PART

1

CHAPTER 1
The Corporation

CHAPTER 2
Introduction to Financial Statement Analysis

Introduction

WHY STUDY CORPORATE FINANCE? No matter what your role in a corporation, an understanding of why and how financial decisions are made is essential. The focus of this book is how to make optimal corporate financial decisions. In this part of the book we lay the foundation for our study of corporate finance. We begin, in Chapter 1, by introducing the corporation and related business forms.

We then examine the role of financial managers and outside investors in decision making for the firm. To make optimal decisions, a decision maker needs information. As a result, in Chapter 2 we review an important source of information for corporate decision making—the firm's accounting statements.

CHAPTER

1

The Corporation

Corporations have existed in Canada since before Canada was a nation. One of the oldest and most recognized corporations in Canada is the Hudson's Bay Company (HBC). HBC was given its charter in 1670 and still continues in operation today. In 1970, the head office of HBC moved from London, England, to Winnipeg; it now resides in Toronto. Ownership and control of the HBC has changed over the years too; originally it was domiciled in England, then in Canada, and currently is in the United States.

Corporations are arguably the most important business organizations in Canada and around the world because of their dominance in terms of products produced, revenues and profits generated, and people employed. The corporate form is not static, though; it evolves through time. The financial and broader economic crisis that began in 2007 has transformed the financial landscape, bringing down multinationals such as AIG and multiple banks around the world. As governments seek to prevent a similar crisis in the future, new regulations will shape corporations and the environment in which they operate. There has never been a more exciting time to study corporate finance.

This book is about how corporations make financial decisions. Canadian corporate law has evolved from British Common Law and brought in aspects of U.S. corporate law. The purpose of this chapter is to introduce the corporation, as well as explain alternative business organizational forms common in Canada. A key factor in the success of corporations is the ability to easily trade ownership shares, and so we will also explain the role of stock markets in facilitating trading among investors in a corporation and the implications that has for the ownership and control of corporations.

1.1 THE THREE TYPES OF FIRMS

We begin our study of corporate finance by introducing the three major types of firms: sole proprietorships, partnerships, and corporations. We explain each organizational form in turn, but our primary focus is on the most important form—the corporation. In addition to describing what a corporation is, we also provide an overview of why corporations are so successful.

SOLE PROPRIETORSHIPS

A **sole proprietorship** is a business owned and run by one person. Sole proprietorships are usually very small with few, if any, employees. Although they are the most common type of business unit in the economy, sole proprietorships are relatively small in terms of revenues and profits produced and people employed. Sole proprietorships share the following key characteristics:

1. Sole proprietorships are straightforward to set up. Because of this advantage, many new businesses use this organizational form.
2. The principal limitation of a sole proprietorship is that there is no separation between the firm and the owner; the firm can have only one owner and business income is taxed at the personal level. If there are other investors, they cannot hold an ownership stake in the firm; this limits the ability of the owner to raise money for the business.
3. The owner of a sole proprietorship has unlimited personal liability for any of the firm's debts. That is, if the firm defaults on any debt payment, the lender can (and will) require the owner to repay the loan from personal assets. An owner who cannot afford to repay the loan must declare personal bankruptcy.
4. The life of a sole proprietorship is limited to the life of the owner. It is also difficult to transfer ownership of a sole proprietorship.

For most businesses, the disadvantages of a sole proprietorship outweigh the advantages. As soon as the firm reaches the point at which it can borrow without the owner agreeing to be personally liable, the owner typically converts the business into a form that limits the owner's liability.

PARTNERSHIPS

A **partnership** is similar to a sole proprietorship but it has more than one owner. Key features of a partnership are as follows:

1. Income is taxed at the personal level. The income is split among partners according to their ownership in the partnership.
2. *All* partners have unlimited personal liability. This applies to the firm's debt. That is, a lender can require *any* partner to repay *all* the firm's outstanding debts. Similarly, the unlimited liability applies in a legal judgment against the partnership; each partner is fully liable. Thus, partners must be chosen carefully, as any single partner's actions can affect the exposure of all the partners.
3. The partnership ends on the death or withdrawal of any single partner. However, partners can avoid liquidation if the partnership agreement provides for alternatives such as a buyout of a deceased or withdrawn partner.

Some old and established businesses remain partnerships or sole proprietorships. Often these firms are the types of businesses in which the owners' personal reputations are the basis for the businesses. For example, law firms and accounting firms are often organized as partnerships. For such enterprises, the partners' personal liability increases the confidence of the firm's clients that the partners will strive to maintain their reputation.

A **limited partnership** is a partnership with two kinds of owners, general partners and limited partners. There must be at least one general partner. General partners have the same rights and privileges as partners in a (general) partnership—they are personally liable for the firm's debt obligations. Limited partners, however, have **limited liability**—that is, their liability is limited to their investment. Their private property cannot be seized to pay off the firm's outstanding debts. Furthermore, the death or withdrawal of a limited partner does not dissolve the partnership, and a limited partner's interest is transferable. However, a limited partner has no management authority and cannot legally be involved in the managerial decision making for the business.

Private equity funds and venture capital funds are two examples of industries dominated by limited partnerships. In these firms, a few general partners contribute some of their own capital and raise additional capital from outside investors who are limited partners. The general partners control how all the capital is invested. Most often they will actively participate in running the businesses in which they choose to invest. The outside investors play no active role in running the partnership; their concern is with how their investments are performing.

In Canada a special type of partnership called a **limited liability partnership (LLP)** can be used in the legal and accounting professions. The LLP is similar to a general partnership in that the partners can be active in the management of the firm and they do have a degree of unlimited liability. The limitation on a partner's liability takes effect only in cases related to actions of negligence of other partners or those supervised by other partners. In all other respects, including a particular partner's own negligence or the negligence of those supervised by the particular partner, that partner has unlimited personal liability. In addition, the assets of the business are potentially at risk of seizure due to the actions of anyone within the partnership. Thus, while a partner's personal assets are protected from the negligent actions of other partners, the investment into the overall partnership may be lost.

CORPORATIONS

The distinguishing feature of a **corporation** is that it is a legally defined, artificial being (a judicial person or legal entity), separate from its owners. As such, it has many of the legal powers that people have. It can enter into contracts, acquire assets, incur obligations, and it receives similar protection against the seizure of its property as received by an individual. Because a corporation is a legal entity separate and distinct from its owners, it is solely responsible for its own obligations. Consequently, the owners of a corporation (its **shareholders**) have limited liability; they are not liable for any obligations the corporation enters into. Similarly, the corporation is not liable for any personal obligations of its owners.

FORMATION OF A CORPORATION. In most provinces corporations are defined under the provincial Business Corporations Act or the Canada Business Corporations Act. Corporations must be legally formed, which means that the **articles of incorporation** must be filed with the relevant registrar of corporations. The articles of incorporation, sometimes referred to as the corporate charter, are like a corporate constitution that sets out the terms of the corporation's ownership and existence. Setting up a corporation is therefore considerably more costly than setting up a sole proprietorship. Most firms hire lawyers to create the formal articles of incorporation and a set of bylaws.

