Licensed to:

Fundamentals of Financial Management

THIRTEENTH EDITION

Licensed to:

This is an electronic version of the print textbook. Due to electronic rights restrictions, some third party content may be suppressed. Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. The publisher reserves the right to remove content from this title at any time if subsequent rights restrictions require it. For valuable information on pricing, previous editions, changes to current editions, and alternate formats, please visit www.cengage.com/highered to search by ISBN#, author, title, or keyword for materials in your areas of interest.

CENGAGE brain

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

SOUTH-WESTERN
CENGAGE Learning®

Fundamentals of Financial Management, Thirteenth Edition
Eugene F. Brigham and Joel F. Houston

VP, Editorial Director:
Jack W. Calhoun

Editor-in-Chief:
Joe Sabatino

Executive Editor:
Mike Reynolds

Developmental Editor:
Kendra Brown

Sr. Editorial Assistant:
Adele Scholtz

Sr. Marketing Communications Manager: Jim Overly

Marketing Manager:
Nathan Anderson

Marketing Coordinator:
Suellen Ruttkay

Content Project Managers:
Scott Dillon & Jacquelyn K Featherly

Supervising Media Editor:
Scott Fidler

Manufacturing Planner:
Kevin Kluck

Production House/Compositor:
Integra Software Service Pvt. Ltd.

Sr. Rights Specialist:
John Hill

Sr. Art Director:
Michelle Kunkler

Cover and Internal Designer:
Beckmeyer Design

Cover Images:
© Charles Schug/iStockphoto

Except where otherwise noted, all items are: © Cengage Learning

© 2013, 2010 South-Western, a part of Cengage Learning

ALL RIGHTS RESERVED. No part of this work covered by the copyright herein may be reproduced, transmitted, stored or used in any form or by any means graphic, electronic, or mechanical, including but not limited to photocopying, recording, scanning, digitizing, taping, Web distribution, information networks, or information storage and retrieval systems, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the publisher.

For product information and technology assistance, contact us at
Cengage Learning Customer & Sales Support, 1-800-354-9706

For permission to use material from this text or product,
submit all requests online at **www.cengage.com/permissions**
Further permissions questions can be emailed to
permissionrequest@cengage.com

ExamView® and ExamView Pro® are registered trademarks of FSCreations, Inc. Windows is a registered trademark of the Microsoft Corporation used herein under license. Macintosh and Power Macintosh are registered trademarks of Apple Computer, Inc. used herein under license.

Library of Congress Control Number: 2011941653

Student Edition ISBN 13: 978-0-538-48243-1

Student Edition ISBN 10: 0-538-48243-5

Package Student Edition ISBN 13: 978-0-538-48212-7

Package Student Edition ISBN 10: 0-538-48212-5

CENGAGEbrain.com

South-Western Cengage Learning
5191 Natorp Boulevard
Mason, OH 45040
USA

Cengage Learning products are represented in Canada by Nelson Education, Ltd.

For your course and learning solutions, visit **www.cengage.com** Purchase any of our products at your local college store or at our preferred online store **www.cengagebrain.com**

Printed in the United States of America
1 2 3 4 5 6 7 16 15 14 13 12

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

© Courtesy of Google, Inc.

An Overview of Financial Management

Striking the Right Balance

In 1776, Adam Smith described how an "invisible hand" guides companies as they strive for profits, and that hand leads them to decisions that benefit society. Smith's insights led him to conclude that profit maximization is the right goal for a business and that the free enterprise system is best for society. But the world has changed since 1776. Firms today are much larger, they operate globally, they have thousands of employees, and they are owned by millions of stockholders. This makes us wonder if the "invisible hand" still provides reliable guidance: Should companies still try to maximize profits, or should they take a broader view and take more balanced actions designed to benefit customers, employees, suppliers, and society as a whole?

Many academics and finance professionals today subscribe to the following modified version of Adam Smith's theory:

- *A firm's principal goal should be to maximize the wealth of its stockholders, which means maximizing the value of its stock.*
- *Free enterprise is still the best economic system for the country as a whole. Under the free enterprise framework, companies develop products and services that people want and that benefit society.*
- *However, some constraints are needed—firms should not be allowed to pollute the air and water, to engage in unfair employment practices, or to create monopolies that exploit consumers.*

These constraints take a number of different forms. The first set of constraints are the costs that are assessed on companies if they take actions that harm society. Another set of constraints arises through the political process, where society imposes a wide range of regulations that are

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

designed to keep companies from engaging in practices that are harmful to society. Properly imposed, these costs fairly transfer value to suffering parties and help create incentives that help prevent similar events from occurring in the future.

The recent financial crisis dramatically illustrates these points. We witnessed many Wall Street firms engaging in extremely risky activities that pushed the financial system to the brink of collapse in 2007 and 2008. Saving the financial system required a bailout of the banks and other financial companies, and that bailout imposed huge costs on the taxpayers, and also helped push the economy into a deep recession. Apart from the huge costs imposed on society, the financial firms also paid a heavy price—a number of leading financial institutions saw a huge drop in their stock price, some failed and went out of business, and many Wall Street executives lost their jobs.

Arguably, these costs are not enough to prevent another financial crisis down the road. Many maintain that the events surrounding the financial crisis illustrate that markets don't always work the way they should, and that there is a need for stronger regulation of the financial sector. For example, in his recent book, Nobel Laureate Joseph Stiglitz makes a strong case for enhanced regulation. At the same time, others with a different political persuasion continue to express concerns about the costs of excessive regulation.

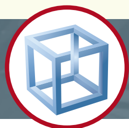
Beyond just the financial crisis, there is a broader question of whether laws and regulations are enough to compel firms to act in society's interest. For example, GE Chief Executive Officer (CEO) Jeffrey Immelt believes that just obeying the law is not enough, and that companies should strive to behave ethically and continually operate with society's interests in mind. Immelt further argues that value and reputation go hand in hand, and that having a good reputation with customers, suppliers, employees, and regulators is essential if value is to be maximized. In his words, "The reason people come to work for GE is that they want to be part of something bigger than themselves. They want to work hard, win promotions, and be well compensated, but they also want to work for a company that makes a difference, a company that's doing great things in the world.... It's up to GE to be a good citizen. Not only is that a nice thing to do, but it's good for business and thus the price of our stock."

GE is not alone. An increasing number of companies see their mission as more than just making money for their shareholders. Google's well-known corporate motto is "Don't Be Evil." Consistent with this mission, the company has its own in-house foundation that has made large investments in a wide range of philanthropic ventures worldwide. There are other instances where corporate leaders have donated personal funds.

In 2008, Microsoft Corporation's Bill Gates gave a speech to the World Economic Forum in which he made the case for a "creative capitalism." Gates stated that, "Such a system would have a twin mission: making profits and also improving lives for those who don't fully benefit from market forces."

Gates has certainly been true to his word. In 2000, he and his wife established the Bill & Melinda Gates Foundation. Today the fund has assets totaling $34 billion. It received a notable boost in 2006 when famed investor Warren Buffett announced that he would donate a huge share of his fortune to the Foundation. To date, Buffett has contributed close to $8 billion, and over time he is scheduled to contribute additional stock that is now worth about $40 billion. These efforts show that there is more to life than money, but it often takes money to do good things.

Sources: Marc Gunther, "Money and Morals at GE," *Fortune*, November 15, 2004, pp. 176–182; Patricia Sellers, "Melinda Gates Goes Public," CNNMoney.com, January 7, 2008; Kevin J. Delaney, "Google: From 'Don't Be Evil' to How to Do Good," *The Wall Street Journal*, January 18, 2008, pp. B1–B2; Robert A. Guth, "Bill Gates Issues Call for Kinder Capitalism," *The Wall Street Journal*, January 24, 2008, p. A1; and Joseph E. Stiglitz, *FreeFall: America, Free Markets, and the Sinking of the World Economy* (New York: W.W. Norton & Company, 2010).



PUTTING THINGS IN PERSPECTIVE

This chapter will give you an idea of what financial management is all about. We begin the chapter by describing how finance is related to the overall business, by pointing out that finance prepares students for jobs in different fields of business, and by discussing the different forms of business organization. For corporations,

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

management's goal should be to maximize shareholder wealth, which means maximizing the value of the stock. When we say "maximizing the value of the stock," we mean the "true, long-run value," which may be different from the current stock price. Good managers understand the importance of ethics, and they recognize that maximizing long-run value is consistent with being socially responsible. We conclude the chapter by discussing how firms must provide the right incentives for managers to focus on long-run value maximization. When you finish this chapter, you should be able to:

- **Explain the role of finance and the different types of jobs in finance.**
- **Identify the advantages and disadvantages of different forms of business organization.**
- **Explain the links between stock price, intrinsic value, and executive compensation.**
- **Discuss the importance of business ethics and the consequences of unethical behavior.**
- **Identify the potential conflicts that arise within the firm between stockholders and managers and between stockholders and bondholders, and discuss the techniques that firms can use to mitigate these potential conflicts.**

1-1 WHAT IS FINANCE?

