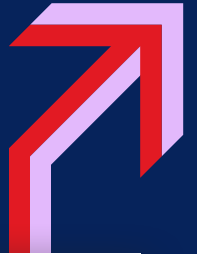


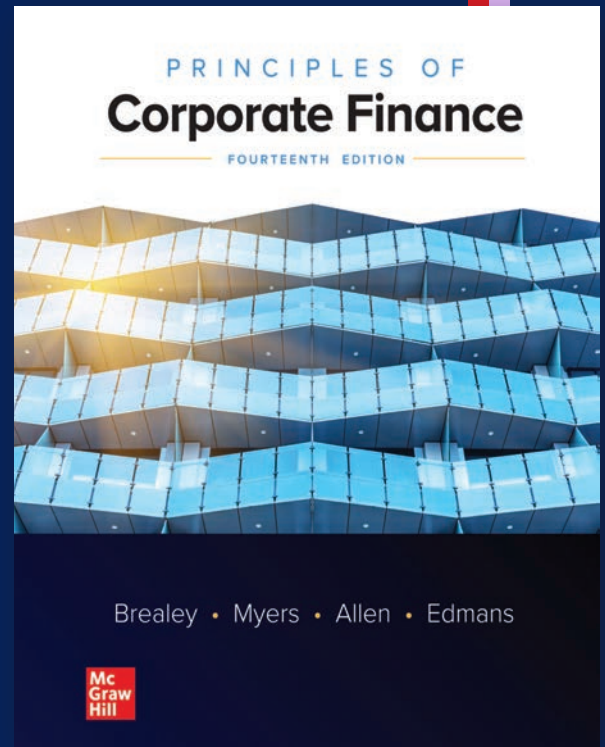


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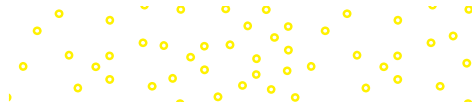
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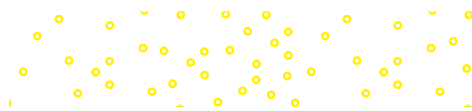
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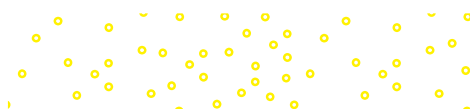
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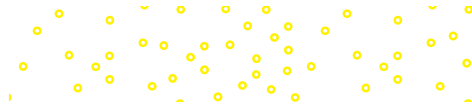
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Some ancillaries, including electronic and print components, may not be available to customers outside the United States.

This book is printed on acid-free paper.

1 2 3 4 5 6 7 8 9 LWI 27 26 25 24 23 22

ISBN 978-1-264-08094-6 (bound edition)

MHID 1-264-08094-8 (bound edition)

ISBN 978-1-266-03047-5 (loose-leaf edition)

MHID 1-266-03047-6 (loose-leaf edition)

Portfolio Manager: *Charles Synovec*

Product Developers: *Allison McCabe-Carroll*

Marketing Manager: *Trina Maurer*

Content Project Managers: *Bruce Gin, and Fran Simon*

Buyer: *Laura Fuller*

Designer: *Matt Diamond*

Content Licensing Specialists: *Jacob Sullivan*

Cover Image:

Compositor: *Straive*

All credits appearing on page or at the end of the book are considered to be an extension of the copyright page.

### Library of Congress Cataloging-in-Publication Data

Names: Brealey, Richard A., author.

Title: Principles of corporate finance / Richard A. Brealey, Stewart C.

Myers, Franklin Allen, Alex Edmans.

Description: Fourteenth edition. | New York, NY : McGraw Hill LLC, [2023] |

Series: The McGraw Hill series in finance, insurance, and real estate |

Includes bibliographical references and index.

Identifiers: LCCN 2022006414 (print) | LCCN 2022006415 (ebook) | ISBN

9781264080946 (paperback ; alk. paper) | ISBN 9781266032806 (ebook)

Subjects: LCSH: Corporations--Finance.

Classification: LCC HG4026 .B667 2023 (print) | LCC HG4026 (ebook) | DDC

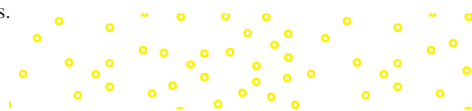
658.15--dc23/eng/20220211

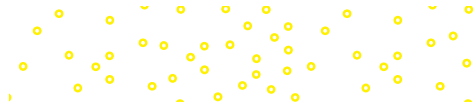
LC record available at <https://lcn.loc.gov/2022006414>

LC ebook record available at <https://lcn.loc.gov/2022006415>

The Internet addresses listed in the text were accurate at the time of publication. The inclusion of a website does not indicate an endorsement by the authors or McGraw Hill LLC, and McGraw Hill LLC does not guarantee the accuracy of the information presented at these sites.

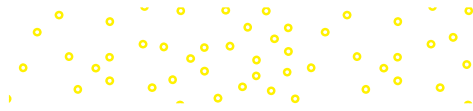
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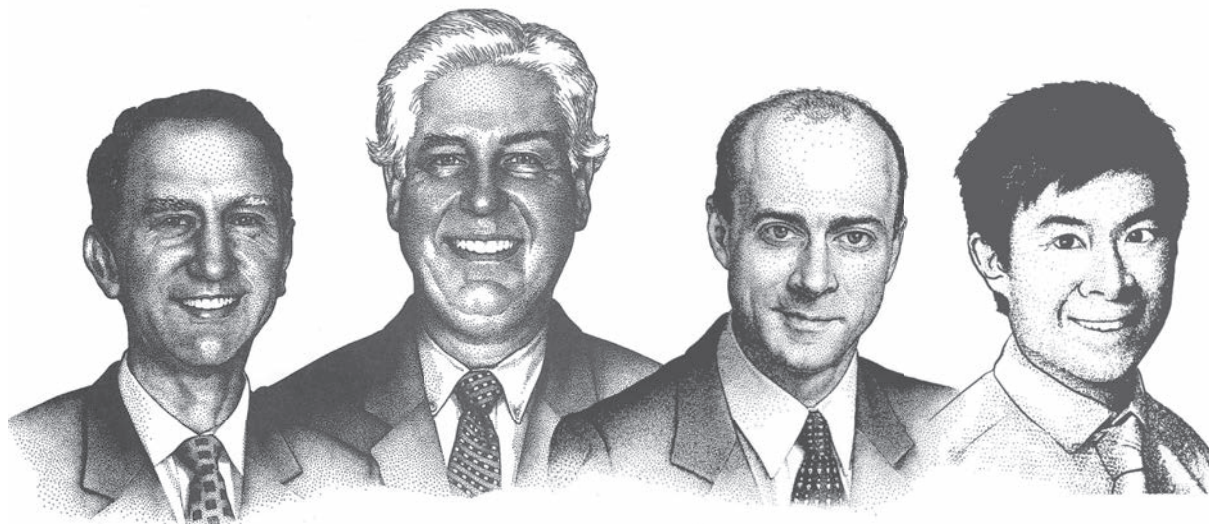
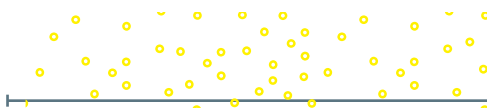