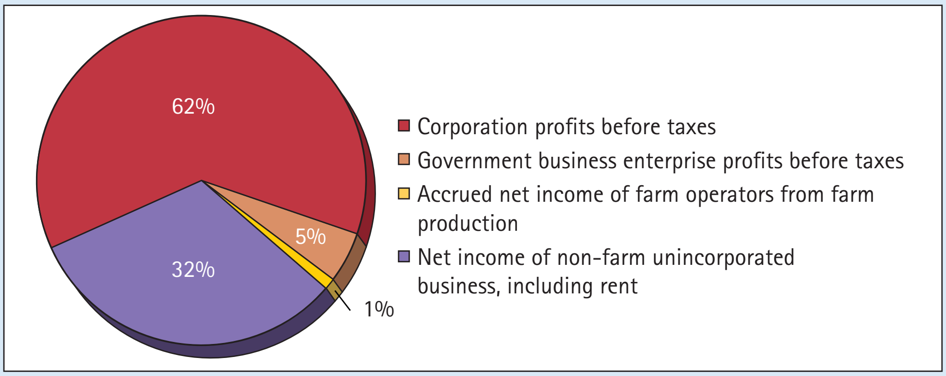
OWNERSHIP OF A CORPORATION. There is no limit on the number of owners a corporation can have. Because most corporations have many owners, each owner owns only a fraction of the corporation. The entire ownership stake of a corporation is divided into shares known as **stock**. The collection of all the outstanding shares of a corporation is known as the **equity** of the corporation. An owner of a share of stock in the corporation is known as a shareholder, **stockholder**, or **equity holder** and is entitled to **dividend payments**, that is, payments made at the discretion of the corporation's Board of Directors to the equity holders. Shareholders usually receive voting rights and dividend rights that are proportional to the amount of stock they own. For example, a shareholder who owns 30% of the firm's shares will be entitled to 30% of the votes at an annual meeting and 30% of the total dividend payment. In Canada, many corporations have a dominant shareholder (controlling in excess of 25% of the equity); in the United States, more corporations are considered widely held (with the largest shareholder holding less than 5% of the equity). About 19% of Canadian corporations listed on the Toronto Stock Exchange (TSX) have multiple classes of stock such that some classes may have more voting rights than others, even though they have the same rights to dividends.

A unique feature of a corporation is that there is no limitation on who can own its stock. That is, an owner of a corporation need not have any special expertise or qualification. This feature allows free trade in the shares of the corporation and provides one of the most important advantages of organizing a firm as a corporation rather than as sole proprietorship or partnership. Corporations can raise substantial amounts of capital because they can sell ownership shares to anonymous outside investors.

The availability of outside funding has enabled corporations to dominate the economy compared to other enterprises (see Figure 1.1). Let's take the world's largest corporation ranked by sales in the 2012 Fortune Global 500 survey, Royal Dutch Shell, headquartered in The Hague, The Netherlands. For the fiscal year ended December 31, 2011, Royal

FIGURE 1.1

Sources of Profit Generation in Canada for 2011



Although there are many more unincorporated businesses in Canada than there are corporations, non-corporate private enterprises (including all proprietorships and partnerships) account for only 33% of profit generation whereas corporations account for 62% of profit generation in the Canadian economy. The remaining 5% of profit generation is from government business enterprises including crown corporations.

Source: Statistics Canada, CANSIM Table 3800016.

Dutch Shell's annual report indicated revenue was about \$484 billion. The total value of the company (the wealth in the company the owners collectively owned) was over \$225 billion. It employed about 90,000 people. Let's put these numbers into perspective. A country with \$484 billion gross domestic product (GDP) in 2011 would rank just behind Norway as the 25th richest *country* (out of more than 200).[1] Norway has about 5 million people, about 56 times as many people as employees at Royal Dutch Shell. Indeed, if the number of employees were used as the "population" of Royal Dutch Shell, it would rank as the 194th largest country, about the same size as the country of Antigua and Barbuda whose GDP in 2011 was about \$1 billion.

TAX IMPLICATIONS FOR CORPORATE ENTITIES

An important difference between the types of organizational forms is the way they are taxed. Because a corporation is a separate legal entity, a corporation's profits are subject to taxation separate from its owners' tax obligations. In effect, shareholders of a corporation pay taxes twice. First, the corporation pays tax on its profits, and then when the remaining profits are distributed to the shareholders, the shareholders pay their own personal income tax on this income. This system is sometimes referred to as *double taxation*.

EXAMPLE 1.1 TAXATION OF CORPORATE EARNINGS

Problem

You are a shareholder in a corporation. Some of your shares are held inside your tax-free savings account (TFSA) so any earnings there are not taxed; any income from shares held outside your TFSA is taxable. The corporation earns \$5 per share before taxes. After it has paid taxes, it will distribute the rest of its earnings to you as a dividend. The corporate tax rate is 25% and your tax rate on dividend income outside your TFSA is 26%.[2] How much of the earnings remains after all taxes are paid (calculate this twice—for the shares in the TFSA and for the shares outside of the TFSA)?

Solution

First, the corporation pays taxes. It earned \$5 per share, but must pay $0.25 \times \$5 = \$1.25$ per share to the government in corporate taxes. That leaves \$3.75 to distribute. However, for the shares outside your TFSA you must pay $0.26 \times \$3.75 = 97.5$ cents in income taxes, leaving $\$3.75 - \$0.975 = \$2.775$ per share after all taxes are paid. As a shareholder owning shares outside your TFSA, you end up with only \$2.775 of the original \$5 in earnings; the remaining $\$1.25 + \$0.975 = \$2.225$ is paid as taxes. Thus, your total effective tax rate on the corporation's earnings is $2.225 / 5 = 44.5\%$ if your shares are held outside your TFSA. The shares you hold within your TFSA are not subject to taxes on the dividends paid; thus, there is only the corporate tax of 25% and your TFSA keeps the full \$3.75 dividend.

1. World Bank Indicators, http://data.worldbank.org/indicator.

2. Your tax on dividend income from a Canadian corporation is determined by Canada Revenue Agency's requirement to gross up the dividend amount by 45%, apply your tax rate to the grossed up amount, and then receive a dividend tax credit of 27.5% of the actual dividend. For taxpayers in the highest tax bracket in the 2012 tax year, this resulted in combined federal and provincial tax rates on dividends that ranged from 19.29% in Alberta to 36.06% in Nova Scotia and was around 26% in many of the other provinces.

In most countries, there is some relief from double taxation. Thirty countries make up the Organization for Economic Co-operation and Development (OECD), and of these countries, only Ireland offers no relief from double taxation. In Canada, the dividend tax credit gives some relief by effectively giving a lower tax rate on dividend income than on other sources of income. In the 2012 tax year, for most provinces, dividend income was taxed at a rate about 40% less than ordinary income; for example, in Ontario the effective personal tax rates (combined provincial and federal) were 29.54% for dividends and 46.41% for regular income for individuals in the top tax bracket. A few countries, including Australia, Finland, Mexico, New Zealand, and Norway, offer complete relief by effectively not taxing dividend income.

While the corporate organizational structure is subject to double taxation, Canada Revenue Agency allowed an exemption from double taxation for certain **flow through entities** where all income produced by the business flowed to the investors and virtually no earnings were retained within the business. These entities are called **income trusts** and come in three forms. A **business income trust** holds all the debt and equity securities of a corporation (the underlying business) in trust for the trust's owners, called the **unit holders**. An **energy trust** either holds resource properties directly or holds all the debt and equity securities of a resource corporation within the trust. A **real estate investment trust (REIT)** either holds real estate properties directly or holds all the debt and equity securities of a corporation that owns real estate properties. For income trusts formed before November 2006, there was no tax at the business level until 2011. REITs continue to have no tax at the business level beyond 2011 but the other forms of income trusts are now taxed.

