govern its operations.

shareholders
Owners of ordinary and preference shares of a company.

equity claimants
Owners of a company's equity securities.

Generally, preference shareholders bear less risk than ordinary shareholders, because preference shares pay a fixed dividend yearly, and preference shareholders have a more senior claim on the firm's assets in the event of bankruptcy. Therefore, we refer to ordinary shareholders as the firm's ultimate owners. Ordinary shareholders vote periodically to elect members to the board of directors and to amend the firm's corporate charter when necessary. Directors typically include the company's top managers as well as outsiders, who are usually successful entrepreneurs or executives of other major corporations. The **chief executive officer (CEO)** is responsible for managing day-to-day operations and carrying out policies established by the board. In the United States the CEO is sometimes called the president of the company. Although not all companies split the roles of chairman and chief executive or president and CEO, increasingly it is seen as indicative of good corporate governance to do so. The board expects regular reports from the CEO about the firm's current status and future direction. Note the division between owners and managers in a large corporation, as shown by the red dashed horizontal line in Figure 1.1. This separation leads to **agency costs**, which arise because of conflicts of interest between shareholders (owners) and managers. Agency costs are discussed in greater depth later in this chapter.

chief executive officer (CEO)
The top company manager with overall responsibility and authority for managing daily company affairs and carrying out policies established by the board.

agency costs
Costs that arise due to conflicts of interest between shareholders and managers.

Although corporations dominate economic life around the world, this form has some competitive disadvantages. Many governments tax corporate income at both company and personal levels. This treatment, commonly called the **double taxation problem**, has traditionally been the single greatest disadvantage of the corporate form.

double taxation problem
A situation where company profits (out of which dividends are paid) are subject to taxation, and the dividends themselves are also subject to taxation.

Limited liability companies internationally Many countries distinguish two types of limited liability companies, the split being between limited liability companies that can be traded publicly on an organized exchange and those that are privately held. You should note that, even though a company may be private, this does not mean that its shares cannot be traded. The trading however is privately arranged and does not take place on an organized exchange. Thus, in Germany, Gesellschaft mit beschränkten Haftung (GmbH) are privately owned, unlisted, limited liability stock companies. In France, these types of private companies are called Société à Responsibilité Limitée (SARL). Private companies, particularly family-owned firms, play important roles in all market economies. For example, the German post-war 'economic miracle' was not propelled by giant companies, but rather by mid-sized, export-oriented companies that pursued niche marketing strategies at home and abroad. These Mittelstand (middle market) firms still account for some three quarters of all German economic activity. A similar set of relatively small, entrepreneurial companies has helped propel Taiwan, Singapore and other Asian nations to growth rates consistently higher than those achieved in the industrialized West.

Although public limited liability companies exist around the world, they too have different names in different countries. In the UK they are called public limited companies (plc); in Germany, Aktiengesellschaft (AG); in France, Société Générale (SG); and in Spain, Mexico and elsewhere in Latin America, Sociedad Anónima (SA). Given the complexity of national rules in European countries, the Societas Europaea, SE, or European Company form also exists, which allows incorporation in any European state with easy transfer of basis of incorporation to any other state. Key differences internationally revolve around tax treatment of business income and the amount of information that publicly traded companies must disclose. Tax rules are typically, though not always, harsher in the United States than elsewhere, and disclosure requirements are invariably greater for US than for non-US companies. The Comparative Corporate Finance panel shows how the firms' values of publicly quoted companies have surged in markets around the world over the past 20 years.