# Dedication

*To our parents.*



# About the Authors



## ›Richard A. Brealey

Emeritus Professor of Finance at London Business School. He is the former president of the European Finance Association and a former director of the American Finance Association. He is a fellow of the British Academy and has served as a special adviser to the Governor of the Bank of England and director of a number of financial institutions. Other books written by Professor Brealey include *Introduction to Risk and Return from Common Stocks*.

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Emeritus Professor of Financial Economics at MIT's Sloan School of Management. He is past president of the American Finance Association, a research associate at the National Bureau of Economic Research, a principal of the Brattle Group Inc., and a retired director of Entergy Corporation. His research is primarily concerned with the valuation of real and financial assets, corporate financial policy, and financial aspects of government regulation of business. He is the author of influential research papers on many topics, including adjusted present value, rate of return regulation, pricing and capital allocation in insurance, real options, and moral hazard and information issues in capital structure decisions.

## ›Franklin Allen

Professor of Finance and Economics, Imperial College London, and Emeritus Nippon Life Professor of Finance at the Wharton School of the University of Pennsylvania. He is past president of the American Finance Association, Western Finance Association, Society for Financial Studies, Financial Intermediation Research Society, and Financial Management Association. His research has focused on financial innovation, asset price bubbles, comparing financial systems, and financial crises. He is Director of the Brevan Howard Centre for Financial Analysis at Imperial College Business School.

## ›Alex Edmans

Professor of Finance at London Business School and Mercers School Memorial Professor of Business at Gresham College. He is Managing Editor of the *Review of Finance* and was previously a tenured professor at Wharton, where he won 14 teaching awards in six years. His research focuses on corporate finance, responsible business, and behavioral finance. He has spoken at the World Economic Forum in Davos and given the TED talk "What to Trust in a Post-Truth World" and the TEDx talk "The Social Responsibility of Business"; he is also advisor to several asset managers. He is the author of *Grow the Pie: How Great Companies Deliver Both Purpose and Profit*. Poets & Quants named him MBA Professor of the Year for 2021.



» This book describes the theory and practice of corporate finance. We hardly need to explain why financial managers have to master the practical aspects of their job, but we should spell out why down-to-earth managers need to bother with theory.

Managers learn from experience how to cope with routine problems. But the best managers are also able to respond to change. To do so you need more than time-honored rules of thumb; you must understand why companies and financial markets behave the way they do. In other words, you need a *theory* of finance.

That should not sound intimidating. Good theory helps you to grasp what is going on in the world around you. It helps you to ask the right questions when times change and new problems need to be analyzed. It also tells you which things you do *not* need to worry about. Throughout this book, we show how managers use financial theory to solve practical problems.

Of course, the theory presented in this book is not perfect and complete—no theory is. There are some famous controversies where financial economists cannot agree. We have not glossed over these disagreements. We set out the arguments for each side and tell you where we stand.

Much of this book is concerned with understanding what financial managers do and why. But we also say what financial managers *should* do to increase company value. Where theory suggests that financial managers are making mistakes, we say so, while admitting that there may be hidden reasons for their actions. In brief, we have tried to be fair but to pull no punches.

This book may be your first view of the world of modern finance. If so, you will read first for new ideas, and for an understanding of how finance theory translates into practice. But eventually you will be in a position to make financial decisions, not just study them. At that point, you can turn to this book as a reference and guide.

## » Changes in the Fourteenth Edition

What has changed in this edition? You will have seen the first change on the cover: Alex Edmans has joined the author team. Alex is a global authority in corporate finance, with particular expertise in corporate governance, responsible business, and behavioral finance—three areas we have significantly bolstered as we will shortly describe. In addition to being a leading researcher,

he has substantial practitioner expertise. He has also won a multitude of teaching awards at MIT, Wharton, and London Business School and is particularly noted for the ability to explain complex finance concepts in simple language. He recently gave a year-long Gresham College public lecture series on the principles of finance attended by a diverse audience, from schoolchildren to retirees.

This expansion of the author team has led to a number of important changes. For example, in recent years many observers have questioned companies' focus on profits and have suggested that managers should promote the interests of *all* stakeholders rather than simply seeking to maximize shareholder value. The issue is an important one and we have, therefore, added a new chapter, Chapter 20, that discusses these different corporate objectives, how far they conflict, and how a responsible business should behave.

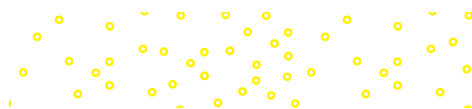
The structure of a firm's governance is closely related to its objectives. We have therefore moved the material on corporate governance and agency issues to Chapter 19, where it now sits next to the chapter on corporate objectives. This chapter has also been substantially rewritten.

Other chapters with major changes include the two chapters on the pricing of risky assets (Chapters 7 and 8). Chapter 7 now focuses on portfolio choice and a stock's effect on portfolio risk, while Chapter 8 concentrates on asset pricing. This is a clearer separation of topics than in previous editions; we think that it is more logical and helps understanding.

The discussion of market efficiency (Chapter 12) has also undergone substantial revision with additional and updated sections on empirical evidence. The chapter also contains an expanded discussion of behavioral finance and the evidence for behavioral biases.

Financial innovation today is being driven by technological developments such as artificial intelligence, big data, and cloud computing. Chapter 13 now includes a new section that reviews seven ways in which financial technology is changing financial practice.

U.S. financial managers work in a global environment and need to understand the financial systems of other countries. Also, many of the text's readers come from countries other than the United States. Therefore, in recent editions, we have progressively introduced more international material, including information about the major developing economies, such as China and India. Material on international differences in financing is now



integrated in Chapter 14, while Chapter 19 includes a discussion of governance systems around the world.