EXAMPLE 1.2 TAXATION OF INCOME TRUSTS

Problem

Rework Example 1.1, assuming the corporation in that example was actually a real estate investment trust (REIT) and flowed through all earnings to trust unit owners. We will assume you hold some of the trust units within your TFSA, so they are not subject to personal taxes. For the trust units held outside your TFSA, suppose you pay tax at a rate of 46%.

Solution

In this case, there is no corporate tax. If the business earned \$5 per unit, then the \$5 is paid out to the trust unit holders. For your units held within your TFSA, there is no personal tax. Thus there is no tax whatsoever in the year the business income is generated—giving the government 0% of the business earnings. For your units held outside your TFSA, there will be personal tax of $0.46 \times \$5 = \$2.30$. The net tax collected by the government is the 46% collected from you.

On October 31, 2006, the government changed the taxation of business and energy trusts so they would be taxable at the business level (beginning in 2011). Its concern was that many of these trust units were held within non-taxable registered retirement savings plans (RRSPs) or pension funds or by foreign investors, and thus much of the tax that would normally be collected from corporate earnings was being lost by the government. Since that time, many of these income trusts have been converting back to the standard corporate form because of the loss of their special non-taxable status.

CONCEPT CHECK

1. What are the advantages and disadvantages of organizing a business as a corporation?
2. What is a limited liability partnership (LLP)? How does it differ from a limited partnership?
3. What is an income trust? Which type of trust still gets preferential tax treatment after 2011?

1.2 OWNERSHIP VERSUS CONTROL OF CORPORATIONS

Unlike the owner of a sole proprietorship, who has direct control of the firm, it is often not feasible for the owners of a corporation to have direct control of the firm because there are many owners of a corporation, each of whom can freely trade their stock. That is, in a corporation, direct control and ownership are often separate. Rather than the owners, the *board of directors* and *chief executive officer* possess direct control of the corporation. In this section, we explain how the responsibilities for the corporation are divided between these two entities and how together they shape and execute the goals of the firm.

THE CORPORATE MANAGEMENT TEAM

The shareholders of a corporation exercise their control by electing a **board of directors**, a group of people that has the ultimate decision-making authority in the corporation. In most corporations, each share of stock gives a shareholder one vote in the election of each position on the board of directors, so investors with more shares have more influence. When one or two shareholders own a very large proportion of the outstanding stock, these shareholders might either be on the board of directors themselves or they may have the right to appoint a number of directors.

The board of directors makes rules on how the corporation should be run (including how the top managers in the corporation are compensated), sets policy, and monitors the performance of the company. The board of directors delegates most decisions that involve day-to-day running of the corporation to its management, headed by the **chief executive officer (CEO)**. The CEO is charged with running the corporation by instituting the rules and policies set by the board of directors. The size of the rest of the management team varies from corporation to corporation. The separation of powers within corporations between the board of directors and CEO is not always distinct. In fact, it is not uncommon for the CEO also to be the chairman of the board of directors. The most senior financial manager is the **chief financial officer (CFO)**, who usually reports directly to the CEO. Figure 1.2 presents part of a typical organizational chart for a corporation, highlighting the key positions a financial manager may take.

THE FINANCIAL MANAGER

Within the corporation, financial managers are responsible for three main tasks: making investment decisions, making financing decisions, and managing the firm's cash flows.

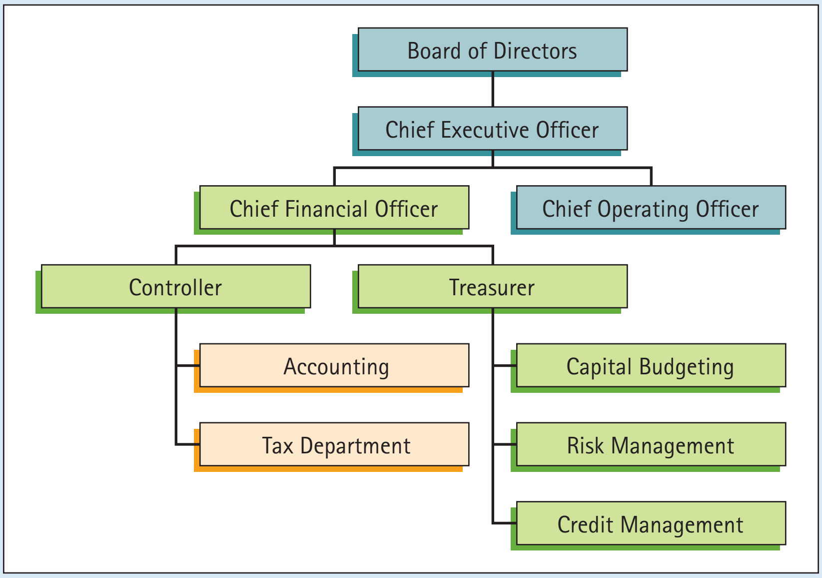
INVESTMENT DECISIONS. The financial manager's most important job is to make the firm's investment decisions. The financial manager must weigh the costs and benefits of each investment or project and decide which of them qualify as good uses of the money shareholders have invested in the firm. These investment decisions fundamentally shape what the firm does and whether it will add value for its owners. In this book, we will develop all the tools necessary to make these investment decisions.

FINANCING DECISIONS. Once the financial manager has decided which investments to make, he or she also decides how to pay for them. Large investments may require the corporation

FIGURE 1.2

Organizational Chart of a Typical Corporation

The board of directors, representing the shareholders, controls the corporation and hires the Chief Executive Officer, who is then responsible for running the corporation. The Chief Financial Officer oversees the financial operations of the firm, with the Controller managing both tax and accounting functions, and the Treasurer being responsible for capital budgeting, risk management, and credit management activities.



to raise additional money. The financial manager must decide whether to raise more money from new and existing owners by selling more shares of stock (equity) or to borrow the money instead (debt). In this book, we will discuss the characteristics of each source of money and how to decide which one to use in the context of the corporation's overall mix of debt and equity.

CASH MANAGEMENT. The financial manager must ensure that the firm has enough cash on hand to meet its obligations from day to day. This job, also commonly known as managing working capital, may seem straightforward, but in a young or growing company, it can mean the difference between success and failure. Even companies with great products require significant amounts of money to develop and bring those products to market. Consider the costs to Apple of launching the iPhone, which included developing the technology and creating a massive marketing campaign, or the costs to Boeing of producing the 787—the firm spent billions of dollars before the first 787 left the ground. A company typically burns through a significant amount of cash before the sales of the product generate income. The financial manager's job is to make sure that access to cash does not hinder the firm's success.

OWNERSHIP AND CONTROL OF CORPORATIONS

In theory, the goal of a firm should be determined by the firm's owners. A sole proprietorship has a single owner who runs the firm, so the goals of a sole proprietorship are the same as the owner's goals. But in organizational forms with multiple owners, the appropriate goal of the firm—and thus its managers—is not as clear.

Many corporations have thousands of owners (shareholders). Each owner is likely to have different interests and priorities. Whose interests and priorities determine the goals of the firm? Later in the book, we examine this question in more detail. However, you might be surprised to learn that the interests of shareholders are aligned for many, if not most, important decisions. For example, if the decision is whether to develop a new product that will be a profitable investment for the corporation, all shareholders will very likely agree that developing this product is a good idea because it will increase the value of the shares they own. **Shareholder wealth maximization** is the one goal that generally unites shareholders because they all benefit from a higher stock price.

ETHICS AND INCENTIVES WITHIN CORPORATIONS

Even when all the owners of a corporation agree on the goals of the corporation, these goals must be implemented. In a simple organizational form such as a sole proprietorship, the owner, who runs the firm, can ensure that the firm's goals match his or her own. But a corporation is run by a management team, separate from its owners, giving rise to conflicts of interest. How can the owners of a corporation ensure that the management team will implement their goals?