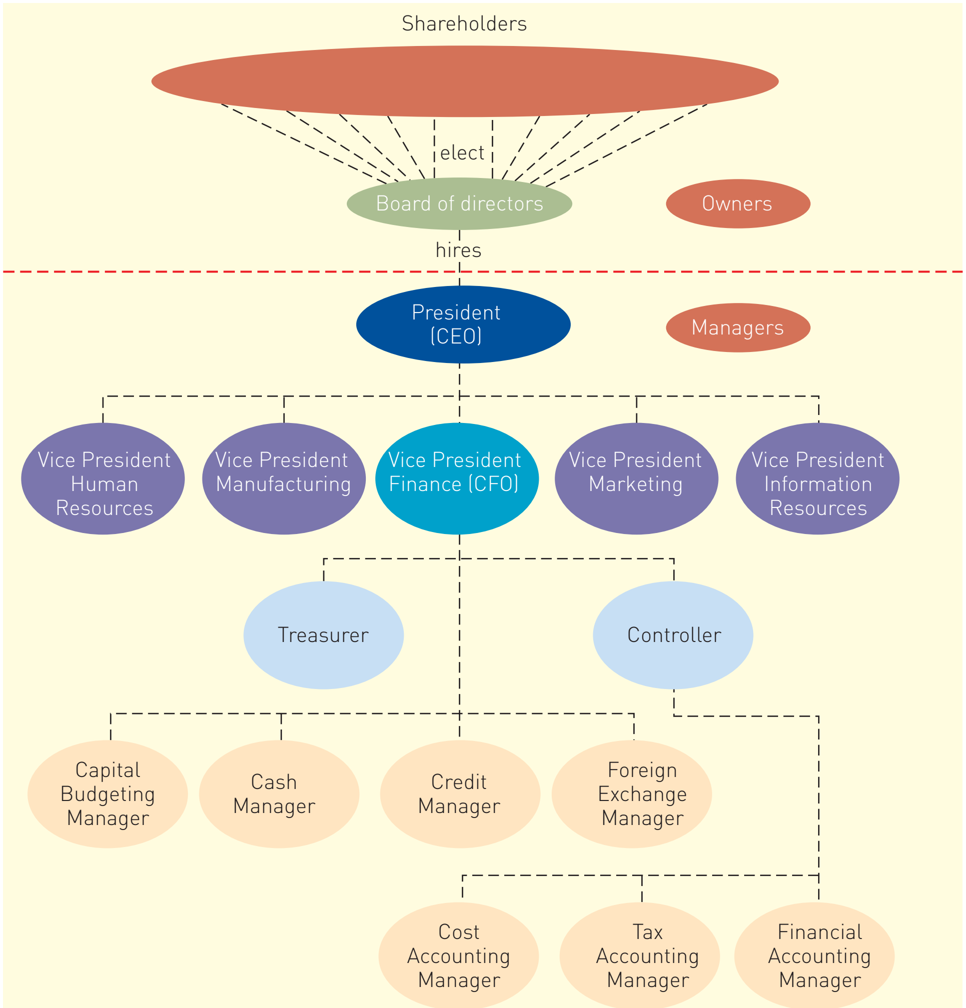


FIGURE 1.1
The finance function in the organizational structure of a typical large corporation

CONCEPT REVIEW QUESTIONS

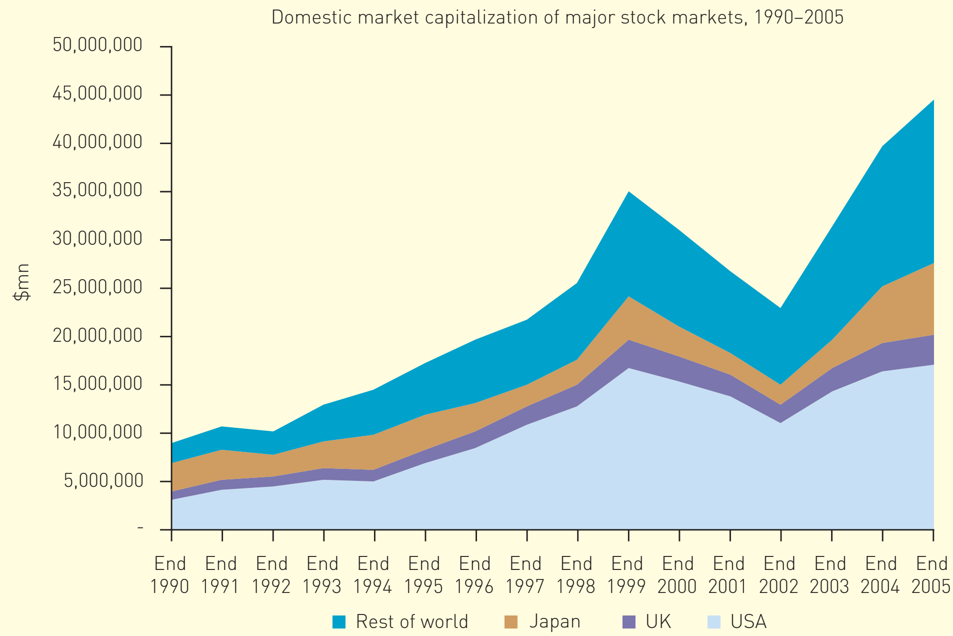
9 What are the advantages and disadvantages of the main types of organizational forms?