## PEDAGOGICAL CHANGES

Throughout, we have tried to explain the material much more clearly--importantly, without dumbing it down. The style of this edition is more direct and less whimsical, with terms being precisely defined and key concepts made explicit rather than having to be inferred from the narrative. In many cases, the changes consist of some updated data here and a new example there. Often, these additions reflect some recent development in the financial markets or company practice.

We have also changed the introduction to each chapter to include summaries of the content of each of the chapter's sections. We think that this will make it easier for the reader to understand the organization of the chapter and to jump forward to a particular topic of interest. Chapters now also conclude with key takeaway bullet points summarizing the chapter's principal lessons.

Within each chapter we have interspersed a number of new self-test questions that provide an opportunity for readers to pause and check their understanding. Answers to these self-tests are located at the end of the chapter.

The Beyond the Page digital extensions and applications provide additional examples, anecdotes, spreadsheet programs, and more detailed explanations and practice examples of some topics. This extra material makes it possible to escape from the constraints of the printed page by providing more explanation for readers who need it and additional material for those who would like to dig deeper. There are now more than 150 of these apps. They are seamlessly available with a click on the e-version of the book, but they are also readily accessible in the traditional hard copy of the text using the shortcut URLs provided in the margins of relevant pages. Check out [mhhe.com/brealey14e](http://mhhe.com/brealey14e) to learn more.

Examples of these applications include:

- **Chapter 2** Would you like to learn more about how to use Excel spreadsheets to solve time value of money problems? A Beyond the Page application shows how to do so.
- **Chapter 3** Do you need to calculate a bond's duration, see how it predicts the effect of small interest rate changes on bond price, calculate the duration of a common stock, or learn how to measure convexity? The duration app allows you to do so.
- **Chapter 5** Want more practice in valuing annuities? There is an application that provides worked examples and hands-on practice.

- **Chapter 7** Ever wondered how COVID-19 has affected the risk of stocks in the travel industry? An app provides the answer.
- **Chapter 12** Want an example of how speculative trading can swamp the actions of arbitrageurs? The app on the explosion in the price of GameStop shares provides one.
- **Chapter 18** The text briefly describes the flow-to-equity method for valuing businesses, but using the method can be tricky. We provide an application that guides you step by step.
- **Chapter 22** The Black–Scholes Beyond the Page application provides an option calculator. It also shows how to estimate the option's sensitivity to changes in the inputs and how to measure an option's risk.

## › Chapter Structure

Each chapter of the book includes an introductory preview, a list of key takeaways, and suggested further reading. The list of candidates for further reading is now voluminous. Rather than trying to include every important article, we largely list survey articles or general books. We give more specific references in footnotes.

In addition to the self-test questions within the chapter, each chapter is followed by a set of problems on both numerical and conceptual topics, together with a few challenge problems.

We include a Finance on the Web section in chapters where it makes sense to do so. This section now houses a number of Web Projects, along with new Data Analysis problems. These exercises seek to familiarize the reader with some useful websites and to explain how to download and process data from the web.

The book also contains 12 end-of-chapter Mini-Cases. These include specific questions to guide the case analyses. Answers to the mini-cases are available to instructors on the book's website.

Spreadsheet programs such as Excel are tailor-made for many financial calculations. Several chapters include boxes that introduce the most useful financial functions and provide some short practice questions. We show how to use the Excel function key to locate the function and then enter the data. We think that this approach is much simpler than trying to remember the formula for each function.

We conclude the book with a glossary of financial terms.

The 34 chapters in this book are divided into 12 parts. Parts 1, 2, and 3 cover valuation and capital investment

decisions, including portfolio theory, asset pricing models, and the cost of capital. Parts 4 through 9 cover financing decisions, payout policy and capital structure, corporate objectives and governance, options, debt financing, and risk management. Part 10 covers financial analysis, planning, and working-capital management. Part 11 covers mergers and acquisitions, and corporate restructuring. Part 12 concludes.

We realize that instructors will wish to select topics and may prefer a different sequence. We have therefore written chapters so that topics can be introduced in several logical orders. For example, there should be no difficulty in reading the chapters on financial analysis and planning before the chapters on valuation and capital investment.

## » Acknowledgments

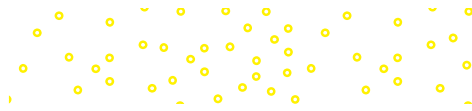
We have a long list of people to thank for their helpful criticism of earlier editions and for assistance in preparing this one. They include Faiza Arshad, Alejda de Cazenove Balsan, Donna Cheung, Kedran Garrison, Robert Pindyck, and Gretchen Slemmons at MIT; Elroy Dimson, Paul Marsh, Mike Staunton, and Stefania Uccheddu at London Business School; Lynda Borucki, Marjorie Fischer, Larry Kolbe, Michael Vilbert, Bente Villadsen, and Fiona Wang at The Brattle Group Inc.; Alex Triantis at Johns Hopkins University; Adam Kolasinski at Texas A&M University; Simon Gervais at Duke University; Michael Chui at Bank for International Settlements; Pedro Matos at the University of Virginia; Yupana Wiwattanakantang at National University of Singapore; Nickolay Gantchev at Warwick University; Tina Horowitz at the University of Pennsylvania; Lin Shen at INSEAD; Darien Huang at Tudor Investment; Julie Wulf at Harvard University; Jinghua Yan at SAC Capital; Bennett Stewart at EVA Dimensions; and Mobeen Iqbal, Antoine Uettwiller and Tong Yu at Imperial College London.

We would also like to thank the dedicated experts who have helped with updates to the instructor materials and online content in Connect and LearnSmart, including Nicholas Racculia.

We want to express our appreciation to those instructors whose insightful comments and suggestions were invaluable to us during the revision process:

Ibrahim Affaneh *Indiana University of Pennsylvania*  
 Neyaz Ahmed *University of Maryland*  
 Alexander Amati *University of Connecticut*  
 Anne Anderson *Middle Tennessee State University*  
 Noyan Arsen *Koc University*

Anders Axvarn *Gothenburg University*  
 John Banko *University of Florida, Gainesville*  
 Michael Barry *Boston College*  
 Jan Bartholdy *Aarhus University*  
 Penny Belk *Loughborough University*  
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 Minhua Yang *University of Central Florida*  
 David Zalewski *Providence College*  
 Chenying Zhang *University of Pennsylvania*

This list is surely incomplete. We know how much we owe to our colleagues at London Business School, MIT's Sloan School of Management, Imperial College London, and the University of Pennsylvania's Wharton School. In many cases, the ideas that appear in this book are as much their ideas as ours.

We would also like to thank all those at McGraw Hill Education who worked on the book, including Chuck Synovec, Executive Brand Manager; Allison McCabe-Carroll, Senior Product Developer; Trina Mauer, Executive Marketing Manager; Fran Simon, Project Manager; and Matt Diamond, Designer.