PRINCIPAL–AGENT PROBLEM. Many people claim that because of the separation of ownership and control in a corporation, managers have little incentive to work in the interests of the shareholders when this means working against their own self-interests. As a manager, wouldn't it be more fun to relax all day and freely eat in the company's gourmet dining room? Unfortunately for shareholders, **shirking** or consuming **perquisites** does little to benefit them even though the manager can benefit a lot. Economists call this a **principal–agent problem** (or just **an agency problem**) when managers, despite being hired as the agents of shareholders, put their own self-interest ahead of the interests of shareholders. Managers face the ethical dilemma of whether to adhere to their responsibility to put the interests of shareholders first, or to do what is in their own personal best interest. The downfall of many corporations can ultimately be blamed on management acting in their own interests at the expense of shareholders. A criticism of management teams in failing firms in the financial sector during the financial crisis of 2008 was that managements' prior decisions maximized their own well being (through short-term bonuses and compensation) at the expense of the long-term viability of their companies.

The most common way the principal–agent problem is addressed in practice is by minimizing the number of decisions managers must make for which their own self-interest substantially differs from the interests of the shareholders. For example, managers' compensation contracts should be designed to ensure that most decisions in the shareholders' interest are also in the managers' interests; shareholders often tie the compensation of top managers to the corporation's profits or perhaps to its stock price. Thus, if managers shirk or consume too many perquisites, the corporation's profit and stock price will drop and managers' compensation will decline. This encourages managers not to shirk or consume too many perquisites. There are, however, two important limitations to this strategy. One, by tying compensation too closely to performance, the shareholders might be asking managers to take on more risk than they are comfortable taking. As a result, managers may not make decisions that the shareholders want them to, or it might be hard to find talented managers willing to accept the job. Two, compensation tied to profits or share price may lead to short-sighted behaviour by managers who can pursue a strategy that may artificially boost short-term results and thus compensation. The market price of the firm may rise on such a strategy if market participants are less informed than management and believe the strategy will provide long-term benefits. When market participants eventually learn the truth, it may be too late as management has received its compensation and may have cashed out of their own shares. It is a constant challenge for boards of directors to design compensation systems for management that discourage short-sighted strategies and promote true wealth creation for shareholders.

THE CEO'S PERFORMANCE. Another way shareholders can encourage managers to work in the interests of shareholders is to discipline them if they don't. If shareholders are unhappy with a CEO's performance, they could, in principle, pressure the board to oust the CEO. However, directors and top executives are very rarely replaced through a grassroots shareholder uprising. Instead, dissatisfied investors often choose to sell their shares. Of course, somebody must be willing to buy the shares from the dissatisfied shareholders. If enough shareholders are dissatisfied, the only way to entice investors to buy the shares is to have a low price. Similarly, investors who see a well-managed corporation will want to purchase shares; this drives up the stock price. Thus, the stock price of the corporation is a barometer for corporate leaders that continuously gives them feedback on their shareholders' opinion of their performance.

When the stock performs poorly, the board of directors might react by replacing the CEO. In some corporations, however, the senior executives are entrenched because boards of directors do not have the will to replace them. Often, the reluctance to fire results because the board consists of people who are close friends of the CEO and lack objectivity. In corporations in which the CEO is entrenched and doing a poor job, the expectation of continued poor performance will cause the stock price to be low. Low stock prices create a profit opportunity. In a **hostile takeover**, an individual or organization—sometimes known as a corporate raider—can purchase a large fraction of the stock and in doing so get enough votes to replace the board of directors and the CEO. With a new superior management team, the stock is a much more attractive investment, which would likely result in a price rise and a profit for the corporate raider and the other shareholders. Although the words "hostile" and "raider" have negative connotations, corporate raiders themselves provide an important service to shareholders. The mere threat of being removed as a result of a hostile takeover is often enough to discipline bad managers and motivate boards of directors to make difficult decisions. Consequently, when a corporation's shares are publicly traded, a "market for corporate control" is created that encourages managers and boards of directors to act in the interests of their shareholders.

If there is a dominant shareholder, or a shareholder that owns a class of shares with multiple votes, it may be impossible for the market for corporate control to work as desired because not enough shares can be purchased on the market to accumulate enough votes to change control. Shareholder rights activists point out this problem for many Canadian firms that have multiple voting classes or a dominant shareholder; thus, as investors we might want to reconsider investing in such firms. In response to the concern about multiple voting stocks, in 2004 the TSX added extensions to stocks' ticker symbols to indicate whether a share had lesser or greater voting power than other shares from the same corporation. However, due to intense lobbying pressure, these symbol extensions were removed by the end of June 2006.

SHAREHOLDERS VERSUS STAKEHOLDERS. Shareholders are not the only ones interested in what a corporation does. Employees are interested in their jobs with the corporation. Customers are interested in the quality of the corporation's products. Suppliers are interested in being paid for their supplies and making a profit on what they sell to corporations. The community is interested in the environmental impact of the corporation and the government is interested in the tax dollars it collects. These groups and others (including shareholders and debt holders) can be considered **stakeholders** of the corporation, as they each have an interest (or stake) in how the corporation operates. In Canada, the United States, and the United Kingdom, the prevailing view in terms of the corporate goal is shareholder wealth maximization. In Japan and some European countries, a sometimes more popular view is that of **stakeholder satisfaction**. Stakeholder satisfaction as the desired corporate objective is a view also held by many critics of corporations and free enterprise economies.

How big, though, is the difference between caring for stakeholders versus shareholder wealth maximization? Consider a corporation that harasses employees, sacrifices quality, delays paying suppliers, breaks environmental protection laws, and sets up schemes to avoid taxes. These actions are obviously detrimental to many of the corporation's stakeholders, but do they accomplish shareholder wealth maximization? Some would argue that they do because they may allow the corporation to report a higher profit in the current year. This, however, is short-sighted, as it ignores the problems caused by these actions in future periods. When employees feel harassed, they may quit or consider becoming unionized. When customers experience defective products, they will stop buying from the corporation. When suppliers realize they are not going to be paid on time, they will either stop selling to the corporation or they will adjust their prices higher to recoup the lost money due to delayed collections. When it is discovered that environmental laws are broken, the corporation will be fined and forced to clean up its operations. Tax avoidance by the corporation may also result in penalties or the government changing the tax laws. In all these cases, there will be long-term damage to the corporation's reputation and profits. Since shareholders own stock that is a claim to the company's current *and future* earnings, these actions—when recognized—will actually be harmful to the current value of the company's stock. In the vast majority of cases, corporations that take care of their stakeholders also add true value for their stockholders, so there is a convergence between shareholder wealth maximization and stakeholder satisfaction. Management that is being criticized for acting against stakeholders can usually be equally criticized for not acting for true shareholder wealth maximization. Of course there are limits in both directions. If managers are excessively generous to some stakeholders, it may border on corporate welfare at the expense of shareholder wealth maximization.

CORPORATE BANKRUPTCY. Ordinarily, a corporation is run on behalf of its shareholders. But when a corporation borrows money, the holders of the firm's debt also become investors in the corporation. While the debt holders do not normally exercise control over the firm, if the corporation fails to repay its debts the debt holders are entitled to seize the assets of the corporation in compensation for the default. To prevent such a seizure, the firm may attempt to renegotiate with the debt holders, or file for bankruptcy protection. (We describe the details of the bankruptcy process and its implications for corporate decisions in much more detail in Part 5 of the text.)