10 Comment on the following statement: 'Sooner or later, all successful private companies that are organized as proprietorships or partnerships must become corporations.'

COMPARATIVE CORPORATE FINANCE

The growth of stock market capitalization

The world's stock markets have increased phenomenally in value and importance during the past 20 years. The figure traces the rise in the total value of the world's stock markets from 1990 to 2005. This period saw a total worldwide market capitalization increase of $8 trillion to about $44 trillion. As the figure shows, the market value of US stocks increased six-fold over this period, but non-US markets experienced even faster growth.



Source: International Federation of Stock Exchanges (http://www.fibv.com).

1.4 THE CORPORATE FINANCIAL MANAGER'S GOALS

In large, publicly traded corporations, owners are typically distinct from managers. Traditionally, finance teaches that managers should act according to the interests of the firm's owners – its stockholders. In the sections that follow, we discuss varying ideas about what a corporate manager's goals should be. We first evaluate profit maximization and then describe shareholder wealth maximization. Next, we discuss the agency costs arising from potential conflicts between the stockholders' goals and the managers' actions. Finally, we consider the role of ethics in corporate finance and briefly discuss how the Sarbanes-Oxley Act is likely to affect financial management in the USA.

What should a financial manager try to maximize?

Maximize profit? Some people believe that the manager's objective always should be to try to maximize profits. To maximize profits, financial managers should take only those actions that are expected to increase the firm's revenues more than its costs. From a practical standpoint, this objective translates into maximizing earnings per share (EPS), defined as earnings available for ordinary shareholders divided by the number of shares outstanding.

Although it seems a reasonable objective for corporate managers, profit maximization as a goal suffers from several flaws:

- Figures for earnings per share are always historical, reflecting past performance rather than what is happening now or what will happen in the future.
- If managers seek only to maximize profits over a period of time, they may ignore the timing of those profits. Large profits that pay off many years in the future may be less valuable than smaller profits received next year.
- When firms compute profits, they follow certain accounting principles that focus on accrued revenues and costs. A firm that is profitable according to accounting principles may spend more cash than it receives, and an

unprofitable firm may have larger cash inflows than outflows. In finance, we place more emphasis on cash than on profits or earnings. Cash is king, but cash flow is perhaps an emperor. Profit cannot be used to pay bills, only cash.

- Finally, focusing only on earnings ignores variability, or risk. When comparing two investment opportunities, managers must consider both the risks and the expected return of the investments. Corporate finance presumes a trade-off between risk and expected return, and that risk and expected return are the key determinants of share prices. However, they affect share prices differently. Higher cash flow generally leads to higher share prices, while higher risk results in lower share prices.

Maximize shareholder wealth? Current theory asserts that the firm's proper goal is to maximize shareholders' wealth, as measured by the market price of the firm's shares. A firm's share price reflects the timing, magnitude and risk of the cash flows that investors expect the firm to generate over time. When considering alternative strategies, financial managers should undertake only those actions that they expect will increase the firm's share price – in other words, actions that will increase the value of the firm's future cash flows. This objective really brings us back to our basic premise for the book: financial managers should choose actions that generate benefits in excess of costs ($MB \geq MC$).

SMART PRACTICES VIDEO

David Nickel, Controller for Intel Communications Group, Intel Corporation

'Finance's primary role is to try to drive the right business decisions to increase shareholder value.'

See the entire interview at **www.cengage.co.uk/megginson**

Why does finance regard share value maximization as the primary corporate objective? Why not focus instead on satisfying the desires of customers, employees, suppliers, creditors or any other stakeholders? Theoretical and empirical arguments support the assertion that managers should focus on maximizing shareholder wealth. A firm's shareholders are sometimes called 'residual' claimants, meaning that they have claims only on any of the firm's cash flows that remain after employees, suppliers, creditors, governments and other stakeholders are paid in full. It may help to visualize all the firm's stakeholders standing in line to receive their allocation of the firm's cash flows. Shareholders stand at the very end of this line. If the firm cannot pay its employees, suppliers, creditors and tax authorities first, shareholders receive nothing. Furthermore, by accepting their position as residual claimants, shareholders agree to bear most of the risk of running the firm. If firms did not operate to maximize shareholder wealth, investors would have little incentive to accept the risks inherent in buying shares and providing the funds necessary for a business to thrive.