It's hard to define *finance*—the term has many facets, which makes it difficult to provide a clear and concise definition. The discussion in this section will give you an idea of what finance people do and what you might do if you enter the finance field after you graduate.

CENGAGE brain

1-1a Finance versus Economics and Accounting

Finance, as we know it today, grew out of economics and accounting. Economists developed the notion that an asset's value is based on the future cash flows the asset will provide, and accountants provided information regarding the likely size of those cash flows. People who work in finance need knowledge of both economics and accounting. As discussed next, in the modern corporation, the accounting department falls under the control of the chief financial officer (CFO).

1-1b Finance within an Organization

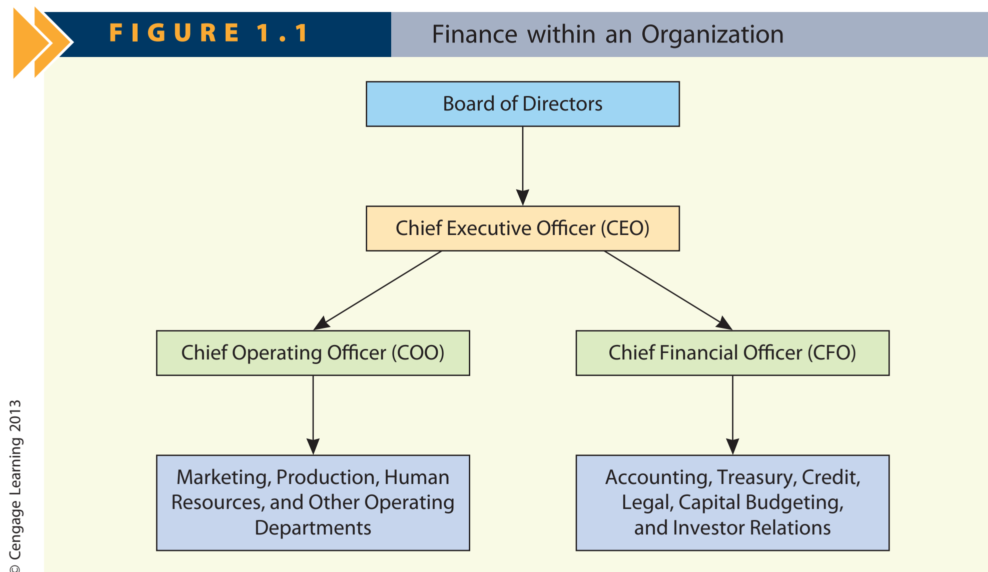
The duties of the CFO have broadened over the years. CFO magazine's online service, cfo.com, is an excellent source of timely finance articles intended to help the CFO manage those new responsibilities.

Most businesses and not-for-profit organizations have an organization chart similar to the one shown in Figure 1.1. The board of directors is the top governing body, and the chairperson of the board is generally the highest-ranking individual. The CEO comes next, but note that the chairperson of the board often also serves as the CEO. Below the CEO comes the chief operating officer (COO), who is often also designated as a firm's president. The COO directs the firm's operations, which include marketing, manufacturing, sales, and other operating departments. The CFO, who is generally a senior vice president and the third-ranking officer, is in charge of accounting, financing, credit policy, decisions regarding asset acquisitions, and investor relations, which involves communications with stockholders and the press.

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

FIGURE 1.1 Finance within an Organization



© Cengage Learning 2013

If the firm is publicly owned, the CEO and the CFO must both certify to the Securities and Exchange Commission (SEC) that reports released to stockholders, and especially the annual report, are accurate. If inaccuracies later emerge, the CEO and the CFO could be fined or even jailed. This requirement was instituted in 2002 as a part of the **Sarbanes-Oxley Act**. The Act was passed by Congress in the wake of a series of corporate scandals involving now-defunct companies such as Enron and WorldCom, where investors, workers, and suppliers lost billions of dollars due to false information released by those companies.

Sarbanes-Oxley Act
A law passed by Congress that requires the CEO and CFO to certify that their firm's financial statements are accurate.

1-1c Corporate Finance, Capital Markets, and Investments

Finance as taught in universities is generally divided into three areas: (1) financial management, (2) capital markets, and (3) investments.

Financial management, also called corporate finance, focuses on decisions relating to how much and what types of assets to acquire, how to raise the capital needed to purchase assets, and how to run the firm so as to maximize its value. The same principles apply to both for-profit and not-for-profit organizations; and as the title suggests, much of this book is concerned with financial management.

Capital markets relate to the markets where interest rates, along with stock and bond prices, are determined. Also studied here are the financial institutions that supply capital to businesses. Banks, investment banks, stockbrokers, mutual funds, insurance companies, and the like bring together "savers" who have money to invest and businesses, individuals, and other entities that need capital for various purposes. Governmental organizations such as the Federal Reserve System, which regulates banks and controls the supply of money, and the SEC, which regulates the trading of stocks and bonds in public markets, are also studied as part of capital markets.

Investments relate to decisions concerning stocks and bonds and include a number of activities: (1) *Security analysis* deals with finding the proper values of individual securities (i.e., stocks and bonds). (2) *Portfolio theory* deals with the

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

best way to structure portfolios, or "baskets," of stocks and bonds. Rational investors want to hold diversified portfolios in order to limit risks, so choosing a properly balanced portfolio is an important issue for any investor. (3) *Market analysis* deals with the issue of whether stock and bond markets at any given time are "too high," "too low," or "about right." *Behavioral finance*, where investor psychology is examined in an effort to determine if stock prices have been bid up to unreasonable heights in a speculative bubble or driven down to unreasonable lows in a fit of irrational pessimism, is a part of market analysis.

Although we separate these three areas, they are closely interconnected. Banking is studied under capital markets, but a bank lending officer evaluating a business' loan request must understand corporate finance to make a sound decision. Similarly, a corporate treasurer negotiating with a banker must understand banking if the treasurer is to borrow on "reasonable" terms. Moreover, a security analyst trying to determine a stock's true value must understand corporate finance and capital markets to do his or her job. In addition, financial decisions of all types depend on the level of interest rates; so all people in corporate finance, investments, and banking must know something about interest rates and the way they are determined. Because of these interdependencies, we cover all three areas in this book.

What is the relationship between economics, finance, and accounting?

Who is the CFO, where does this individual fit into the corporate hierarchy, and what are some of his or her responsibilities?

Does it make sense for not-for-profit organizations such as hospitals and universities to have CFOs?

What three areas of finance does this book cover? Are these areas independent of one another, or are they interrelated in the sense that someone working in one area should know something about each of the other areas? Explain.

CENGAGEbrain.com

1-2 JOBS IN FINANCE

To find information about different finance careers, go to careers-in-finance.com. This website provides information about different finance areas and recommends different books about jobs in finance.

Finance prepares students for jobs in banking, investments, insurance, corporations, and government. Accounting students need to know finance, marketing, management, and human resources; they also need to understand finance, for it affects decisions in all those areas. For example, marketing people propose advertising programs, but those programs are examined by finance people to judge the effects of the advertising on the firm's profitability. So to be effective in marketing, one needs to have a basic knowledge of finance. The same holds for management—indeed, most important management decisions are evaluated in terms of their effects on the firm's value.

It is also worth noting that finance is important to individuals regardless of their jobs. Some years ago most businesses provided pensions to their employees, so managing one's personal investments was not critically important. That's no longer true. Most firms today provide what's called "defined contribution" pension plans, where each year the company puts a specified amount of money into an account that belongs to the employee. The employee must decide how those funds are to be invested—how much should be divided among stocks, bonds, or

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

money funds and how much risk they're willing to take with their stock and bond investments. These decisions have a major effect on people's lives, and the concepts covered in this book can improve decision-making skills.

1-3 FORMS OF BUSINESS ORGANIZATION

The basics of financial management are the same for all businesses, large or small, regardless of how they are organized. Still, a firm's legal structure affects its operations and thus should be recognized. There are four main forms of business organizations: (1) proprietorships, (2) partnerships, (3) corporations, and (4) limited liability companies (LLCs) and limited liability partnerships (LLPs). In terms of numbers, most businesses are proprietorships. However, based on the dollar value of sales, over 80% of all business is done by corporations.[1] Because corporations conduct the most business and because most successful businesses eventually convert to corporations, we concentrate on them in this book. Still, it is important to understand the legal differences between firms.