**Richard A. Brealey**

**Stewart C. Myers**

**Franklin Allen**

**Alex Edmans**

## Pedagogical Features

### › Chapter Overview

Each chapter begins with a brief narrative and outline to explain the concepts that will be covered in more depth. Useful websites related to material for each part are provided in the Connect library.

### › Finance in Practice Boxes

Relevant news articles, often from financial publications, appear in various chapters throughout the text. Aimed at bringing real-world flavor into the classroom, these boxes provide insight into the business world today.

### › Numbered Examples

Numbered and titled examples are called out within chapters to further illustrate concepts. Students can learn how to solve specific problems step-by-step and apply key principles to answer concrete questions and scenarios.

### › Self-Test Questions

Each chapter includes a number of self-test questions that allow students to check their understanding. Answers to these questions are given at the end of the chapter.

### › Numbered Equations

Where a result can be stated formally, we do so in the form of a numbered equation. However, we are also careful to explain the intuition behind a financial theory, so that readers without a quantitative background should be able to read with understanding.

### › Beyond the Page Interactive Content and Applications

Additional resources and hands-on applications are just a click away. Students can use the web address or click on the icon in the eBook to learn more about key concepts and try out calculations, tables, and figures when they go Beyond the Page.

Part 1 Value

1

CHAPTER

## Introduction to Corporate Finance

**T**his book is about how corporations make financial decisions. We start by explaining what these decisions are and what they are intended to accomplish.

This chapter begins with specific examples of recent investment and financing decisions made by well-known corporations. The middle of the chapter covers what a corpora-

FINANCE IN PRACTICE

### Arithmetic Averages and Compound Annual Returns

**›** The average returns shown in Table 7.1 are *arithmetic averages*. In other words, we simply added the 121 annual returns and divided by 121 to get our average return of 11.5%. However, financial analysts may also quote the *geometric average* (also known as the *compound rate of return*). Over the 121-year period stock values multiplied 69,754 times. The geometric average return is calculated by taking the 121st root of 69,754. This gives 9.7%, 1.8 percentage points below the arithmetic average of 11.5%.<sup>2</sup>

Why did we quote the arithmetic average of 11.5%, rather than the geometric average of 9.7%? To understand this, let's use a simple example.

Suppose that Big Pharma's stock price is \$100. There is an equal chance that at the end of the year the

$$\frac{-10 + 10 + 30}{3} = +10\%$$

The arithmetic average of past returns gives you exactly the same answer as the expected return. Thus, it correctly measures the opportunity cost of capital for investments of similar risk to Big Pharma stock.<sup>6</sup>

The geometric average return on Big Pharma stock would be

$$(0.9 \times 1.1 \times 1.3)^{1/3} - 1 = 0.088, \text{ or } 8.8\%$$

which is less than the opportunity cost of capital. Thus, if the cost of capital is estimated from historic returns, only the arithmetic average gives the right answer, not the geometric average.<sup>7</sup>

EXAMPLE 9.1 • A Railroad Industry Cost of Capital for Berkshire Hathaway

Industry betas are particularly helpful for conglomerate companies investing in many different industries. Berkshire Hathaway is today's largest U.S. conglomerate, with investments in insurance, electric utilities, pipelines, jewelry, chemicals, paints, candies, batteries—the list goes on and on. It also owns BNSF, the Burlington Northern Santa Fe railroad. BNSF is one of the largest U.S. railroads and would have been included in Table 9.1 if it were still an independent public company. BNSF and the other railroads in the table face similar business and operating risks. The cost of capital for the comparable portfolio of railroads should be a good discount rate for Berkshire Hathaway's investments in BNSF.

6.4 Self-Test

A firm is considering investment in a new manufacturing plant. The site is owned by the company, but existing buildings would need to be demolished. Which of the following should be treated as incremental cash flows?

- The market value of the site.
- The market value of the existing buildings.
- Demolition costs and site clearance.
- The cost of a new access road put in last year.
- Lost cash flows on an existing product that will be replaced by the new proposal.

The following simple formula<sup>8</sup> shows how DOL is related to the business's fixed costs (including depreciation) as a proportion of pretax profits:

$$DOL = 1 + \frac{\text{fixed costs including depreciation}}{\text{pretax profits}} \quad (10.1)$$

BEYOND THE PAGE

**Try It!** Figure 10.3: Decision tree for the pharmaceutical project

[mhhe.com/brealey14e](http://mhhe.com/brealey14e)

# Excel

## Spreadsheet Functions Boxes

These boxes provide detailed examples of how to use Excel spreadsheets when applying financial concepts. Questions that apply to the spreadsheet follow for additional practice.

### USEFUL SPREADSHEET FUNCTIONS

#### Estimating Stock and Market Risk

Spreadsheets such as Excel have some built-in statistical functions that are useful for calculating risk measures. You can find these functions by clicking *fx* on the Excel toolbar. If you then click on the function that you wish to use, Excel will ask you for the inputs that it needs. At the bottom left of the function box, there is a Help facility with an example of how the function is used.

Here is a list of useful functions for estimating stock and market risk. You can enter the inputs for all these functions as numbers or as the addresses of cells that contain the numbers. Note that different versions of Excel may use slightly different names for these functions.

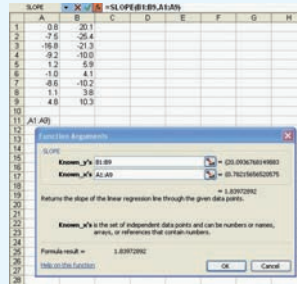
- VAR.P and STDEV.P:** Calculate variance and standard deviation of a series of numbers, as shown in Section 7-2.
- VAR.S and STDEV.S:** Footnote 12 of Chapter 7 noted that when variance is estimated from a sample of observations (the usual case), a correction should be made for the loss of a degree of freedom. VAR.S and STDEV.S provide the corrected measures. For any large sample VAR.S and VAR.P will be similar.
- SLOPE:** Useful for calculating the beta of a stock or portfolio.
- CORREL:** Useful for calculating the correlation between the returns on any two investments.
- COVARIANCE.P and COVARIANCE.S:** Portfolio risk depends on the covariance between the returns on each pair of stocks. These functions calculate the covariance.
- RSQ:** R-squared is the square of the correlation coefficient and is useful for measuring the proportion of the variance of a stock's returns that can be explained by the market.
- AVERAGE:** Calculates the average of any series of numbers.