In bankruptcy, management is given the opportunity to reorganize the firm and renegotiate with debt holders. If this process fails, control of the corporation generally passes to the debt holders. In most cases, the original equity holders are left with little or no stake in the firm. Thus, when a firm fails to repay its debts, the end result is often a change in ownership of the firm, with control passing from equity holders to debt holders. Importantly, bankruptcy need not result in a **liquidation** of the firm, which involves shutting down the business and selling off its assets. Even if control of the firm passes to the debt holders, it is in the debt holders' interest to run the firm in the most profitable way possible. Doing so often means keeping the business operating. For example, in April 2003, Air Canada declared bankruptcy. After 18 months working on restructuring, the airline emerged from bankruptcy as ACE Aviation. Old shareholders of Air Canada were left with virtually nothing—owning only 0.01% of the shares of ACE Aviation. Affected creditors were given about 46% of the shares in ACE and rights to purchase additional shares. If they did not exercise their rights to purchase additional

INTERVIEW WITH MICHAEL SCOTT

Michael Scott is chairman and CEO of Precision BioLogic Incorporated, which develops, manufactures, and markets very specialized products that are used in the diagnosis of blood coagulation disorders.

QUESTION: **Business schools teach the concept of shareholder wealth maximization as the overriding corporate goal. Do you agree?**

ANSWER: That is an important goal. As a company, we are an engine for value creation. That value has three prongs: creating value for customers, for employees, and for shareholders. Shareholder value creation comes from the first two. If you have engaged employees looking for ways to create value for customers, you will have a successful business and create value for shareholders.

We provide good jobs, with a good work–life balance, that people are happy to be doing. Our company is participatory and consensus-based. We ensure that people across the company participate in the processes we go through with customers as we listen for product ideas, as we develop ideas, and as we work together. We want engaged people who are committed to their work, rather than compliant with a regime.

The medical products industry is all about trust. We are known for service and have built strong relationships over the years with the largest players in the industry. That pays off for us in collaborations, in development, and in ongoing sustainable profitable business. The collaborative way in which we develop products is incredibly important. Our job is to produce fairly priced, high-quality products so our customers can make a positive buying decision.

So we have strong relationships with our customers and are responsive to their needs. That, combined with dedicated, committed, engaged employees, makes us successful. Obviously, that all results in value being created for our shareholders.

QUESTION: **Is maximizing profit or quarterly income the same as shareholder wealth maximization?**

ANSWER: No, and I think that is where many people go wrong. You have to look at profitability over time and how it affects value. One reason we remain a private company is to avoid the game of trying to match the quarter-by-quarter demands of analysts who track publicly traded companies. We may make a business decision to invest in expensive new marketing or development efforts. That may negatively affect our profitability in the short run. Value recognizes the whole future stream of profits our company will produce. We have, year by year, been increasingly profitable as a matter of developing the business.

QUESTION: **Some argue that other stakeholders (e.g., employees, suppliers, customers, government, community) need to be looked after and that this conflicts with shareholder wealth maximization. Can you comment on that?**

ANSWER: I don't think that shareholder wealth maximization is compromised by paying attention to other stakeholders. In the short run you might squeeze out more profits by pressing harder on suppliers or employees. But for the long run, and for a sustainable entity, you need an ecosystem of players who are all benefiting from the activities of the company. That includes customers, suppliers, and particularly employees. If you have a healthy organization, with employees who are happy and engaged in what they are doing, that will help to ensure the long-run success of the company, which then reflects on shareholder value.

QUESTION: **Can you comment on plans for the future ownership of your company?**

ANSWER: We could take the company public, we could keep it private, or we could sell it. We do not think going public is the right thing for us now, because we are not big consumers of external capital. We are profitable and growing quite strongly and steadily at about 15 to 20% per year. Also, we like the flexibility of being a private company. We like what we have built, we like the culture, and we are creating and extracting value for shareholders while recognizing those things. At this time we don't want to sell the company. So we are coming up with a slow transition of ownership that involves key employees coming in through an earn-in over time and the exiting over time of a number of existing shareholders—potentially, eventually even myself. There is no particular hurry to that. We want to make sure the transition is solid and will work for everybody.

shares, Deutsche Bank stood by to buy up to 42% of ACE Aviation's shares. Other investors injected $250 million by buying preferred shares in ACE Aviation. In order to make ACE Aviation a viable company and to get the required financing, employees had to accept concessions on their union contracts, aircraft leases had to be renegotiated, and the operating units of Air Canada were reconfigured so they could compete for third-party business. These changes, while difficult, were better than what would have resulted if Air Canada had been shut down completely—leaving the company's creditors with less, displacing all the employees, and terminating the leases from the aircraft suppliers. Air Canada regained its status in the Canadian aviation industry with ACE Aviation's income jumping from $261 million in 2005 to $1.4 billion in 2007. How Air Canada and other airlines will fare in the future is always a good question. Airlines are quite cyclical in their profitability and by the end of 2008, in the midst of the economic crisis, ACE Aviation's positive annual net income had slipped to a $120 million loss. Not until the second quarter of 2009 did ACE Aviation return to positive net income. In 2012, ACE Aviation began the liquidation of its holdings and Air Canada remained as a publicly traded company independent of its former parent company.

Thus, a useful way to understand corporations is to think of there being two sets of investors with claims to its cash flows: debt holders and equity holders. As long as the corporation can satisfy the claims of the debt holders, ownership remains in the hands of the equity holders. If the corporation fails to satisfy debt holders' claims, debt holders may take control of the firm. Thus a corporate bankruptcy is best thought of as a *change in ownership* of the corporation, and not necessarily as a failure of the underlying business.

CONCEPT CHECK

1. What is a principal–agent problem that may exist in a corporation?
2. How does the board of directors control a corporation?
3. How does shareholder wealth maximization converge with stakeholder satisfaction?
4. How may a corporate bankruptcy filing affect the ownership of a corporation?

FINANCIAL CRISIS
LEHMAN BROTHERS BANKRUPTCY

On September 15, 2008, Lehman Brothers' investment bank announced it was filing for bankruptcy protection. With liabilities exceeding $700 billion, Lehman's bankruptcy was by far the largest bankruptcy in history, and it helped to trigger a worldwide financial crisis. In reporting the bankruptcy of this 158-year-old investment bank, the *International Herald Tribune* claimed, "It certainly is over for Lehman's 25,000 employees, who have lost a large portion of their fortunes as the firm's stock has fallen and who are now frantically searching for work."* But was it really "over"?

Despite the bankruptcy filing, and the ensuing havoc endured by Lehman's employees, Lehman continued to operate. Within a week of the filing, Barclays PLC had purchased Lehman's North American investment-banking and trading units as going concerns, so all the employees of these units became employees of Barclays. Within a month Nomura Holdings had purchased Lehman's non–U.S. subsidiaries as going concerns, so Lehman's foreign employees became employees of Nomura. Finally, by the end of the year Lehman Brothers' Investment Management business was bought by its senior managers.

As catastrophic as this bankruptcy was to the financial sector and to economies around the world, it did not result in the cessation of Lehman Brothers' underlying business activities. Instead, it precipitated a change in who owned and controlled the firm.

* Landon Thomas, *International Herald Tribune*, September 15, 2008.