A **proprietorship** is an unincorporated business owned by one individual. Going into business as a sole proprietor is easy—a person begins business operations. Proprietorships have three important advantages: (1) They are easily and inexpensively formed, (2) they are subject to few government regulations, and (3) they are subject to lower income taxes than are corporations. However, proprietorships also have three important limitations: (1) Proprietors have unlimited personal liability for the business' debts, so they can lose more than the amount of money they invested in the company. You might invest $10,000 to start a business but be sued for $1 million if, during company time, one of your employees runs over someone with a car. (2) The life of the business is limited to the life of the individual who created it; and to bring in new equity, investors require a change in the structure of the business. (3) Because of the first two points, proprietorships have difficulty obtaining large sums of capital; hence, proprietorships are used primarily for small businesses. However, businesses are frequently started as proprietorships and then converted to corporations when their growth results in the disadvantages outweighing their advantages.

Proprietorship
An unincorporated business owned by one individual.

A **partnership** is a legal arrangement between two or more people who decide to do business together. Partnerships are similar to proprietorships in that they can be established relatively easily and inexpensively. Moreover, the firm's income is allocated on a pro rata basis to the partners and is taxed on an individual basis. This allows the firm to avoid the corporate income tax. However, all of the partners are generally subject to unlimited personal liability, which means that if a partnership goes bankrupt and any partner is unable to meet his or her pro rata share of the firm's liabilities, the remaining partners will be responsible for making good on the unsatisfied claims. Thus, the actions of a Texas partner can bring ruin to a millionaire New York partner who had nothing to do with the actions that led to the downfall of the company. Unlimited liability makes it difficult for partnerships to raise large amounts of capital.[2]

Partnership
An unincorporated business owned by two or more persons.

[1]Refer to U.S. Census Bureau, *Statistical Abstract of the United States: 2011* (www.census.gov/compendia/statab), Table 743: Number of Tax Returns, Receipts, and Net Income by Type of Business: 1990 to 2007, p. 491.

[2]Originally, there were just straightforward partnerships; but over the years, lawyers have created a number of variations. We leave the variations to courses on business law, but we note that the variations are generally designed to limit the liabilities of some of the partners. For example, a "*limited partnership*" has a general partner, who has unlimited liability, and one or more limited partners, whose liability is limited to the amount of their investment. This sounds great from the standpoint of limited liability; but the limited partners must cede sole control to the general partner, which means that they have almost no say in the way the firm is managed. With a corporation, the owners (stockholders) have limited liability, but they also have the right to vote and thus change management if they think that a change is in order. Note too that LLCs and LLPs, discussed later in this section, are increasingly used in lieu of partnerships.

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

Corporation
A legal entity created by a state, separate and distinct from its owners and managers, having unlimited life, easy transferability of ownership, and limited liability.

A **corporation** is a legal entity created by a state, and it is separate and distinct from its owners and managers. It is this separation that limits stockholders' losses to the amount they invested in the firm—the corporation can lose all of its money, but its owners can lose only the funds that they invested in the company. Corporations also have unlimited lives, and it is easier to transfer shares of stock in a corporation than one's interest in an unincorporated business. These factors make it much easier for corporations to raise the capital necessary to operate large businesses. Thus, companies such as Hewlett-Packard and Microsoft generally begin as proprietorships or partnerships, but at some point they find it advantageous to become a corporation.

S Corporation
A special designation that allows small businesses that meet qualifications to be taxed as if they were a proprietorship or a partnership rather than a corporation.

A major drawback to corporations is taxes. Most corporations' earnings are subject to double taxation—the corporation's earnings are taxed; and then when its after-tax earnings are paid out as dividends, those earnings are taxed again as personal income to the stockholders. However, as an aid to small businesses, Congress created **S corporations**, which are taxed as if they were partnerships; thus, they are exempt from the corporate income tax. To qualify for S corporation status, a firm can have no more than 100 stockholders, which limits their use to relatively small, privately owned firms. Larger corporations are known as *C corporations*. The vast majority of small corporations elect S status and retain that status until they decide to sell stock to the public, at which time they become C corporations.

Limited Liability Company (LLC)
A relatively new type of organization that is a hybrid between a partnership and a corporation.

Limited Liability Partnership (LLP)
Similar to an LLC but used for professional firms in the fields of accounting, law, and architecture. It has limited liability like corporations but is taxed like partnerships.

A **limited liability company (LLC)** is a relatively new type of organization that is a hybrid between a partnership and a corporation. A **limited liability partnership (LLP)** is similar to an LLC; but LLPs are used for professional firms in the fields of accounting, law, and architecture, while LLCs are used by other businesses. Both LLCs and LLPs have limited liability like corporations but are taxed like partnerships. Further, unlike limited partnerships, where the general partner has full control of the business, the investors in an LLC or LLP have votes in proportion to their ownership interest. LLCs and LLPs have been gaining in popularity in recent years, but large companies still find it advantageous to be C corporations because of the advantages in raising capital to support growth. LLCs/LLPs were dreamed up by lawyers, and it is necessary to hire a good lawyer when establishing one.[3]

When deciding on its form of organization, a firm must trade off the advantages of incorporation against a possibly higher tax burden. However, for the following reasons, the value of any business other than a relatively small one will probably be maximized if it is organized as a corporation:

1. Limited liability reduces the risks borne by investors; and other things held constant, the lower the firm's risk, the higher its value.
2. A firm's value is dependent on its growth opportunities, which are dependent on its ability to attract capital. Because corporations can attract capital more easily than other types of businesses, they are better able to take advantage of growth opportunities.
3. The value of an asset also depends on its liquidity, which means the time and effort it takes to sell the asset for cash at a fair market value. Because the stock of a corporation is easier to transfer to a potential buyer than is an interest in a proprietorship or partnership, and because more investors are willing to invest in stocks than in partnerships (with their potential unlimited liability), a corporate investment is relatively liquid. This too enhances the value of a corporation.

[3]LLCs and LLPs are relatively complicated structures, and what they can do and how they must be set up varies by state. Moreover, they are still evolving.

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

Investing in Socially Responsible Funds

The same societal pressures that have encouraged consumers to buy products of companies that they believe to be socially responsible have also led some investors to search for ways to limit their investments to only those firms that they deem to be socially responsible. Indeed, today there are a large number of mutual funds that only invest in companies that meet specified social goals. Each of these socially responsible funds applies different criteria, but typically they consider a company's environmental record, its commitment to social causes, and its employee relations. Many of these funds also avoid investments in companies that are involved with alcohol, tobacco, gambling, and nuclear power. Investment performance varies among funds from year to year. The accompanying chart compares the past performance of a representative socially responsible fund, the Domini Social Equity Fund, with that of the S&P 500 during the past 20 years.

Recent Performance of Domini Social Equity Fund versus S&P 500

Source: finance.yahoo.com, May 23, 2011.

What are the key differences between proprietorships, partnerships, and corporations?

How are LLCs and LLPs related to the other forms of organization?

What is an S corporation, and what is its advantage over a C corporation? Why don't firms such as IBM, GE, and Microsoft choose S corporation status?

What are some reasons why the value of a business other than a small one is generally maximized when it is organized as a corporation?

Suppose you are relatively wealthy and are looking for a potential investment. You do not plan to be active in the business. Would you be more interested in investing in a partnership or in a corporation? Why?

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

1-4 BALANCING SHAREHOLDER VALUE AND THE INTERESTS OF SOCIETY

The primary goal of a corporation should be to maximize its owners' value, but a proprietor's goal might be quite different. Consider Larry Jackson, the proprietor of a local sporting goods store. Jackson is in business to make money, but he likes to take time off to play golf on Fridays. He also has a few employees who are no longer very productive, but he keeps them on the payroll out of friendship and loyalty. Jackson is running the business in a way that is consistent with his own personal goals. He knows that he could make more money if he didn't play golf or if he replaced some of his employees. But he is comfortable with his choices; and since it is his business, he is free to make those choices.

By contrast, Linda Smith is CEO of a large corporation. Smith manages the company; but most of the stock is owned by shareholders who purchased it because they were looking for an investment that would help them retire, send their children to college, pay for a long-anticipated trip, and so forth. The shareholders elected a board of directors, which then selected Smith to run the company. Smith and the firm's other managers are working on behalf of the shareholders, and they were hired to pursue policies that enhance shareholder value. Throughout this book, we focus primarily on publicly owned companies; hence, we operate on the assumption that management's primary goal is **shareholder wealth maximization**. At the same time, the managers know that this does not mean maximize shareholder value "at all costs." Managers have an obligation to behave ethically, and they must follow the laws and other society-imposed constraints that we discussed in the opening vignette to this chapter.

Shareholder Wealth Maximization
The primary goal for managers of publicly owned companies implies that decisions should be made to maximize the long-run value of the firm's common stock.

Indeed, most managers recognize that being socially responsible is not inconsistent with maximizing shareholder value. Consider, for example, what would happen if Linda Smith narrowly focused on creating shareholder value, but in the process, her company was unresponsive to its employees and customers, hostile to its local community, and indifferent to the effects its actions had on the environment. In all likelihood, society would impose a wide range of costs on the company. It may find it hard to attract top notch employees, its products may be boycotted, it may face additional lawsuits and regulations, and it may be confronted with negative publicity. These costs would ultimately lead to a reduction in shareholder value. So clearly when taking steps to maximize shareholder value, enlightened managers need to also mind these society-imposed constraints.