If, say, you need to know the standard error of your estimate of beta, you can obtain more detailed statistics by going to the *Tools* menu and clicking on *Data Analysis* and then on *Regression*.

#### Spreadsheet Questions

The following questions provide opportunities to practice each of the Excel functions.

- (VAR.P and STDEV.P) Choose two well-known stocks and download the latest 61 months of adjusted prices from [finance.yahoo.com](http://finance.yahoo.com). Calculate the monthly returns for each stock. Now find the variance and standard deviation of the returns for each stock by using VAR.P and STDEV.P. Annualize the variance by multiplying by 12 and the standard deviation by multiplying by the square root of 12.
- (AVERAGE, VAR.P, and STDEV.P) Now calculate the annualized variance and standard deviation for a portfolio that each month has equal holdings in the two stocks. Is the result more or less than the average of the standard deviations of the two stocks? Why?
- (SLOPE) Download the Standard & Poor's index for the same period (its symbol is GSPC). Find the beta of each stock and of the portfolio. (Note: You need to enter the stock returns as the Y-values and market returns as the X-values.) Is the beta of the portfolio more or less than the average of the betas of the two stocks?
- (CORREL) Calculate the correlation between the returns on the two stocks. Use this measure and your earlier estimates of each stock's variance to calculate the variance of a portfolio that is evenly divided between the two stocks. (You may need to reread Section 7-3 to refresh your memory of how to do this.) Check that you get the same answer as when you calculated the portfolio variance directly.
- (COVARIANCE.P) Repeat Question 4, but now calculate the covariance directly rather than from the correlations and variances.



## Excel Exhibits

Select tables are set as spreadsheets, and the corresponding Excel files are also available in Connect and through the Beyond the Page features.

	Year								
	0	1	2	3	4	5	6	7	
1 Capital investment	12,000							-1,949 <sup>a</sup>	
2 Accumulated depreciation		2,000	4,000	6,000	8,000	10,000	12,000	0	
3 Year-end book value	12,000	10,000	8,000	6,000	4,000	2,000	0	0	
4 Working capital		550	1,289	3,261	4,890	3,583	2,002	0	
5 Revenues		523	12,887	32,610	48,901	35,834	19,717		
6 Expenses	4,000	3,037	8,939	20,883	30,809	23,103	13,602		
7 Depreciation <sup>b</sup>		2,000	2,000	2,000	2,000	2,000	2,000	0	
8 Pretax profit (5 - 6 - 7 - 1)	-4,000	-4,514	1,948	9,727	16,092	10,731	4,115	1,949 <sup>a</sup>	
9 Tax at 21%		-840 <sup>c</sup>	-948	409	2,043	3,379	2,254	864	409
10 Profit after tax (8 - 9)		-3,160	-3,566	1,539	7,684	12,713	8,477	3,251	1,540


**TABLE 6.2** Initial forecast data for guano project.

<sup>a</sup> In the income statement, the initial investment of \$12 million is depreciated straight-line over the six years.  
<sup>b</sup> Gain on sale of assets. The asset has been entirely depreciated for tax purposes and the entire sales price is, therefore, subject to tax.  
<sup>c</sup> A negative tax payment means a cash inflow, assuming that IM&C can use the tax loss on the guano project to shield income from the rest of its operations.

# End-of-Chapter Features

## Problem Sets

Beside each end-of-chapter problem we note the section of the chapter to which the question relates. This helps instructors create assignments and makes it simpler for students to look back for help. These end-of-chapter problems give students hands-on practice with key concepts and applications.

 Select problems are available in McGraw-Hill's *Connect*. Please see the preface for more information.

**PROBLEM SETS**

- Behavioral biases (S11.1)** Explain why setting a higher discount rate is not a cure for upward-biased cash-flow forecasts.
- Behavioral biases (S11.1)** Look back to the cash flows for projects F and G in Section 5-3. The cost of capital was assumed to be 10%. Assume that the forecasted cash flows for projects of this type are overstated by 8% on average. That is, the forecast for each cash flow from each project should be reduced by 8%. But a lazy financial manager, unwilling to take the time to argue with the projects' sponsors, instructs them to use a discount rate of 18%.
  - What are the projects' true NPVs?
  - What are the NPVs at the 18% discount rate?
  - Are there any circumstances in which the 18% discount rate would give the correct NPVs? (*Hint:* Could upward bias be more severe for more-distant cash flows?)
- Market values (S11.2)** Your brother-in-law wants you to join him in purchasing a building on the outskirts of town. You and he would then develop and run a Taco Palace restaurant. Both of you are extremely optimistic about future real estate prices in this area, and your brother-in-law has prepared a cash-flow forecast that implies a large positive NPV. This calculation assumes sale of the property after 10 years. What further calculations should you do before going ahead?

## CHALLENGE PROBLEMS

- Economic rents (S11.3)** Accidental setbacks can result in negative rents in any year. But can a project have *expected* positive rents in some years and negative expected rents in other years? Explain.
- Economic rents (S11.3)** The manufacture of polysyllabic acid is a competitive industry. Most plants have an annual output of 100,000 tons. Operating costs are \$0.90 a ton, and the sales price is \$1 a ton. A 100,000-ton plant costs \$100,000 and has an indefinite life. Its current scrap value of \$60,000 is expected to decline to \$57,900 over the next two years.


Phlogiston Inc. proposes to invest \$100,000 in a plant that employs a new low-cost process to manufacture polysyllabic acid. The plant has the same capacity as existing units, but operating costs are \$0.85 a ton. Phlogiston estimates that it has two years' lead over each of its rivals in use of the process but is unable to build any more plants itself before year 2. Also it believes that demand over the next two years is likely to be sluggish and that its new plant will therefore cause temporary overcapacity.

You can assume that there are no taxes and that the cost of capital is 10%.

## Excel Problems

Most chapters contain problems, denoted by an icon, specifically linked to Excel spreadsheets that are available in Connect and through the Beyond the Page features.

**BEYOND THE PAGE**

 Try All The Black-Scholes model  
[mhhe.com/brealley14e](http://mhhe.com/brealley14e)

- Expansion options (S23.1)** You own a one-year call option to buy one acre of Los Angeles real estate. The exercise price is \$2 million, and the current, appraised market value of the land is \$1.7 million. The land is currently used as a parking lot, generating just enough money to cover real estate taxes. The annual standard deviation is 15% and the interest rate 12%. How much is your call worth? Use the Black-Scholes formula. You may find it helpful to go to the spreadsheet for Chapter 22, which calculates Black-Scholes values (see the Beyond the Page feature).