1.3 THE STOCK MARKET

As we have discussed, shareholders would like the firm's managers to maximize the value of their investment in the firm. The value of their investment is determined by the price of a share of the corporation's stock. Because **private companies** have a limited set of shareholders and their shares are not traded regularly, the value of their shares can be difficult to determine. But many corporations are **public companies**, whose shares trade on organized markets called **stock markets** (or **stock exchanges**). These markets provide *liquidity* and determine a market price for the company's shares. An investment is said to be **liquid** if it is possible to sell it quickly and easily for a price very close to the price at which you could contemporaneously buy it. This liquidity is attractive to outside investors, as it provides flexibility regarding the timing and duration of their investment in the firm. In this section we provide an overview of the world's major stock markets. The research and trading of participants in these markets give rise to share prices that provide constant feedback to managers regarding investors' views of their decisions.

PRIMARY AND SECONDARY STOCK MARKETS

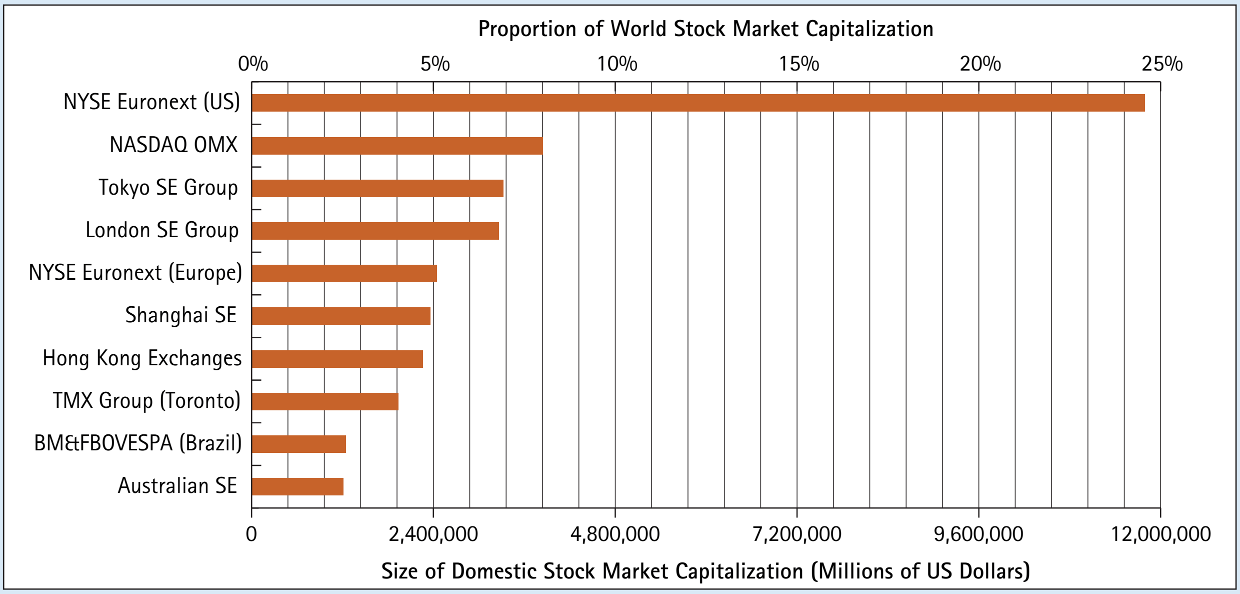
When a corporation itself issues new shares of stock and sells them to investors they do so on the **primary market**. After this initial transaction between the corporation and investors, the shares continue to trade in a **secondary market** between investors without the involvement of the corporation. For example, if you wish to buy 100 shares of Tim Hortons, you would place an order on a stock exchange where Tim Hortons trades under the ticker symbol THI. You would buy your shares from someone who already held shares of Tim Hortons, not from Tim Hortons itself.

THE LARGEST STOCK MARKETS

The best-known stock market and the largest stock market in the world is the New York Stock Exchange (NYSE Euronext US). The largest stock exchange in Canada is the Toronto Stock Exchange (TSX), which is part of the TMX Group (formed by the merger of the TSX and the Montreal Exchange—a market for derivatives trading that will be discussed later in the book). The TSX is the eighth largest exchange in the world as measured by total market capitalization at the end of 2011. Most countries have at least one stock market. Other than the NYSE and NASDAQ (which stands for National Association of Securities Dealers Automated Quotations) in the United States, the biggest stock markets are the Tokyo Stock Exchange, the London Stock Exchange, and the NYSE Euronext (Europe).

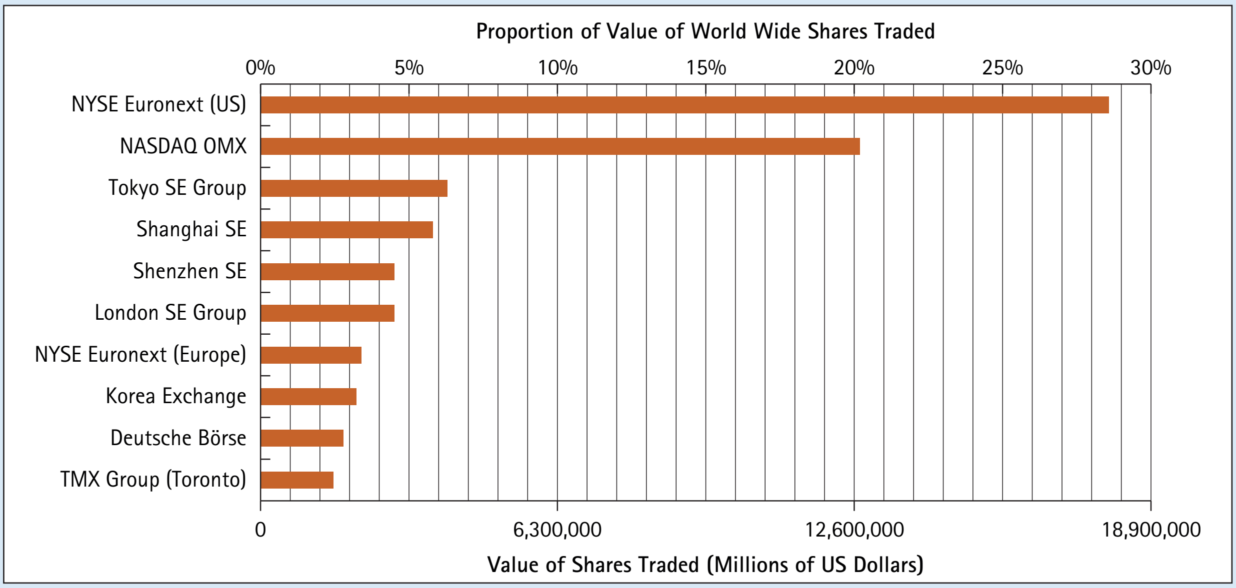
Figure 1.3 shows the world's 10 largest stock markets according to the total value of all domestic corporations listed on the exchanges at the end of 2011. Figure 1.4 shows the world's 10 largest stock markets according to the total annual value of shares traded on the exchanges in 2011. Table 1.1 shows the actual data for the world's 50 largest stock markets for the same measures. It is worth noting the importance and growth of emerging markets; China and Brazil's markets are in the world's top 10 in terms of market capitalization.

FIGURE 1.3 Worldwide Stock Markets Ranked by Domestic Stock Market Capitalization at the End of 2011



Source: World Federation of Exchanges, www.world-exchanges.org, and author's own calculations.

FIGURE 1.4 Worldwide Stock Markets Ranked by Total Value of Shares Traded for 2011



Source: World Federation of Exchanges, www.world-exchanges.org, and author's own calculations.