Firms have a number of different departments, including marketing, accounting, production, human resources, and finance. The finance department's principal task is to evaluate proposed decisions and judge how they will affect the stock price and thus shareholder wealth. For example, suppose the production manager wants to replace some old equipment with new automated machinery that will reduce labor costs. The finance staff will evaluate that proposal and determine whether the savings seem to be worth the cost. Similarly, if marketing wants to spend $10 million advertising on the Super Bowl, the financial staff will evaluate the proposal, look at the probable increase in sales, and reach a conclusion as to whether the money spent will lead to a higher stock price. Most significant decisions are evaluated in terms of their financial consequences.

Note too that stock prices change over time as conditions change and as investors obtain new information about a company's prospects. For example, Apple's stock ranged from $199.25 to $364.90 per share during a recent 12-month period, rising and falling as good and bad news was released. Walmart, which is in a more stable industry, had a narrower price range—from $47.77 to $57.90. Investors can predict future results for Walmart more accurately than for Apple; thus, Walmart is thought to be less risky. Also, some projects are relatively

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

straightforward and easy to evaluate and, hence, not very risky. For example, if Walmart were considering a proposed new store, the revenues, costs, and profits for this project would be easier to estimate than for an Apple project related to a new voice-activated computer. The success or failure of projects such as these determines the stock prices of Walmart, Apple, and other companies.

What is management's primary goal?

Is maximizing shareholder value inconsistent with being socially responsible? Explain.

When Boeing decides to invest $5 billion in a new jet airliner, are its managers certain of the project's effects on Boeing's future profits and stock price? Explain.

1-5 INTRINSIC VALUES, STOCK PRICES, AND EXECUTIVE COMPENSATION

If a manager is to maximize shareholder wealth, he or she must know how that wealth is determined. Throughout this book, we shall see that the value of any asset is the present value of the stream of cash flows that the asset provides to its owners over time. We discuss stock valuation in depth in Chapter 9, where we see that stock prices are based on cash flows expected in future years, not just in the current year. Thus, stock price maximization requires us to take a long-run view of operations. Ideally, managers adhere to this long-run focus, but there are numerous examples in recent years where the focus for many companies shifted to the short run. Perhaps most notably, prior to the recent financial crisis, many Wall Street executives received huge bonuses for engaging in risky transactions that generated short-term profits. Subsequently, the value of these transactions collapsed causing many of these Wall Street firms to seek a massive government bailout. In response to the financial crisis, in July 2010, Congress passed the Dodd-Frank Act, which established the Financial Stability Oversight Council to monitor for risks in the financial system and the Consumer Financial Protection Bureau to enforce consumer protection rules for financial products.

Apart from the recent problems on Wall Street, there have been other examples where managers have focused on short-run profits to the detriment of long-term value. Many academics and practitioners stress the important role that executive compensation plays in encouraging managers to focus on the proper objectives. For example, if a manager's bonus is tied solely to this year's earnings, it would not be a surprise to discover that the manager took steps to pump up current earnings—even if those steps were detrimental to the firm's long-run value. With these concerns in mind, a growing number of companies have used stock and stock options as a key part of executive pay. The intent of structuring compensation in this way is for managers to think more like stockholders and to continually work to increase shareholder value.

Despite the best of intentions, stock-based compensation does not always work as planned. To give managers an incentive to focus on stock prices, stockholders (acting through boards of directors) awarded executives stock options that could be exercised on a specified future date. An executive could exercise the option on that date, receive stock, immediately sell it, and earn a profit. The profit was based on the stock price on the option exercise date, which led some managers to try to maximize the stock price on that specific date, not over the long run. That, in turn, led to some

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

ARE CEOS OVERPAID?

According to an annual survey provided to *The Wall Street Journal* by the Hay Group Management Consultancy, CEO compensation increased sharply in 2010. In their survey of 350 large U.S. corporations, Hay Group found that the median CEO received $9.3 million in total compensation (which includes salaries, bonuses, and long-term incentives such as stock options), representing an increase of 11% from the previous year. CEOs were rewarded by their boards for their companies' strong profit and share-price growth performances. Median net income rose by 17% and shareholders averaged returns of 18%.

The top five highest paid CEOs were: Viacom's Philippe P. Dauman ($84.3 million), Oracle's Larry Ellison ($68.6 million), CBS's Leslie Moonves ($53.9 million), Jarden Corp.'s Martin E. Franklin ($45.2 million), and DirecTV's Michael White ($32.6 million). However, not all CEOs' pay increased. For example, Occidental's CEO Ray Irani, who retired in May, saw his 2010 compensation decline by 71% to $14.9 million. The decline in his pay resulted from a new corporate policy prompted from shareholder discontent.

Despite declines in 2008 and 2009 in median CEO compensation, average compensation levels for many CEOs are still significantly higher than they were a decade ago. The large shifts in CEO compensation over time can often be attributed to the continued importance of stock options. Once a relatively small part of total compensation, stock options now account for roughly 80% of a typical CEO's compensation. Stock options provide CEOs with an incentive to raise their companies' stock prices. Indeed, most observers believe there is a strong causal relationship between CEO compensation procedures and stock price performance.

However, some critics argue that although performance incentives are entirely appropriate as a method of compensation, the overall level of CEO compensation is just too high. The critics ask such questions as these: Would these CEOs have been unwilling to take their jobs if they had been offered only half as many stock options? Would they have put forth less effort, and would their firms' stock prices have not increased as much? It is hard to say. Other critics lament that the exercise of stock options has dramatically increased the compensation of not only truly excellent CEOs, but it has also dramatically increased the compensation of some pretty average CEOs, who were lucky enough to have had the job during a stock market boom that raised the stock prices of even companies with rather poor performance. Another problem is that the huge CEO salaries are widening the gap between top executives and middle management salaries. This is leading to employee discontent and a decrease in employee morale and loyalty.

As a direct result of the 2008 and 2009 financial crisis, in July 2010 Congress passed the Dodd-Frank Act. Among its provisions are requirements for stockholders of corporations with a stock market value greater than $75 million to vote their approval/disapproval on CEO pay at least once every three years and for corporations to disclose the ratio of the CEO's overall pay relative to its average employee. The intent of this legislation is to discourage companies from awarding lucrative compensation packages that encourage risky behavior. While this shareholder vote is nonbinding, companies must disclose whether shareholders' wishes were followed. Dissension among a majority of investors could possibly lead to directors not getting re-elected. It's interesting to note that while the average CEO's pay increased by 11% in 2010, the average worker's pay only increased by 3%. Only time will tell if these provisions have any impact on CEO pay levels and the composition of various corporate boards.

Sources: Louis Lavelle, Frederick F. Jespersen, and Michael Arndt, "Executive Pay," *BusinessWeek*, April 15, 2002, pp. 80-86; Jason Zweig, "A Chance to Veto a CEO's Bonus," *The Wall Street Journal* (online.wsj.com), January 29, 2011; and Joann S. Lublin, "CEOs Pay in 2010 Jumped 11%," *The Wall Street Journal* (online.wsj.com), May 9, 2011.

horrible abuses. Projects that looked good from a long-run perspective were turned down because they would penalize profits in the short run and thus lower the stock price on the option exercise day. Even worse, some managers deliberately overstated profits, temporarily boosted the stock price, exercised their options, sold the inflated stock, and left outside stockholders "holding the bag" when the true situation was revealed. Enron and WorldCom are examples of companies whose managers did this, but there were many others.