## » Finance on the Web

These web exercises give students the opportunity to explore financial websites on their own. The web exercises make it easy to include current, real-world data in the classroom.

### FINANCE ON THE WEB

You can download data for Questions 1 and 2 from [finance.yahoo.com](http://finance.yahoo.com). Refer to the Useful Spreadsheet Functions box near the end of Chapter 9 for information on Excel functions.

1. Download to a spreadsheet the last three years of monthly adjusted stock prices for Coca-Cola (KO), Citigroup (C), and Pfizer (PFE).
  - a. Calculate the monthly returns.
  - b. Calculate the monthly standard deviation of those returns (see Section 7-2). Use the Excel function STDEV.P to check your answer. Find the annualized standard deviation by multiplying by the square root of 12.
  - c. Use the Excel function CORREL to calculate the correlation coefficient between the monthly returns for each pair of stocks. Which pair provides the greatest gain from diversification?
  - d. Calculate the standard deviation of returns for a portfolio with equal investments in the three stocks.
2. A large mutual fund group such as Fidelity offers a variety of funds. They include *sector funds* that specialize in particular industries and *index funds* that simply invest in the market index. Log on to [www.fidelity.com](http://www.fidelity.com) and find first the standard deviation of returns on the Fidelity Spartan 500 Index Fund, which replicates the S&P 500. Now find the standard deviations for different sector funds. Are they larger or smaller than the figure for the index fund? How do you interpret your findings?

## » Mini-Cases

Mini-cases are included in select chapters so students can apply their knowledge to real-world scenarios.

### MINI-CASE

#### Waldo County

Waldo County, the well-known real estate developer, worked long hours, and he expected his staff to do the same. So George Chavez was not surprised to receive a call from the boss just as George was about to leave for a long summer's weekend.

Mr. County's success had been built on a remarkable instinct for a good site. He would exclaim "Location! Location! Location!" at some point in every planning meeting. Yet finance was not his strong suit. On this occasion, he wanted George to go over the figures for a new \$90 million outlet mall designed to intercept tourists heading downeast from Bar Harbor through southern Maine. "First thing Monday will do just fine," he said as he handed George the file. "I'll be in my house in Bar Harbor if you need me."

George's first task was to draw up a summary of the projected revenues and costs. The results are shown in Table 10.6. Note that the mall's revenues would come from two sources: The company would charge retailers an annual rent for the space they occupied and, in addition, it would receive 5% of each store's gross sales.

Construction of the mall was likely to take three years. The construction costs could be depreciated straight-line over 15 years starting in year 3. As in the case of the company's other developments, the mall would be built to the highest specifications and would not need to be rebuilt until year 17. The land was expected to retain its value, but could not be depreciated for tax purposes.

Construction costs, revenues, operating and maintenance costs, and local real estate taxes were all likely to rise in line with inflation, which was forecasted at 2% a year. Local real estate taxes are deductible for corporate tax. The company's corporate tax rate was 25% and the cost of capital was 9% in nominal terms.

George decided first to check that the project made financial sense. He then proposed to look at some of the things that might go wrong. His boss certainly had a nose for a good retail project, but he was not infallible. The Salome project had been a disaster because store sales had turned out to be 40% below forecast. What if that happened here? George wondered just how far sales could fall short of forecast before the project would be underwater.



In this edition, we have gone to great lengths to ensure that our supplements are equal in quality and authority to the text itself.


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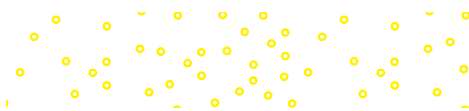
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### Instructor Library

The *Connect* Instructor Library provides additional resources to improve student engagement in and out of class. This library contains information about the book and the authors, as well as all of the instructor supplements, many of which were carefully updated for this edition by Nicholas Racculia, St. Vincent College.


- **Instructor's Manual** The Instructor's Manual contains an overview of each chapter, teaching tips, learning objectives, challenge areas, key terms, and



an annotated outline that provides references to the PowerPoint slides.

- **Solutions Manual** The Solutions Manual contains solutions to all basic, intermediate, and challenge problems found at the end of each chapter.
- **Test Bank** The Test Bank contains hundreds of multiple-choice and short answer/discussion questions, updated based on the revisions of the authors. The level of difficulty varies, as indicated by the easy, medium, or difficult labels.
- **PowerPoint Presentations** The PowerPoint presentations contain exhibits, outlines, key points, and summaries in a visually stimulating collection of slides. The instructor can edit, print, or rearrange the slides to fit the needs of his or her course.
- **Beyond the Page** The authors have created a wealth of additional examples, explanations, and applications, available for quick access by instructors and students. Each Beyond the Page feature is called out in the text with an icon that links directly to the content.
- **Excel Solutions and Templates** There are templates for select exhibits, as well as various end-of-chapter problems that have been set as Excel spreadsheets—all denoted by an icon. They correlate with specific concepts in the text and allow students to work through financial problems and gain experience using spreadsheets. Useful Spreadsheet Functions Boxes are sprinkled throughout the text to provide helpful prompts on working in Excel.

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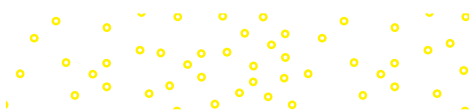
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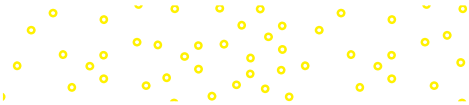


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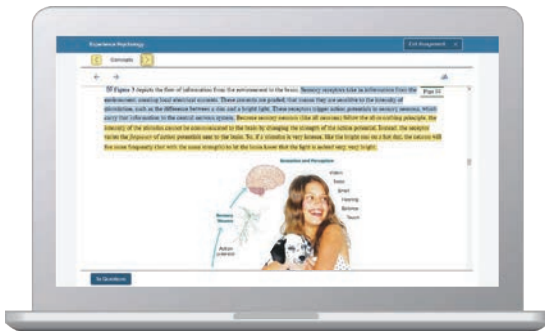
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*"I really liked this app—it made it easy to study when you don't have your textbook in front of you."*