TABLE 1.1 WORLDWIDE STOCK MARKETS RANKED BY TWO COMMON MEASURES

The 50 biggest stock markets in the world ranked (a) by total value of all domestic corporations listed on the exchanges at year-end 2011, and (b) by total value of the shares traded on the exchanges in 2011.

Top 50 Stock Markets by Domestic Capitalization				Top 50 Stock Markets by Value of Shares Traded			
	Exchange	Value (millions USD)	% of World		Exchange	Value (millions USD)	% of World
1	NYSE Euronext (US)	11,795,575	24.88%	1	NYSE Euronext (US)	18,027,086	28.58%
2	NASDAQ 0 MX	3,845.132	8.11%	2	NASDAQ OMX	12,723,511	20.17%
3	Tokyo SE Group	3,325,388	*7.02%*	3	Tokyo SE Group	3,971,892	6.30%
4	London SE Group	3,266,418	6.89%	4	ShanghaiSE	3,657,978	5.80%
5	NYSE Euronext (Europe)	2,446,767	5.16%	5	Shenzhen SE	2,838,054	4.50%
6	Shanghai SE	2,357,423	4.97%	6	London SE Group	2,836,992	4.50%
7	Hong Kong Exchanges	2,258,035	4.76%	7	NYSE Euronext (Europe]	2,134,213	3.38%
8	TMX Group (Toronto)	1,912,122	4.03%	8	Korea Exchange	2,029,098	3.22%
9	BM&FBOVESPA [Brazil)	1,228,936	2.59%	9	Deutsche Bdrse	1,758,185	2.79%
10	Australian SE	1,198,187	2.53%	10	TMX Group (Toronto)	1,542,174	2.44%
11	Deutsche Bdrse	1,184,500	2.50%	11	Hong Kong Exchanges	1,444,610	2.29%
12	SIXSwiss Exchange	1,089,519	2.30%	12	BME Spanish Exchanges	1,227,913	1.95%
13	Shenzhen SE	1,054,685	2.23%	13	Australian SE	1,196,707	1.90%
14	BME Spanish Exchanges	1,030,988	2.18%	14	BM&FBOVESPA (Brazil)	930,698	1.48%
15	BSE Ltd (Bombay)	1,007,183	2.12%	15	Taiwan SECorp.	889,904	1.41%
16	Korea Exchange	996,140	2.10%	16	SIX Swiss Exchange	886,527	1.41%
17	National Stock Exchange India	985,269	2.08%	17	NASDAQ OMX Nordic Exchange	828,308	1.31%
18	NASDAQ 0MX Nordic Exchange	842,101	1.78%	18	National Slock Exchange India	588,843	0.93%
19	Johannesburg SE	789,037	1.66%	19	MICEX (Moscow)	514,331	0.82%
20	MICEX (Moscow)	770,609	1.63%	20	IMKB (Istanbul)	412,911	0.65%
21	Taiwan SECorp.	635,506	1.34%	21	Johannesburg SE	372,177	0.59%
22	Singapore Exchange	598,273	1.26%	22	Saudi Stock Exchange - Tadawul	291,432	0.46%
23	Mexican Exchange	408,690	0.86%	23	Singapore Exchange	285,118	0.45%
24	Bursa Malaysia	395,624	0.83%	24	Oslo Bers	245,152	0.39%
25	Indonesia SE	390,107	0.82%	25	The Stock Exchange of Thailand	222,605	0.35%
26	Saudi Stock Exchange-Tadawul	338,873	0.71%	26	Osaka SE	188,651	0.30%
27	Santiago SE	270,289	0.57%	27	BSE Ltd (Bombay)	148,488	0.24%
28	The Stock Exchange of Thailand	268,489	0.57%	28	Bursa Malaysia	135,949	0.22%
29	Oslo Bars	220,936	0.47%	29	Mexican Exchange	121,640	0.19%
30	Osaka SE	215,376	0.45%	30	Indonesia SE	109,421	0.17%
31	Colombia SE	201,296	0.42%	31	RTS Exchange (Russia)	92,485	0.15%
32	IMKB (Istanbul)	197,074	0.42%	32	Warsaw SE	86,518	0.14%
33	Philippine SE	165,066	0.35%	33	Tel Aviv SE	82,043	0.13%
34	Tel Aviv SE	156,939	0.33%	34	Santiago SE	55,260	0.09%
35	Warsaw SE	138,244	0.29%	35	Wiener Bdrse (Vienna]	42,356	0.07%
36	Irish SE	108,393	0.23%	36	Colombia SE	36,816	0.06%
37	Wiener Bdrse (Vienna)	85,270	0.18%	37	Philippine SE	27,765	0.04%
38	Lima SE	81,878	0.17%	38	Athens Exchange	27,295	0.04%
39	Luxembourg SE	67,627	0.14%	39	Budapest SE	19,172	0.03%
40	Casablanca SE	60,088	0.13%	40	Egyptian Exchange	16,133	0.03%
41	Egyptian Exchange	48,682	0.10%	41	Irish SE	8,956	0.01%
42	BuenosAiresSE	43,580	0.09%	42	Lima SE	6,220	0.01%
43	Athens Exchange	*n* 77:	0.07%	43	Colombo SE	4,946	0.01%
44	Amman SE	27,183	0.06%	44	Casablanca SE	4,314	0.01%
45	Colombo SE	19,437	0.04%	45	Amman SE	3,898	0.01%
46	Budapest SE	18,773	0.04%	46	Buenos Aires SE	3,284	0.01%
47	Mauritius SE	7,845	0.02%	47	Ljubljana SE	553	0.00%
48	Ljubljana SE	6,326	0.01%	48	Mauritius SE	520	0.00%
49	Malta SE	3,429	0.01%	49	Cyprus SE	434	0.00%
50	Cyprus SE	2,853	0.01%	50	Luxembourg SE	156	0.00%
	All Exchanges	47,400,528	100.00%		All Exchanges	63,079,820	100.00%

Source: World Federation of Exchanges, www.world-exchanges.org, and author's own calculations.

TSX

The TSX is an electronic exchange. Investors (individuals and institutions) can post orders onto the TSX trading system from anywhere. The highest price being quoted to buy a stock is called the **bid price**. The lowest price being quoted to sell a stock is called the **ask** (or **offer**) **price**. When the bid and ask prices are at the same price, the trade is completed; then the next highest bid and next lowest ask become the quoted bid and ask prices respectively.

Ask prices exceed bid prices. This difference between the posted ask price and bid price is called the **bid–ask spread**. If you enter the market wanting to buy a stock, you can post a **limit order** to buy at a specified price, but until your order matches the ask price (the amount for which someone will sell the stock to you), no trade will take place. Alternatively, a **market order** to buy will transact immediately because it automatically takes the best ask price already posted. However, with market orders customers end up always buying at the ask (the higher price) and selling at the bid (the lower price), the bid–ask spread is an implicit **transaction cost** investors have to pay in order to trade quickly. Companies that are more interesting to investors are frequently traded and many investors put in orders to buy and sell the stock. In these cases, the bid–ask spread is generally quite small. Other companies that attract less investor interest are said to be **thinly traded**. Because not many investors want to trade these stocks, the bid–ask spreads tend to be much larger. Stocks that trade on the TSX tend to have lower bid–ask spreads than those that trade on the TSX Venture Exchange (an exchange for relatively small company stocks).