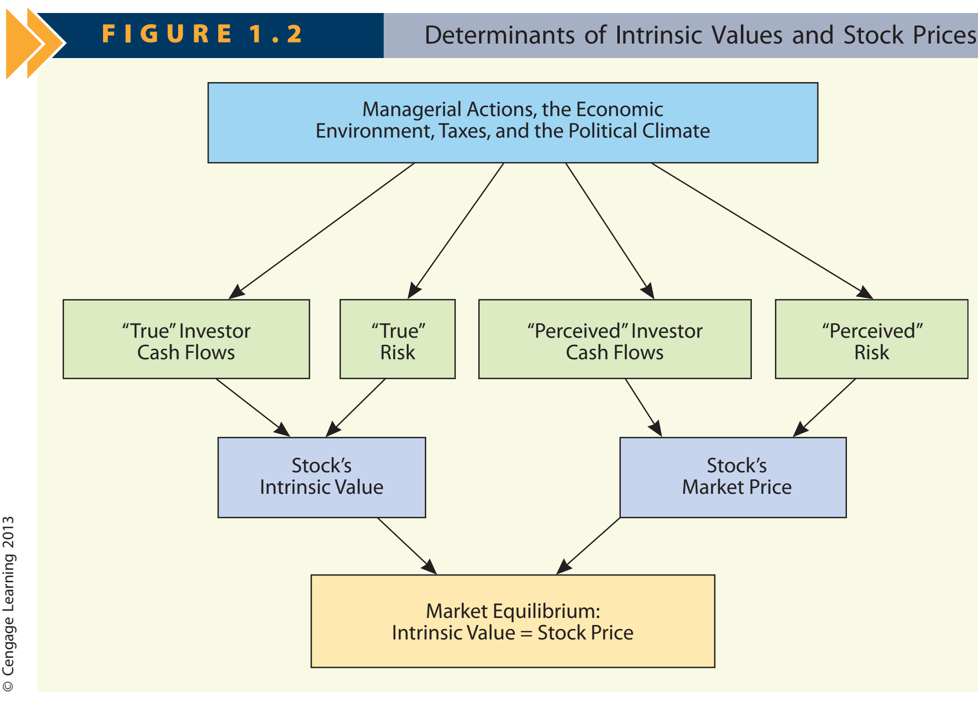
Fortunately, most executives are honest. But even for honest companies, it is hard for investors to determine the proper price of a stock. Figure 1.2 illustrates the situation. The top box indicates that managerial actions, combined with the economy, taxes, and political conditions, influence the level and riskiness of the company's future cash flows which ultimately determine the company's stock price. As you might expect, investors like higher expected cash flows, but they dislike risk; so the larger the expected cash flows and the lower the perceived risk, the higher the stock's price.

The second row of boxes differentiates what we call "true" expected cash flows and "true" risk from "perceived" cash flows and "perceived" risk. By "true," we mean the cash flows and risk that investors would expect if they had all of the

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

FIGURE 1.2 Determinants of Intrinsic Values and Stock Prices



information that existed about a company. "Perceived" means what investors expect, given the limited information they actually have. To illustrate, in early 2001, investors had information that caused them to think that Enron was highly profitable and would enjoy high and rising future profits. They also thought that actual results would be close to the expected levels and hence, that Enron's risk was low. However, true estimates of Enron's profits, which were known by its executives but not the investing public, were much lower; and Enron's true situation was extremely risky.

The third row of boxes shows that each stock has an **intrinsic value**, which is an estimate of the stock's "true" value as calculated by a competent analyst who has the best available data, and a **market price**, which is the actual market price based on perceived but possibly incorrect information as seen by the **marginal investor**.[4] Not all investors agree, so it is the "marginal" investor who determines the actual price.

When a stock's actual market price is equal to its intrinsic value, the stock is in **equilibrium**, which is shown in the bottom box in Figure 1.2; and when equilibrium exists, there is no pressure for a change in the stock's price. Market prices can—and do—differ from intrinsic values; but eventually, as the future unfolds, the two values tend to converge.

Actual stock prices are easy to determine—they can be found on the Internet and are published in newspapers every day. However, intrinsic values are estimates; and different analysts with different data and different views about the future form different estimates of a stock's intrinsic value. *Indeed, estimating intrinsic values is what security analysis is all about and is what distinguishes successful*

Intrinsic Value
An estimate of a stock's "true" value based on accurate risk and return data. The intrinsic value can be estimated but not measured precisely.

Market Price
The stock value based on perceived but possibly incorrect information as seen by the marginal investor.

Marginal Investor
An investor whose views determine the actual stock price.

Equilibrium
The situation in which the actual market price equals the intrinsic value, so investors are indifferent between buying or selling a stock.

[4]Investors at the margin are the ones who actually set stock prices. Some stockholders think that a stock at its current price is a good deal, and they would buy more if they had more money. Others think that the stock is priced too high, so they would not buy it unless the price dropped sharply. Still others think that the current stock price is about where it should be; so they would buy more if the price fell slightly, sell it if the price rose slightly, and maintain their current holdings unless something were to change. These are the marginal investors, and it is their view that determines the current stock price. We discuss this point in more depth in Chapter 9, where we discuss the stock market in detail.

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

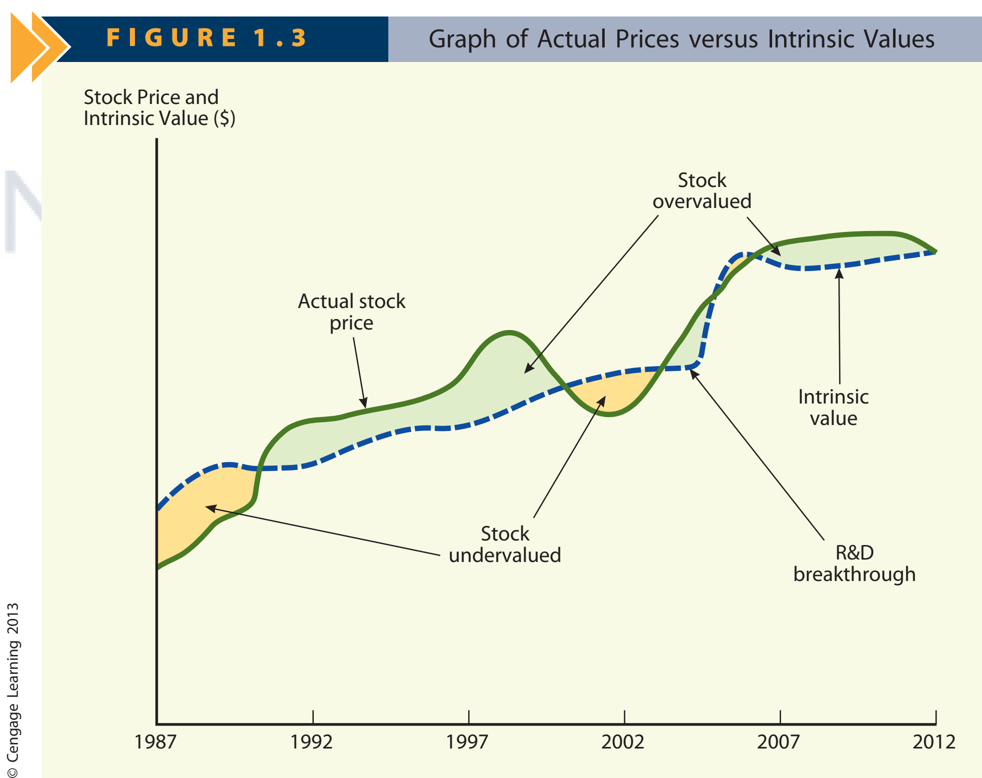
Licensed to:

from unsuccessful investors. Investing would be easy, profitable, and essentially riskless if we knew all stocks' intrinsic values; but, of course, we don't. We can estimate intrinsic values, but we can't be sure that we are right. A firm's managers have the best information about the firm's future prospects, so managers' estimates of intrinsic values are generally better than those of outside investors. However, even managers can be wrong.

Figure 1.3 graphs a hypothetical company's actual price and intrinsic value as estimated by its management over time.[5] The intrinsic value rises because the firm retains and reinvests earnings each year, which tends to increase profits. The value jumped dramatically in 2006, when a research and development (R&D) breakthrough raised management's estimate of future profits before investors had this information. The actual stock price tended to move up and down with the estimated intrinsic value; but investor optimism and pessimism, along with imperfect knowledge about the true intrinsic value, led to deviations between the actual prices and intrinsic values.

Intrinsic value is a long-run concept. *Management's goal should be to take actions designed to maximize the firm's intrinsic value, not its current market price.* Note, though, that maximizing the intrinsic value will maximize the *average* price over the long run, but not necessarily the current price at each point in time. For example, management might make an investment that lowers profits for the current year but raises expected future profits. If investors are not aware of the true situation, the stock price will be held down by the low current profit even though the intrinsic value was actually raised. Management should provide

FIGURE 1.3 Graph of Actual Prices versus Intrinsic Values

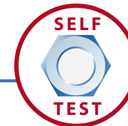


[5]We emphasize that the intrinsic value is an estimate and that different analysts have different estimates for a company at any given time. Managers should also estimate their firm's intrinsic value and then take actions to maximize that value. They should try to help outside security analysts improve their intrinsic value estimates by providing accurate information about the company's financial position and operations, but without releasing information that would help its competitors.

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

information that helps investors make better estimates of the firm's intrinsic value, which will keep the stock price closer to its equilibrium level. However, there are times when management cannot divulge the true situation because doing so would provide information that helps its competitors.[6]



What's the difference between a stock's current market price and its intrinsic value?

Do stocks have known and "provable" intrinsic values, or might different people reach different conclusions about intrinsic values? Explain.

Should managers estimate intrinsic values or leave that to outside security analysts? Explain.

If a firm could maximize either its current market price or its intrinsic value, what would stockholders (as a group) want managers to do? Explain.

Should a firm's managers help investors improve their estimates of the firm's intrinsic value? Explain.