- Jordan Cunningham,  
Eastern Washington University



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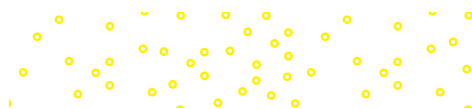
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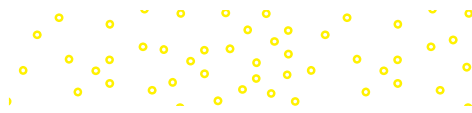
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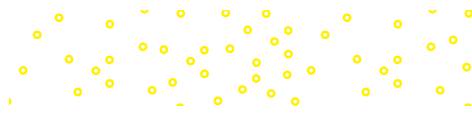
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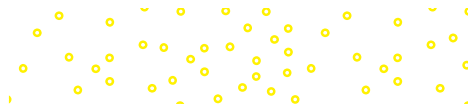
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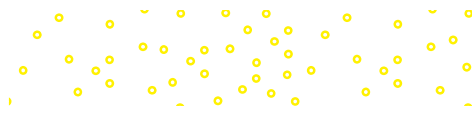
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## 20

## CHAPTER

# Stakeholder Capitalism and Responsible Business

So far in this book, we've assumed that the manager has a single objective—shareholder value. This objective is consistent with how companies are run in practice, at least in the United States. In Chapter 19, we discussed how institutional features, such as stock-based pay, shareholder-appointed directors, and takeovers, help ensure that executives maximize shareholder value. Indeed, for decades, managers themselves believed this was their only objective. Between 1997 and 2018, the “Statement on the Purpose of a Corporation” issued by the Business Roundtable, an organization of the CEOs of the largest U.S. companies, stated that “The paramount duty of management and of boards of directors is to the corporation’s shareholders.” A system in which management’s objective is to maximize shareholder value is called **shareholder capitalism** or *shareholder primacy*.

Yet policymakers, the public, many executives, and even some shareholders now argue that a corporation should also consider the interests of *stakeholders*—other parties affected by the company, such as employees, customers, suppliers, communities, the government, and the environment—potentially even at the expense of shareholder value. This is known as **stakeholder capitalism**. Indeed, on August 19, 2019, the Business Roundtable radically changed its Statement on the Purpose of a Corporation to embrace stakeholder capitalism. The new statement read: “We commit to: delivering value to our customers . . . investing in our employees . . . dealing fairly and ethically with our suppliers . . . supporting the communities in which we work . . . generating long-term value for shareholders.” It put shareholders on a par with stakeholders, rather than ahead of them.

While praised by many, this new statement also attracted strong criticism. The Council of Institutional Investors, an association of U.S. pension funds, foundations, and endowments,

stated that same afternoon that “we respectfully disagree with the statement issued by the BRT earlier today . . . accountability to everyone means accountability to no one.”

Who’s right? Should a company focus entirely on shareholders, as argued by the Council of Institutional Investors? Or does it have wider responsibilities, as claimed by the Business Roundtable? This chapter reviews the arguments for and against stakeholder capitalism.

## Section 20-1 Who are the stakeholders?

We start by summarizing the several classes of stakeholders that a company has responsibility for under stakeholder capitalism.

## Section 20-2 The case for shareholder capitalism

This section covers the arguments for shareholder capitalism. We stress that the shareholder value framework we’ve considered throughout this book places much greater emphasis on stakeholder welfare than often assumed: A company can only create shareholder value if it invests in its stakeholders. Moreover, shareholder value provides a concrete way to evaluate whether a company should undertake such investment.

## Section 20-3 The case for stakeholder capitalism

Here we stress that the case for shareholder capitalism relies on three critical assumptions. Since these assumptions aren’t always valid, stakeholder capitalism is sometimes justified. But, before advocating stakeholder capitalism, we first need to explain why these assumptions don’t hold in a particular setting.

## Section 20-4 Responsible business

Both Sections 20-2 and 20-3 show that neither pure shareholder capitalism nor pure stakeholder capitalism is likely to be optimal. Instead, companies should operate somewhere in between. In this section, we describe a mix known

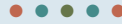
as “responsible business,” which seeks to create value for shareholders through creating value for society.

### Section 20-5 Responsible business in practice

We discuss how the legal regime affects whether companies are obliged to pursue shareholder or stakeholder value,

and how companies can practice responsible business even under shareholder primacy.

*Note:* Some of this chapter is adapted from Alex Edmans's book on stakeholder capitalism and responsible business, entitled *Grow the Pie: How Great Companies Deliver Both Purpose and Profit*.



## 20-1 Who Are the Stakeholders?

Before proceeding further, it's helpful to understand who the key stakeholders are.

### Employees

A corporation's survival and profitability depend on the commitment and productivity of its employees. Thus, even a company focused on shareholder value may choose to pay employees more than the legal minimum wage (or what competitors are offering), improve their working conditions, and provide them with meaningful work and skills development. Doing so may lead to its workers becoming more productive and more likely to stay with the firm.

However, under stakeholder capitalism, a company is concerned for employee welfare even if there is no clear link to shareholder value. For example, when Airbnb needed to shed a quarter of its workforce in May 2020 due to the coronavirus pandemic, it spent money on reducing the impact of these layoffs—even though the employees would no longer be working for Airbnb and, thus, wouldn't affect its future profitability. Airbnb gave them a minimum 14 weeks of severance pay and a year's health insurance, allowed them to keep company laptops to help them with the job search, and reassigned part of its recruitment division to outplacement.

### Customers

A business that focuses purely on profits will still wish to deliver value to its customers beyond its contractual requirements. It may provide them with free after-sales service, grant refunds even after the official return window, and not increase prices even if demand becomes high in a pandemic. Doing so may increase brand loyalty and reputation, encouraging current customers to stay and attracting new customers.

Under stakeholder capitalism, a company has a responsibility to its customers even if there's no clear benefit. In most countries, households are unable to change their water supplier. Thus, a water company doesn't clearly gain from ensuring that its water quality exceeds the minimum regulatory standards. However, a responsible company may do so because it believes that it has a duty to its customers.

A company's customers might include not only households, but also other companies. For example, clothing manufacturers sell their products to clothing stores rather than only to households directly. In the coronavirus pandemic of 2020, many retailers had to shut their shops and were on the brink of collapse. Chinese sportswear manufacturers Anta and Li Ning supported their retailers by buying back inventory, providing subsidies, cutting or delaying future shipments, and extending credit terms.

### Suppliers

Suppliers are instrumental to the success of many companies because they provide high-tech, bespoke inputs. For example, Spirit Aerosystems produces components and subassemblies for

Boeing commercial aircraft, including the entire Boeing 737 aircraft body. Boeing and Spirit are locked together in a customer-supplier stakeholder relationship—neither could operate without the other. The same relationship holds for Spirit and Airbus.