To understand this point, consider how a firm would operate if it were run in the interests of its creditors. Would such a firm ever make risky investments, no matter how profitable, given that its creditors receive only a fixed return if these investments pay off? Only shareholders have the proper incentives to make risky, value-increasing investments that maximize overall firm value. Thus, only shareholders can force the firm to take on risky, but potentially profitable, ventures.

Focus on stakeholders? Although the primary goal of managers should be maximizing shareholder wealth, many firms have broadened their focus in recent years to include the interests of other stakeholders – such as employees, customers, tax authorities and the communities where firms operate. A firm with a stakeholder focus consciously avoids actions that would prove detrimental to stakeholders by transferring other constituents' wealth to shareholders (e.g. driving down wages – the return to employee stakeholders – simply to increase shareholder value). The goal is not so much to maximize others' interests as it is to preserve those interests.

Considering other constituents' interests is part of the firm's 'social responsibility', and keeping other affected groups happy provides long-term benefit to shareholders. Such relationships minimize employee turnover, conflicts and litigation. In most cases, taking care of stakeholders translates into maximizing shareholder wealth. But conflict between these two objectives inevitably arises. In that case, the firm should ultimately be run to benefit equity holders. Companies are rarely required by law to act in a socially responsible manner, although the growth in corporate social responsibility (CSR) movements in recent years has begun to place a greater focus on this area. The EU Commission in 1995 set up a network on CSR, and the UK government has also led initiatives on CSR.

How can agency costs be controlled in corporate finance?

Control of modern corporations usually rests in the hands of professional, non-owner managers. We have seen that the goal of financial managers should be to maximize shareholder wealth; thus, managers act as agents of the owners, who have hired them to make decisions and to manage the firm for the owners' benefit. Technically, any manager who owns less than 100 per cent of the firm's stock is, to some degree, an *agent* of other owners.

In practice, managers also consider their own personal wealth, job security, lifestyle and prestige, and seek to receive perquisites, such as country club memberships, limousines, corporate jet usage and posh offices (provided at company expense, of course). Such concerns often motivate managers to pursue objectives other than shareholder wealth maximization. Voting shareholders, especially large institutional investors, recognize the potential for managers' self-interested behaviour, and use a variety of tools to limit such conflicts of interest. Financial economists recognize the agency costs that arise when the shareholders' interests and managers' interests conflict.

agency problems
The conflict between the goals of a firm's owners and its managers.

Types of agency costs Conflict between the goals of a firm's owners and managers gives rise to managerial **agency problems** – costs arising from the likelihood that managers may place personal goals ahead of corporate goals. Shareholders can attempt to overcome these agency problems by:

- relying on market forces to exert managerial discipline
- incurring the monitoring and bonding costs necessary to supervise managers
- structuring executive remuneration packages to align managers' interests with stockholders' interests.

Several market forces constrain a manager's opportunistic behaviour. In recent years large investors have become more active in management. This is particularly true for institutional investors such as mutual funds, life insurance companies and pension funds, which often hold large blocks of a firm's equity capital and thus have many votes to wield if issues arise. Institutional investor activists use their influence to pressure underperforming management teams, occasionally applying enough pressure to replace existing CEOs with new ones. The rise in investor activism, however, has not to date proven to dramatically affect value, but the evidence is more favourable as regards 'internal' corporate governance. Also, research from the London Business School/European Corporate Governance Institute in 2006 suggested that shareholder activism works for UK companies.

hostile takeover
The acquisition of one firm by another through an open-market bid for a majority of the target's shares where the target firm's senior managers do not support (or, more likely, actively resist) the acquisition.