1-6 IMPORTANT BUSINESS TRENDS

Three important business trends should be noted. The first trend is the increased globalization of business. Developments in communications technology have made it possible for Walmart, for example, to obtain real-time data on the sales of hundreds of thousands of items in stores from China to Chicago and to manage all of its stores from Bentonville, Arkansas. IBM, Microsoft, and other high-tech companies now have research labs and help desks in China, India, and Romania; and customers of Home Depot and other retailers have their telephone and e-mail questions answered by call center operators in countries around the globe. Coca-Cola, Exxon Mobil, GE, and IBM, among others, generate more than half of their sales and income overseas. The trend toward globalization is likely to continue, and companies that resist will have difficulty competing in the 21st century.[7]

A second trend that's having a profound effect on financial management is ever-improving information technology (IT). Improvements in IT are spurring globalization, and they are changing financial management as it is practiced in the United States and elsewhere. Firms are collecting massive amounts of data and using it to take much of the guesswork out of financial decisions. For example, when Walmart is considering a potential site for a new store, it can draw on historical results from thousands of other stores to predict results at the proposed site. This lowers the risk of investing in new stores.

A third trend relates to *corporate governance*, or the way the top managers operate and interface with stockholders. Some years ago the chairperson of the board of directors was almost always also the CEO, and this individual decided who would be

[6] As we discuss in Chapter 2, many academics believe that stock prices embody all publicly available information—hence, that stock prices are typically reasonably close to their intrinsic values and thus at or close to equilibrium. However, almost no one doubts that managers have better information than the public at large, that at times stock prices and equilibrium values diverge, and that stocks can be temporarily undervalued or overvalued (as we suggest in Figure 1.3).

[7] To give you an idea of the prevalence of globalization, the computer programming that causes the test bank problems for this book to vary randomly was outsourced to programmers in Moscow, Russia. Our books have been translated into 11 languages, and they are sold throughout the world. Globalization is alive and well!

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

GLOBAL PERSPECTIVES

Is Shareholder Wealth Maximization a Worldwide Goal?

Most academics agree that shareholder wealth maximization should be a firm's primary goal, but it's not clear that people elsewhere really know how to implement it. Pricewaterhouse-Coopers (PwC), a global consulting firm, conducted a survey of 82 Singapore companies to test their understanding and implementation of shareholder value concepts. Ninety percent of the respondents said their firm's primary goal was to enhance shareholder value, but only 44% had taken steps to achieve this goal. Moreover, almost half of the respondents who had shareholder value programs in place said they were dissatisfied with the results achieved thus far. Even so, respondents who focused on shareholder value were more likely to believe that their stock was fairly valued than those with other focuses, and 50% of those without a specific program said they wanted to learn more and would probably adopt the goal of shareholder wealth maximization eventually.

The study found that firms measure performance primarily with accounting-based measures such as the return on assets, equity, or invested capital. These measures are easy to understand and thus to implement, even though they are not the best conceptually. Typically, compensation was tied to shareholder value only for mid-level managers and above.

It is unclear how closely these results correspond to U.S. firms, but firms in the United States and Singapore would certainly agree on one thing: It is easier to set the goal of shareholder wealth maximization than it is to figure out how to achieve it.

Source: Kalpana Rashiwala, "Low Adoption of Shareholder Value Concepts Here," *The Business Times* (Singapore), February 14, 2002.

elected to the board. That made it almost impossible for stockholders to replace a poor management team. Today, though, active investors who control huge pools of capital (hedge funds and private equity groups) are constantly looking for underperforming firms; and they will quickly pounce on laggards, take control, and replace managers. At the same time, the SEC, which has jurisdiction over the way stockholders vote and the information they must be given, has been making it easier for activist stockholders to change the way things are done within firms. For example, in January 2011, the SEC adopted new rules that make it mandatory for companies with a stock market value greater than $75 million to have their shareholders vote regarding approval/disapproval of top management's pay at least once every three years. However, these companies can still ignore the results.

What three trends affect business management in general and financial management in particular?

1-7 BUSINESS ETHICS

As a result of the financial scandals occurring during the past decade, there has been a strong push to improve *business ethics*. This is occurring on several fronts—actions begun by former New York attorney general and former governor Elliot Spitzer and others who sued companies for improper acts; Congress' passing of the Sarbanes-Oxley bill to impose sanctions on executives who sign financial statements later found to be false; Congress' passing of the Dodd-Frank Act to implement an aggressive overhaul of the U.S. financial regulatory system aimed at

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

preventing reckless actions that would cause another financial crisis; and business schools trying to inform students about proper versus improper business actions.

As noted earlier, companies benefit from having good reputations and are penalized by having bad ones; the same is true for individuals. Reputations reflect the extent to which firms and people are ethical. *Ethics* is defined in *Webster's Dictionary* as "standards of conduct or moral behavior." Business ethics can be thought of as a company's attitude and conduct toward its employees, customers, community, and stockholders. A firm's commitment to business ethics can be measured by the tendency of its employees, from the top down, to adhere to laws, regulations, and moral standards relating to product safety and quality, fair employment practices, fair marketing and selling practices, the use of confidential information for personal gain, community involvement, and illegal payments to obtain business.

1-7a What Companies Are Doing

Most firms today have strong written codes of ethical behavior; companies also conduct training programs to ensure that employees understand proper behavior in different situations. When conflicts arise involving profits and ethics, ethical considerations sometimes are so obviously important that they dominate. In other cases, however, the right choice is not clear. For example, suppose that Norfolk Southern's managers know that its coal trains are polluting the air; but the amount of pollution is within legal limits, and further reduction would be costly. Are the managers ethically bound to reduce pollution? Similarly, several years ago Merck's research indicated that its Vioxx pain medicine might be causing heart attacks. However, the evidence was not overly strong, and the product was clearly helping some patients. Over time, additional tests produced stronger evidence that Vioxx did pose a health risk. What should Merck have done, and when should Merck have done it? If the company released negative but perhaps incorrect information, this announcement would have hurt sales and possibly prevented some patients who could have benefit from using the product. If the company delayed the release of this additional information, more patients might have suffered irreversible harm. At what point should Merck have made the potential problem known to the public? There are no obvious answers to questions such as these; but companies must deal with them, and a failure to handle them properly can lead to severe consequences.

CENGAGE brain

1-7b Consequences of Unethical Behavior

Over the past few years, ethical lapses have led to a number of bankruptcies. The collapses of Enron and WorldCom as well as the accounting firm Arthur Andersen dramatically illustrate how unethical behavior can lead to a firm's rapid decline. In all three cases, top executives came under fire because of misleading accounting practices that led to overstated profits. Enron and WorldCom executives were busily selling their stock at the same time they were recommending the stock to employees and outside investors. These executives reaped millions before the stock declined, while lower-level employees and outside investors were left "holding the bag." Some of these executives are now in jail, and Enron's CEO had a fatal heart attack while awaiting sentencing after being found guilty of conspiracy and fraud. Moreover, Merrill Lynch and Citigroup, which were accused of facilitating these frauds, were fined hundreds of millions of dollars.

In other cases, companies avoid bankruptcy but face a damaging blow to their reputation. Safety concerns tarnished Toyota's once sterling reputation for reliability. Ethical questions were raised regarding when the company's senior management became aware of the problems, and whether they were forthcoming in sharing these concerns with the public. In April 2010, the Securities and Exchange Commission (SEC) brought forth a civil fraud suit against Goldman Sachs. The SEC contended that

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

Goldman Sachs misled its investors when it created and marketed securities that were backed by subprime mortgages. In July 2010, Goldman Sachs ultimately reached a settlement where it agreed to pay $550 million. While just one example, many believe that too many Wall Street executives in recent years have been willing to compromise their ethics. In May 2011, Raj Rajaratnam, the founder of the hedge fund Galleon Group LLC, was convicted of securities fraud and conspiracy in one of the government's largest insider trading cases. Mr. Rajaratnam traded on information (worth approximately $63.8 million) from insiders at technology companies and others in the hedge fund industry. He faces up to 25 years in prison. The perception of widespread improper actions has caused many investors to lose faith in American business, and to turn away from the stock market which makes it difficult for firms to raise the capital they need to grow, create jobs, and stimulate the economy. So, unethical actions can have adverse consequences far beyond the companies that perpetrate them.

All this raises a question: Are *companies* unethical, or is it just a few of their employees? That was a central issue that came up in the case of Arthur Andersen, the accounting firm that audited Enron, WorldCom, and several other companies that committed accounting fraud. Evidence showed that relatively few of Andersen's accountants helped perpetrate the frauds. Its top managers argued that while a few rogue employees did bad things, most of the firm's 85,000 employees, and the firm itself, were innocent. The U.S. Justice Department disagreed, concluding that the firm was guilty because it fostered a climate where unethical behavior was permitted and that Andersen used an incentive system that made such behavior profitable to both the perpetrators and the firm. As a result, Andersen was put out of business, its partners lost millions of dollars, and its 85,000 employees lost their jobs. In most other cases, individuals rather than firms were tried; and while the firms survived, they suffered damage to their reputations, which greatly lowered their future profit potential and value.