NYSE

The NYSE is one of the last major stock exchanges to have an active trading floor to which orders are routed for the trading of shares of stock. The NYSE also has **specialists** (or **market makers**) who are given preferential access to orders but must also stand ready to buy or sell shares at their own posted bid and ask prices. Recently, the NYSE has combined electronic trading with the trading on the floor. It is likely that the role of floor trading and the importance of the specialist will decline as the need for a specialist to make a market in a company's stock is replaced by the ability of investors to access an electronic exchange and post their own bid and ask prices directly.

CONCEPT CHECK

1. What is the TSX?
2. What advantage does a stock market provide to corporate investors?

In this chapter, we provided an overview of corporate finance, described the financial manager's role, and stressed the importance of stock markets. In the coming chapters, we will develop the tools of financial analysis together with a clear understanding of when to apply them and why they work. These tools will provide the foundation that will allow you to use the financial market information provided by stock markets and other sources to make the best possible financial management decisions.

SUMMARY

1. There are three types of firms in Canada: sole proprietorships, partnerships, and corporations. In addition, there are income trusts that may hold all of a company's securities; one remaining form of income trust, the real estate investment trust (REIT) allows the company's income to flow through to investors with no tax at the business level.
2. Firms with unlimited personal liability include sole proprietorships and partnerships.

3. Firms with limited liability include limited partnerships; limited liability partnerships (to some extent, although there is also unlimited liability to some extent); and corporations.
4. A corporation is a legally defined artificial being (a judicial person or legal entity) that has many of the legal powers people have. It can enter into contracts, acquire assets, and incur obligations.
5. The shareholders in a corporation effectively must pay tax twice. The corporation pays tax once and then investors must pay personal tax on any funds that are distributed as dividends.
6. The ownership of a corporation is divided into shares of stock collectively known as equity. Investors in these shares are called shareholders, stockholders, or equity holders.
7. The ownership and control of a corporation are separated. Owners (shareholders) exercise their control indirectly through the board of directors who appoint managers, who act as agents of the shareholders, to run the firm. This separation of ownership and control leads to the agency problem, where managers may act in their own interests at the expense of the owners (shareholders).
8. Financial managers within the firm are responsible for three main tasks: making investment decisions, making financing decisions, and managing the firm's cash flows.
9. Shareholder wealth maximization as the corporate goal is the predominant view in Canada, the United States, and the United Kingdom. A contrasting view emphasizes stakeholder satisfaction, but shareholder wealth maximization, for the most part, also requires corporations to take care of their stakeholders.
10. Corporate bankruptcy can be thought of as a change in ownership and control of the corporation. The equity holders give up their ownership and control to the debt holders.
11. The shares of public corporations are traded on stock markets. The shares of private corporations do not trade on a stock market.

KEY TERMS

agency problem ***p. 10***
articles of incorporation ***p. 4***
ask (offer) price ***p. 18***
bid price ***p. 15***
bid–ask spread ***p. 18***
board of directors ***p. 8***
business income trust ***p. 7***
chief executive officer (CEO) ***p. 8***
chief financial officer (CFO) ***p. 8***
corporation ***p. 4***
dividend payments ***p. 5***
equity ***p. 5***
equity holder ***p. 5***
flow through entities ***p. 7***
hostile takeover ***p. 11***
income trust ***p. 7***
limit order ***p. 18***
limited liability ***p. 4***
limited liability partnership (LLP) ***p. 4***
limited partnership ***p. 4***
liquid ***p. 15***
liquidation ***p. 12***
market makers ***p. 18***
market order ***p. 18***
partnership ***p. 3***
perquisites ***p. 10***
primary market ***p. 15***
principal–agent problem ***p. 10***
private companies ***p. 15***
public companies ***p. 15***
real estate investment trust (REIT) ***p. 7***
secondary market ***p. 15***
shareholder ***p. 4***
shareholder wealth maximization ***p. 10***
shirking ***p. 10***
sole proprietorship ***p. 3***
specialists ***p. 18***
stakeholder ***p. 11***
stakeholder satisfaction ***p. 12***
stock ***p. 5***
stockholder ***p. 5***
stock markets (stock exchanges) ***p. 15***
thinly traded ***p. 18***
transaction cost ***p. 18***
unit holder ***p. 7***

PROBLEMS

MyFinanceLab Visit MyFinanceLab for the problems indicated in red below.

Problems indicated by a different coloured number are available in MyFinanceLab. An asterisk (*) indicates problems with a higher level of difficulty.

The Three Types of Firms

1. What is the most important difference between a corporation and *all* other organizational forms?
2. What does the phrase *limited liability* mean in a corporate context?
3. Which organizational forms give their owners *complete* limited liability?
4. What are the main advantages and disadvantages of organizing a firm as a corporation?
5. Explain the difference between a corporation that only holds real estate and a REIT.
6. You are a shareholder in a corporation that owns real estate assets. The corporation earns $2 per share before taxes. Once it has paid taxes it will distribute the rest of its earnings to you as a dividend. The corporate tax rate is 34%, the personal tax rate on dividend income is 18%, and the personal tax rate on other income is 40%. How much is left for you after all taxes are paid?
7. Repeat Problem 6 assuming that instead of the assets being held within a corporate form, the assets are held within a REIT which earns $2 per unit before taxes.

Ownership Versus Control of Corporations

8. You have decided to form a new start-up company developing applications for the iPhone. Give examples of the three distinct types of financial decisions you will need to make.
9. Corporate managers work for the owners of the corporation. Consequently, they should make decisions that are in the interests of the owners, rather than their own. What strategies are available to shareholders to help ensure that managers are motivated to act this way?
10. Suppose your local supermarket manager decides that to increase profit, the store will no longer refrigerate milk held in the storage room. Milk on the shelf will still be refrigerated. What stakeholders might this impact? Will the impact of this decision be positive or negative for the stakeholders? Will it be positive or negative for the shareholders? Explain.
11. Suppose you are considering renting an apartment. You, the renter, can be viewed as an agent while the company that owns the apartment can be viewed as the principal. What principal–agent conflicts do you anticipate? Suppose, instead, that you work for the apartment company. What features would you put into the lease agreement that would give the renter incentives to take good care of the apartment?
12. You are the CEO of a company and you are considering entering into an agreement to have your company buy another company. You think the price might be too high, but you will be the CEO of the combined, much larger company. You know that when the company gets bigger, your pay and prestige will increase. What is the nature of the agency conflict here and how is it related to ethical considerations?
13. Are hostile takeovers necessarily bad for firms or their investors? Explain.

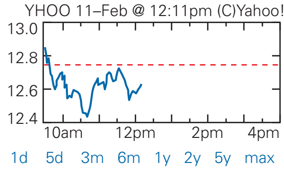
The Stock Market

14. What is the difference between a public and a private corporation?
15. Explain why the bid–ask spread is a transaction cost.

16. The following quote on Yahoo! stock appeared on February 11, 2009, on Yahoo! Finance:

Yahoo! Inc. (NasdaqGS: YHOO)
Real-Time: 12:57 ↓0.18 (1.41%) 12:34PM ET

Last Trade:	**12.53**	Day's Range:	12.42 – 12.91
Trade Time:	12:19PM ET	52wk Range:	8.94 – 30.25
Change:	↓0.22 (1.71%)	Volume:	5,996,715
Prev Close:	12.75	Avg Vol (3m)	21,536,800
Open:	12.86	Market Cap:	17.39B
Bid:	12.53 × 100	P/E (ttm):	41.35 ×
Ask:	12.54 × 13500	EPS (ttm):	0.30
1y Target Est:	15.00	Div & Yield:	N/A (N/A)



If you wanted to buy Yahoo!, what price would you pay? How much would you receive if you wanted to sell Yahoo!?