An even more powerful form of market discipline is the **hostile takeover**. A hostile takeover involves the acquisition of one firm (the target) by another (the bidder) through an open-market bid, or tender offer, for a majority of the target's shares. By definition, a takeover attempt is hostile if the target firm's senior managers do not support (or, more likely, actively resist) the acquisition. The forces that drive hostile takeovers vary over time and from one acquisition to another, but poor financial performance is a common problem among targets of hostile bids. Bidders in hostile deals may believe they can improve the value of the target company, and thereby profit from their investment, by replacing incumbent management. Managers naturally see this as a threat and erect a variety of barriers to thwart potential acquirers. Nevertheless, the constant threat of a takeover provides additional motivation for managers to act in the firm owners' best interests. In 2005 and 2006 the threat of hostile takeovers caused significant tensions within the European Union, with a series of cross-border bids being stalled, blocked or criticized by national political figures, showing the importance of the implicit government stakeholder in many countries. Even in the USA, hostile takeovers are not always possible, as for example in the airline industry where a majority of ownership must vest with US citizens. In 2006 the state of Pennsylvania passed laws making it more difficult to remove directors. Such barriers to takeovers increase agency costs.

In addition to market forces, other devices can encourage managers to behave in shareholders' interests or limit the consequences when managers misbehave. 'Bonding expenditures' insure firms against the potential consequences of dishonest acts by managers. For example, managers could be required to accept a portion of their total pay in the form of delayed compensation that must be forfeited in the event of poor performance. 'Monitoring expenditures' pay for audits and control procedures that alert shareholders if managers pursue their own interests too aggressively. But, you may ask, 'Who monitors the monitors?' In the wake of Enron's bankruptcy, Enron's auditor, Arthur Andersen, experienced the consequences of failing to alert shareholders to the company's problems. Arthur Andersen's audit clients abandoned the firm in droves, and many of the firm's partners quit. The company was later convicted of criminal misconduct in a US court, which forced Arthur Andersen into bankruptcy.

Use of compensation contracts to control agency costs One of the most popular, powerful and expensive methods of overcoming agency costs and aligning managerial and shareholder interests is through the design of executive remuneration (or 'compensation') contracts. American companies have long used sophisticated (and potentially lucrative) executive compensation contracts, and the practice is spreading to other industrialized countries – though few European or Asian companies offer their managers pay levels that even approach what US managers receive. Remuneration contracts give managers incentives to act in the owners' best interests and allow firms to compete for, hire and retain the best managers available. For this reason, such pay packages are often called 'golden handcuffs', because they tie good managers to the firm.

Incentive remuneration plans attempt to tie managerial wealth directly to the firm's share price. This primarily involves making outright grants of shares to top managers or, more commonly, giving them share options, which we discuss later. Options give managers the right to purchase stock at fixed exercise prices, usually the market price of the shares at the time the manager receives the options. The idea is that managers who have incentives to take actions to maximize the share price above the exercise price will increase their own wealth along with that of other shareholders.

Although experts agree that linking pay to performance can effectively motivate management, the actual workings of many remuneration plans have been harshly criticized in recent years. Individual and institutional investors have publicly questioned the wisdom of awarding multi-million-dollar remuneration packages (which typically include salary, bonus and long-term remuneration) to executives of poorly performing corporations. For example, the highest paid US executives in 2006 were Richard Fairbank of Capital One Financial (with total pay of $249 million) and Terry Semel of Yahoo (total pay of $230 million). Average levels of CEO remuneration in other developed countries tend to be much lower – a fact that critics of CEO pay in the United States do not miss. For example, *The Guardian* newspaper in the UK publishes an annual pay survey and, for 2005, the highest paid UK-based CEO was Mick Davies of Xstrata, a mining company, on £15 million.

Are ethics important in corporate finance?

In recent years, actions by certain businesses have received major media attention. Examples include:

- A string of fines totalling more than $1.2 billion paid between 2002 and 2004 by major brokerage firms to investors (and the state of New York) for intentionally misleading investors with regard to buy-and-sell recommendations offered by brokerage firm analysts.
- The June 2002 insider trading arrest of Samuel Waksal, founder and CEO of the biotech firm ImClone Systems, who leaked information to family and friends on the failure of the Food and Drug Administration to approve ImClone's marketing application for the cancer drug Erbitux before that information was released to the public.
- The January 2004 discovery that the Italian milk distribution company Parmalat had used forged documents to obtain loans and to issue bonds. These actions not only landed the company's top executives in jail but also triggered what may become the largest bankruptcy in financial history.
- The sensational 2004 trials of Dennis Koslowski (Tyco International Ltd) and Martha Stewart (Martha Stewart Living Omnimedia Inc.) on charges of misappropriation of company assets and conspiracy to obstruct justice, respectively.