CENGAGE brain .com

1-7c How Should Employees Deal with Unethical Behavior?

Far too often the desire for stock options, bonuses, and promotions drives managers to take unethical actions such as fudging the books to make profits in the manager's division look good, holding back information about bad products that would depress sales, and failing to take costly but needed measures to protect the environment. Generally, these acts don't rise to the level of an Enron or a WorldCom, but they are still bad. If questionable things are going on, who should take action and what should that action be? Obviously, in situations such as Enron and WorldCom, where fraud was being perpetrated at or close to the top, senior managers knew about the illegal activities. In other cases, the problem is caused by a mid-level manager trying to boost his or her unit's profits and thus his or her bonus. In all cases, though, at least some lower-level employees are aware of what's happening; they may even be ordered to take fraudulent actions. Should the lower-level employees obey their boss's orders; refuse to obey those orders; or report the situation to a higher authority, such as the company's board of directors, the company's auditors, or a federal prosecutor?

In the WorldCom and Enron cases, it was clear to a number of employees that unethical and illegal acts were being committed; but in cases such as Merck's Vioxx product, the situation was less clear. Because early evidence that Vioxx led to heart attacks was weak and evidence of its pain reduction was strong, it was probably not appropriate to sound an alarm early on. However, as evidence accumulated, at some point the public needed to be given a strong warning or the product should have been taken off the market. But judgment comes into play when deciding on what action to take and when to take it. If a lower-level employee thinks that a product should be pulled but the boss disagrees, what

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

should the employee do? If an employee decides to report the problem, trouble may ensue regardless of the merits of the case. If the alarm is false, the company will have been harmed and nothing will have been gained. In that case, the employee will probably be fired. Even if the employee is right, his or her career may still be ruined because many companies (or at least bosses) don't like "disloyal, troublemaking" employees.

Such situations arise fairly often in contexts ranging from accounting fraud to product liability and environmental cases. Employees jeopardize their jobs if they come forward over their bosses' objections. However, if they don't speak up, they may suffer emotional problems and contribute to the downfall of their companies and the accompanying loss of jobs and savings. Moreover, if employees obey orders regarding actions they know are illegal, they may end up going to jail. Indeed, in most of the scandals that have gone to trial, the lower-level people who physically entered the bad data received longer jail sentences than the bosses who presumably gave the directives. So employees can be "stuck between a rock and a hard place," that is, doing what they should do and possibly losing their jobs versus going along with the boss and possibly ending up in jail. This discussion shows why ethics is such an important consideration in business and in business schools—and why we are concerned with it in this book.

How would you define "business ethics"?

Can a firm's executive compensation plan lead to unethical behavior? Explain.

Unethical acts are generally committed by unethical people. What are some things companies can do to help ensure that their employees act ethically?

CENGAGEbrain.com

1-8 CONFLICTS BETWEEN MANAGERS, STOCKHOLDERS, AND BONDHOLDERS[8]

1-8a Managers versus Stockholders

It has long been recognized that managers' personal goals may compete with shareholder wealth maximization. In particular, managers might be more interested in maximizing their own wealth than their stockholders' wealth; therefore, managers might pay themselves excessive salaries. For example, Disney paid its former president Michael Ovitz $140 million as a severance package after just 14 months on the job—$140 million to go away—because he and Disney CEO Michael Eisner were having disagreements. Eisner was also handsomely compensated the year Ovitz was fired—a $750,000 base salary plus a $9.9 million bonus plus $565 million in profits from stock options, for a total of just over $575 million. As another example of corporate excesses, Tyco CEO Dennis Kozlowski (who is now in jail) spent more than $1 million of the company's money on a birthday party for his wife.

Neither the Disney executives' pay nor Kozlowski's birthday party seem consistent with shareholder wealth maximization. Still, good executive compensation plans can motivate managers to act in their stockholders' best interests.

[8]These conflicts are studied under the heading of agency theory in finance literature. The classic work on agency theory is Michael C. Jensen and William H. Meckling, "Theory of the Firm, Managerial Behavior, Agency Costs, and Ownership Structure," *Journal of Financial Economics,* vol. 3, no. 4 (October 1976), pp. 305–360.

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

Useful motivational tools include (1) reasonable compensation packages, (2) firing of managers who don't perform well, and (3) the threat of hostile takeovers.

Compensation packages should be sufficient to attract and retain able managers, but they should not go beyond what is needed. Compensation policies need to be consistent over time. Also, compensation should be structured so that managers are rewarded on the basis of the stock's performance over the long run, not the stock's price on an option exercise date. This means that options (or direct stock awards) should be phased in over a number of years so that managers have an incentive to keep the stock price high over time. When the intrinsic value can be measured in an objective and verifiable manner, performance pay can be based on changes in intrinsic value. However, because intrinsic value is not observable, compensation must be based on the stock's market price— but the price used should be an average over time rather than on a specific date.

Stockholders can intervene directly with managers. Years ago most stock was owned by individuals. Today, however, the majority of stock is owned by institutional investors such as insurance companies, pension funds, hedge funds, and mutual funds; and private equity groups are ready and able to step in and take over underperforming firms. These institutional money managers have the clout to exercise considerable influence over firms' operations. First, they can speak with managers and make suggestions about how the business should be run. In effect, institutional investors such as CalPERS (California Public Employees' Retirement System, with $231 billion of assets) and TIAA-CREF (Teachers Insurance and Annuity Association-College Retirement Equity Fund, a retirement plan originally set up for professors at private colleges that now has more than $453 billion of assets) act as lobbyists for the body of stockholders. When such large stockholders speak, companies listen. Second, any shareholder who has owned $2,000 of a company's stock for one year can sponsor a proposal that may be voted on at the annual stockholders' meeting, even if management opposes the proposal.[9] Although shareholder-sponsored proposals are nonbinding, the results of such votes are heard by top management. There has been an ongoing debate regarding how much influence shareholders should have through the proxy process. As a result of the passage of the Dodd-Frank Act, the SEC was given authority to make rules regarding shareholder access to company proxy materials. On August 25, 2010, the SEC adopted changes to federal proxy rules to give shareholders the right to nominate directors to a company's board. Rule 14a-11 under the 1934 SEC Act will require public companies to permit any shareholder owning at least 3% of a public company's voting stock for at least three years to include director nominations in the company's proxy materials.

Until recently, the probability of a large firm's management being ousted by its stockholders was so remote that it posed little threat. Most firms' shares were so widely distributed and the CEO had so much control over the voting mechanism that it was virtually impossible for dissident stockholders to get the votes needed to overthrow a management team. However, that situation has changed. In recent years, the top executives of AT&T, Coca-Cola, Merrill Lynch, Lehman Brothers, Fannie Mae, General Motors, Peugeot, IBM, and Xerox, to name a few, were forced out due to poor corporate performance.

Corporate Raider
An individual who targets a corporation for takeover because it is undervalued.

Hostile Takeover
The acquisition of a company over the opposition of its management.

If a firm's stock is undervalued, **corporate raiders** will see it as a bargain and will attempt to capture the firm in a **hostile takeover**. If the raid is successful, the target's executives will almost certainly be fired. This situation gives managers a strong incentive to take actions to maximize their stock's price. In the words of one executive, "If you want to keep your job, never let your stock become a bargain."

[9] Under current guidelines, shareholder proposals are restricted to governance issues and shareholders are not allowed to vote directly on items that are considered to be "operating issues." However, the SEC recently adopted rules (resulting from the passage of the Dodd-Frank Act) mandating an advisory vote on CEO compensation at least once every three years.

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

Again, note that the price managers should be trying to maximize is not the price on a specific day. Rather, it is the average price over the long run, which will be maximized if management focuses on the stock's intrinsic value. However, managers must communicate effectively with stockholders (without divulging information that would aid their competitors) to keep the actual price close to the intrinsic value. It's bad for stockholders and managers when the intrinsic value is high but the actual price is low. In that situation, a raider may swoop in, buy the company at a bargain price, and fire the managers. To repeat our earlier message:

Managers should try to maximize their stock's intrinsic value and then communicate effectively with stockholders. That will cause the intrinsic value to be high and the actual stock price to remain close to the intrinsic value over time.

Because the intrinsic value cannot be observed, it is impossible to know whether it is really being maximized. Still, as we will discuss in Chapter 9, there are procedures for estimating a stock's intrinsic value. Managers can use these valuation models to analyze alternative courses of action and thus see how these actions are likely to impact the firm's value. This type of value-based management is not as precise as we would like, but it is the best way to run a business.