SMART ETHICS VIDEO

Andy Bryant, Executive Vice President of Finance and Enterprise Systems, Chief Financial Officer, Intel Corporation

'I never thought that ethics would be a value add to a company, but today I believe it counts as part of your market cap.'

See the entire interview at **www.cengage.co.uk/megginson**

Clearly, these and other similar actions, such as those involving Enron, Global Crossing, WorldCom and Adelphia, have focused attention on the question of ethics, or standards of conduct in business dealings. Today, society in general and the financial community in particular are developing and enforcing higher ethical standards. The US Congress passed the Sarbanes-Oxley Act in 2002 to enforce higher ethical standards and increase penalties for violators. The goal of these standards is to motivate businesspeople and investors alike to adhere to both the letter and the spirit of laws and regulations concerned with all aspects of business and professional practice.

More and more firms are directly addressing ethical issues by establishing corporate ethics policies and guidelines, and by requiring employee compliance with them. Frequently, employees must sign formal pledges to uphold firms' ethics policies. Such policies typically apply to employee actions in dealing with all corporate stakeholders, including the public at large.[2] Ethical behaviour is therefore viewed as necessary for the achievement of firms' goal of maximizing owner wealth.

CONCEPT REVIEW QUESTIONS

11 What are the relative advantages and disadvantages of using sophisticated management remuneration packages to align the interests of managers and shareholders?

12 Why are ethics important in corporate finance? What is the likely consequence of unethical behaviour by a corporation and its managers?

13 Why did the United States government pass the Sarbanes-Oxley Act of 2002, and what are its key provisions?

[2] Unfortunately, these steps are hardly enough. Enron had a detailed conflict-of-interest policy in place, but then waived it so that its executives could set up the special-purpose entities that subsequently caused Enron's failure. The result of a lack of effective ethics policies at Enron and numerous other firms has been an increased level of government oversight and regulation.

1.5 SUMMARY AND CONCLUSIONS

- When making financial decisions, managers should always ask whether the marginal benefits of the decision outweigh the marginal costs. Managers should take actions and accept projects only where the marginal benefits exceed or are equal to marginal costs.
- Finance graduates must interact with professionals trained in all other business disciplines. The five most important career paths for finance professionals are in corporate finance, commercial banking, investment banking, money management or consulting.
- Corporations can obtain external funding either from financial intermediaries, such as commercial banks, or by issuing securities directly to investors through capital markets. Intermediaries have been steadily losing financial market share to capital markets for several decades.
- The practice of corporate finance involves five basic, related sets of activities: external financing, capital budgeting, financial management, corporate governance and risk management.
- The three key legal forms of business organization are sole proprietorships, partnerships and limited liability companies. Sole proprietorships are most common, but limited liability companies dominate economically.
- Limited liability companies exist in virtually every country, and those in developed countries share many of the same basic traits.
- The goal of firm managers should be to maximize shareholder wealth rather than maximize profits, because the latter focuses on the past, ignores the timing of profits, relies on accounting values rather than future cash flows and ignores risk. Shareholder wealth maximization is socially optimal because shareholders are residual claimants who profit only after all other claims have been paid in full.
- Agency costs that result from the separation of ownership and control must be addressed satisfactorily for companies to prosper. These costs can be overcome, or at least reduced, by relying on market incentives or threats relating to corporate control, by incurring monitoring and bonding costs, and by using executive compensation contracts that align the interests of shareholders and managers.
- Ethics – the standards of conduct in business dealings – are important in corporate finance. Ethical behaviour is viewed as necessary for the achievement of firms' goal of maximizing owner wealth. The Sarbanes-Oxley Act of 2002 established rules and procedures in the United States aimed at eliminating the potential for unethical acts and conflicts of interest in public corporations.