1-8b Stockholders versus Bondholders

Conflicts can also arise between stockholders and bondholders. Bondholders generally receive fixed payment regardless of how well the company does, while stockholders do better when the company does better. This situation leads to conflicts between these two groups.[10] To illustrate the problem, suppose a company has the chance to make an investment that will result in a profit of $10 billion if it is successful but the company will be worthless and go bankrupt if the investment is unsuccessful. The firm has bonds that pay an 8% annual interest rate and have a value of $1,000 per bond and stock that sells for $10 per share. If the new project—say, a cure for the common cold—is successful, the price of the stock will jump to $2,000 per share, but the value of the bonds will remain just $1,000 per bond. The probability of success is 50% and the probability of failure is 50%, so the expected stock price is

$$\text{Expected stock price} = 0.5(\$2{,}000) + 0.5(\$0) = \$1{,}000$$

versus a current price of $10. The expected percentage gain on the stock is

$$\text{Expected percentage gain on stock} = (\$1{,}000 - \$10)/\$10 \times 100\% = 9{,}900\%$$

The project looks wonderful from the stockholders' standpoint but lousy for the bondholders. Bondholders just break even if the project is successful, but they lose their entire investment if it is a failure.

Another type of bondholder/stockholder conflict arises over the use of additional debt. As we see later in this book, the more debt a firm uses to finance a given amount of assets, the riskier the firm is. For example, if a firm has $100 million of assets and finances them with $5 million of bonds and $95 million of common stock, things have to go terribly bad before the bondholders suffer a loss. On the other hand, if the firm uses $95 million of bonds and $5 million of stock, the bondholders suffer a loss even if the value of the assets declines only slightly.

Bondholders attempt to protect themselves by including covenants in the bond agreements that limit firms' use of additional debt and constrain managers'

[10] Managers represent stockholders; so saying "stockholders versus bondholders" is the same as saying "managers versus bondholders."

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

actions in other ways. We address these issues later in this book, but they are quite important and everyone should be aware of them.

What are three techniques stockholders can use to motivate managers to maximize their stock's long-run price?

Should managers focus directly on the stock's actual market price or its intrinsic value, or are both important? Explain.

Why might conflicts arise between stockholders and bondholders?

TYING IT ALL TOGETHER

This chapter provides a broad overview of financial management. *Management's primary goal should be to maximize the long-run value of the stock, which means the intrinsic value as measured by the stock's price over time.* To maximize value, firms must develop products that consumers want, produce the products efficiently, sell them at competitive prices, and observe laws relating to corporate behavior. If firms are successful at maximizing the stock's value, they will also be contributing to social welfare and citizens' well-being.

Businesses can be organized as proprietorships, partnerships, corporations, limited liability companies (LLCs), or limited liability partnerships (LLPs). The vast majority of all business is done by corporations, and the most successful firms become corporations, which explains the focus on corporations in this book. We also discussed three important business trends: (1) the trend toward globalization, (2) the ever-improving information technology, and (3) the changes in corporate governance. These three trends are changing the way business is done.

CENGAGE brain

The primary tasks of the CFO are (1) to make sure the accounting system provides "good" numbers for internal decision making and for investors, (2) to ensure that the firm is financed in the proper manner, (3) to evaluate the operating units to make sure they are performing in an optimal manner, and (4) to evaluate all proposed capital expenditures to make sure they will increase the firm's value. In the remainder of this book, we discuss exactly how financial managers carry out these tasks.

SELF-TEST QUESTIONS AND PROBLEMS

(Solutions Appear in Appendix A)

ST-1 **KEY TERMS** Define each of the following terms:

a. Sarbanes-Oxley Act; Dodd-Frank Act
b. Proprietorship; partnership; corporation
c. S corporations; limited liability companies (LLCs); limited liability partnerships (LLPs)
d. Stockholder wealth maximization
e. Intrinsic value; market price
f. Marginal investor; equilibrium
g. Business ethics
h. Corporate raider; hostile takeover

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

QUESTIONS

1-1 What is a firm's intrinsic value? Its current stock price? Is the stock's "true" long-run value more closely related to its intrinsic value or to its current price?

1-2 When is a stock said to be in equilibrium? At any given time, would you guess that most stocks are in equilibrium as you defined it? Explain.

1-3 Suppose three honest individuals gave you their estimates of Stock X's intrinsic value. One person is your current roommate, the second person is a professional security analyst with an excellent reputation on Wall Street, and the third person is Company X's CFO. If the three estimates differed, in which one would you have the most confidence? Why?

1-4 Is it better for a firm's actual stock price in the market to be under, over, or equal to its intrinsic value? Would your answer be the same from the standpoints of stockholders in general and a CEO who is about to exercise a million dollars in options and then retire? Explain.

1-5 If a company's board of directors wants management to maximize shareholder wealth, should the CEO's compensation be set as a fixed dollar amount, or should the compensation depend on how well the firm performs? If it is to be based on performance, how should performance be measured? Would it be easier to measure performance by the growth rate in reported profits or the growth rate in the stock's intrinsic value? Which would be the better performance measure? Why?

1-6 What are the four forms of business organization? What are the advantages and disadvantages of each?

1-7 Should stockholder wealth maximization be thought of as a long-term or a short-term goal? For example, if one action increases a firm's stock price from a current level of $20 to $25 in 6 months and then to $30 in 5 years but another action keeps the stock at $20 for several years but then increases it to $40 in 5 years, which action would be better? Think of some specific corporate actions that have these general tendencies.

1-8 What are some actions that stockholders can take to ensure that management's and stockholders' interests are aligned?

1-9 The president of Southern Semiconductor Corporation (SSC) made this statement in the company's annual report: "SSC's primary goal is to increase the value of our common stockholders' equity." Later in the report, the following announcements were made:

a. The company contributed $1.5 million to the symphony orchestra in Birmingham, Alabama, its headquarters city.

b. The company is spending $500 million to open a new plant and expand operations in China. No profits will be produced by the Chinese operation for 4 years, so earnings will be depressed during this period versus what they would have been had the decision been made not to expand in China.

c. The company holds about half of its assets in the form of U.S. Treasury bonds, and it keeps these funds available for use in emergencies. In the future, though, SSC plans to shift its emergency funds from Treasury bonds to common stocks.

Discuss how SSC's stockholders might view each of these actions and how the actions might affect the stock price.

1-10 Investors generally can make one vote for each share of stock they hold. TIAA-CREF is the largest institutional shareholder in the United States; therefore, it holds many shares and has more votes than any other organization. Traditionally, this fund has acted as a passive investor, just going along with management. However, in 1993, it mailed a notice to all 1,500 companies whose stocks it held that henceforth, it planned to actively intervene if, in its opinion, management was not performing well. Its goal was to improve corporate performance to boost the prices of the stocks it held. It also wanted to encourage corporate boards to appoint a majority of independent (outside) directors; and it stated that it would vote against any directors of firms that "don't have an effective, independent board that can challenge the CEO."

In the past, TIAA-CREF responded to poor performance by "voting with its feet," which means selling stocks that were not doing well. However, by 1993, that position had become difficult to maintain for two reasons. First, the fund invested a large part of its assets in "index funds," which hold stocks in accordance with their percentage value in the broad stock market. Furthermore, TIAA-CREF owns such large blocks of stocks in many companies that

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Licensed to:

if it tried to sell out, doing so would severely depress the prices of those stocks. Thus, TIAA-CREF is locked in to a large extent, which led to its decision to become a more active investor.

a. Is TIAA-CREF an ordinary shareholder? Explain.

b. Due to its asset size, TIAA-CREF owns many shares in a number of companies. The fund's management plans to vote those shares. However, TIAA-CREF is owned by many thousands of investors. Should the fund's managers vote its shares; or should it pass those votes, on a pro rata basis, back to its own shareholders? Explain.

1-11 Edmund Enterprises recently made a large investment to upgrade its technology. While these improvements won't have much effect on performance in the short run, they are expected to reduce future costs significantly. What effect will this investment have on Edmund Enterprises' earnings per share this year? What effect might this investment have on the company's intrinsic value and stock price?

1-12 Suppose you were a member of Company X's board of directors and chairperson of the company's compensation committee. What factors should your committee consider when setting the CEO's compensation? Should the compensation consist of a dollar salary, stock options that depend on the firm's performance, or a mix of the two? If "performance" is to be considered, how should it be measured? Think of both theoretical and practical (that is, measurement) considerations. If you were also a vice president of Company X, might your actions be different than if you were the CEO of some other company?

1-13 Suppose you are a director of an energy company that has three divisions—natural gas, oil, and retail (gas stations). These divisions operate independently from one another, but all division managers report to the firm's CEO. If you were on the compensation committee as discussed in Question 1-12 and your committee was asked to set the compensation for the three division managers, would you use the same criteria as that used for the firm's CEO? Explain your reasoning.

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

This page contains soluations for this chapter only

Appendix A

Solutions to Self-Test Questions and Problems

Note: Except for Chapter 1, we do not show an answer for ST-1 problems because they are verbal rather than quantitative in nature.

CHAPTER 1

ST-1 Refer to the marginal glossary definitions or relevant chapter sections to check your responses.

Copyright 2012 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s).
Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.