INTERNET RESOURCES

Note: This textbook includes numerous internet links, both within the discussions and at the end of each chapter. Because some links are likely to change or be eliminated during the life of this edition, please go to the book's website (**www.cengage.co.uk/megginson**) to obtain updated links.

http://www.ft.com
Financial Times website. One of the best websites for international business and economic information.

http://www.careers.com http://www.monster.com http://www.usnews.com http://www.careers.wsj.com http://www.ft.com/jobs
Websites for career-related facts and figures.

http://www.sec.gov/edgar.shtml
US Securities and Exchange Commission's EDGAR website. Provides online access to all security registrations and financial documents filed by public companies with the SEC since 1994.

http://www.fsa.gov.uk/pubs/ukla/lr_comcode3.pdf
The combined code on good governance for UK listed companies.

http://www.treasurers.org
UK-based Association of Corporate Treasurers, including quizzes and a magazine.

http://www.jobs1.co.uk/directory/recruitment_finance.html
Repository of finance jobs.

http://www.gojobsite.ie/channels/graduate.html http://www.efinancialcareers.co.uk/
Contain profiles of financial service companies and links to recruitment.

KEY TERMS

agency costs
agency problems
boards of directors
capital budgeting function
collective action problem
corporate charter
corporate finance
corporate governance function
corporation
double taxation problem
equity capital
equity claimants
external financing function
fiduciary
financial intermediary
financial management function
hedging
hostile takeover
initial public offering (IPO)
joint and several liability
limited partners
president or chief executive officer (CEO)
primary market transactions
public company
risk management function
Sarbanes-Oxley Act 2002 (SOX)
secondary market transactions
shareholders
venture capitalists

QUESTIONS

Q1-1 Why must a financial manager have an integrated understanding of the five basic finance functions? Why is the corporate governance function considered a finance function? Has the risk management function become more important in recent years?

Q1-2 Enter the home page of the Careers in Business website (http://www.careers-in-business.com), and page through the finance positions listed and their corresponding salaries. What skills sets or job characteristics lead to the variation in salaries? Which of these positions generally require prior work experience?

Q1-3 What are the advantages and disadvantages of the different legal forms of business organization? Could the limited liability advantage of a corporation also lead to an agency problem? Why? What legal form would a start-up entrepreneur likely prefer?

Q1-4 Can there be a difference between profit maximization and shareholder wealth maximization? If so, what could cause this difference? Which of the two should be the goal of the firm and its management?

Q1-5 Define a corporate stakeholder. Which groups are considered to be stakeholders? Would shareholders also be considered stakeholders? Compare the shareholder wealth maximization principle to the stakeholder wealth preservation principle in terms of economic systems.

Q1-6 What is meant by an 'agency cost' or 'agency problem'? Do these interfere with shareholder wealth maximization? Why? What mechanisms minimize these costs/problems? Are executive remuneration contracts effective in mitigating these costs/problems?

Q1-7 Are ethics critical to the financial manager's goal of shareholder wealth maximization? How are the two related? Is the establishment of corporate ethics policies and guidelines, and requiring employee compliance with them, enough to ensure ethical behaviour by employees?

PROBLEMS

Goals of the corporate financial manager

P1-1 Consider the following simple corporate example with one shareholder and one manager. There are two mutually exclusive projects in which the manager may invest and two possible manager remuneration contracts that the shareholder may choose to employ. The manager may be paid a flat €300 000 or receive 10 per cent of corporate profits. The shareholder receives all profits net of manager remuneration. Which project maximizes shareholder wealth? Which remuneration contract does the manager prefer if this project is chosen? Which project will the manager choose under a flat remuneration arrangement? Under a profit-sharing arrangement? Which remuneration contract aligns the interests of the shareholder and manager so that the manager will act in the best interest of the shareholder?

PROJECT #1		PROJECT #2	
PROBABILITY	GROSS PROFIT	PROBABILITY	GROSS PROFIT
33.33%	€0	50.0%	€600 000
33.33%	€3 000 000	50.0%	€900 000
33.33%	€9 000 000		

MINICASE *The scope of corporate finance*

The potential career paths for someone with expertise in finance are varied and exciting. Career possibilities include the areas of corporate finance, commercial banking, investment banking, asset management, mutual funds and brokerage, insurance, property and venture capital.

Assignment

Find descriptions for these and other finance-related careers on the following website: http://www.wetfeet.com/asp/careerlist.asp. Think of the ways that our core financial decision can be applied to each of these careers. Remember, our core financial decision takes the following approach: all financial decisions can be made by asking whether the marginal benefits (MBs) of taking a certain action are greater than or equal to the marginal costs (MCs) of this action.