However, suppliers are less material to other companies. Clothing retailers can choose between multiple garment manufacturers, so some don't think twice about squeezing them as much as possible; if one cries foul, the retailer goes elsewhere. As mentioned earlier, clothing retailers shut their stores in the coronavirus pandemic, and many passed on these losses to their suppliers by canceling orders or demanding price reductions. By the end of May 2020, these actions cost Bangladeshi garment factories \$3.7 billion of sales, and garment workers worldwide suffered \$5.8 billion of unpaid wages. But other retailers followed through on their orders because they felt they had a responsibility to their suppliers.

### Local and Regional Communities

The places where a corporation operates contain many stakeholders. A manufacturing plant can be the largest local employer; closure would hurt not just the plant's workers, but also local businesses where they shop, as well as the plant's suppliers. For example, the 2009 shutdown of the General Motors plant in Janesville, Wisconsin, devastated the entire town. Thousands of workers lost their jobs, but the domino effects spread more widely. Lear, which supplied GM with car seats and interiors, also closed. Contributions to local charities plummeted, and children arrived at school hungry and less able to learn. As a result, a firm may decide to keep an aging plant operating, absorbing losses and hoping against hope for recovery, if closing it would severely damage the local economy.<sup>1</sup>

#### EXAMPLE 20.1 • Cummins and Columbus

The headquarters of Cummins Inc. is in Columbus, Indiana. The Cummins Foundation's Architecture Program has paid fees for prominent architects to design over 50 local schools and other public buildings in Columbus. J. Irwin Miller, Cummins's CEO from 1961 to 1977, ". . . had a lifelong interest in architecture, [and] understood that Cummins' success in retaining the best and brightest employees was closely tied to the company's ability to attract talent to Columbus."<sup>2</sup> The Architecture Program helped make Columbus an attractive community and a good place to live.

In 2017, Cummins announced a \$50 million project to renovate its headquarters in Columbus. The state, county, and local governments simultaneously announced plans for a \$30 million railroad overpass to improve railroad access to Cummins's manufacturing plants.

### The Environment

The environment is different from other stakeholders because it's not a person or group. Corporations can act to improve the environment by cutting back pollution by more than is required by regulations and by investing in energy-efficient production. For example, natural gas leaks out into the atmosphere during production, shipping, and distribution, which

<sup>1</sup>Keeping an unprofitable business alive, at least temporarily, may be a positive-NPV decision that benefits shareholders as well as communities. The ability to close the plant amounts to holding a put option, and it is often optimal to wait before exercising the option. We describe puts in Chapter 21 and put options to close a plant in Chapter 23.

<sup>2</sup>Cummins Foundation Program, <https://columbus.in.us/cummins-foundation/>.

contributes to global warming. Gas producers that focus just on profits often decide that stopping the leaks is not worth the expense. Stakeholder capitalism urges the producers to pay up to stop leaks, even if shareholder value suffers as a result.

As another example, a paper bag left by the side of a road eventually biodegrades. Most plastic containers don't; they remain as litter for 500 years or more. Thus, a food company that uses plastic packaging imposes an external cost on society. Stakeholder capitalism urges the company to switch to biodegradable containers, even if shareholder value suffers as a result.

### The Government

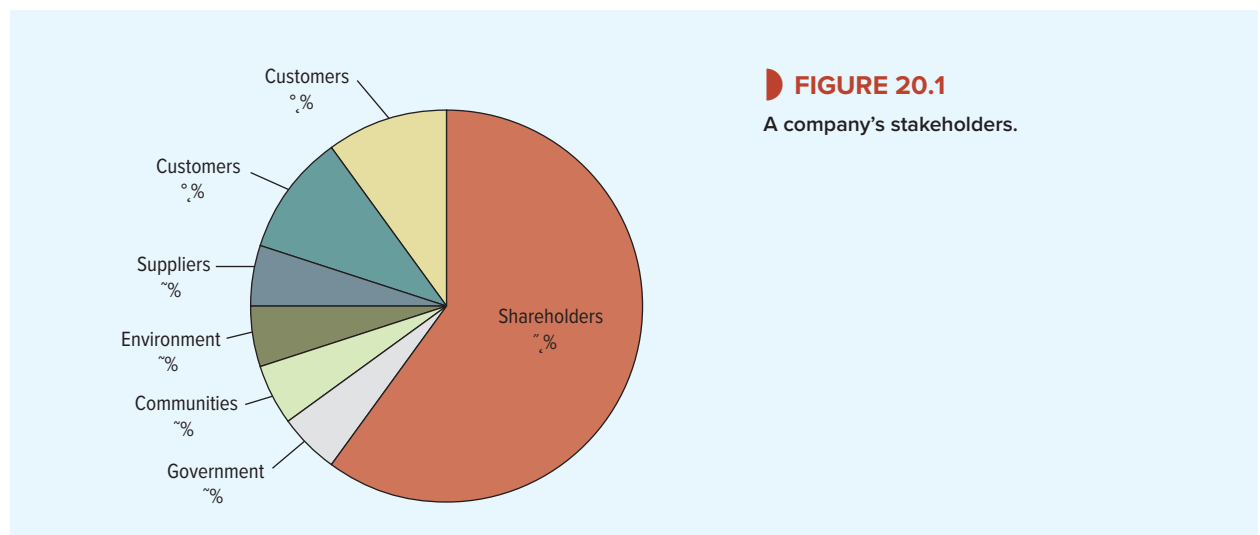
The government is an important stakeholder because a company provides it with tax revenue. Under shareholder capitalism, companies should pay as little tax as they can legally get away with, for example, by locating their intellectual property in low tax jurisdictions. They'll consider the reputational costs of paying low tax, but if the financial damage is less than the tax saved, there's no reason to pay any more.

Under stakeholder capitalism, a company views itself as having a responsibility to contribute to national finances, even if it can get away with contributing less. For example, in 2020, the U.K. government gave companies a tax deduction known as "business rates relief" to help them survive the coronavirus pandemic. Supermarkets Aldi, Morrisons, Sainsbury, and Tesco paid back £1.4 billion of tax relief, even though they were legally entitled to it, because the pandemic boosted their sales and they felt they could survive without it.

Summing up, a company creates value not only for its shareholders, but also for its stakeholders. The value that a company creates to a stakeholder, but doesn't ultimately feed back into profits, is known as *externalities*. The sum of shareholder and stakeholder value (profits plus externalities) can be depicted by a pie, as shown in Figure 20.1. Under shareholder capitalism, a company's objective is to maximize shareholder's slice of the pie. Under stakeholder capitalism, the objective is to maximize the size of the overall pie—the value created to both shareholders and stakeholders.

#### 20.1 Self-Test

Who are a company's stakeholders?



**20-2** The Case for Shareholder Capitalism

In 1970, economist Milton Friedman wrote a provocative article in the *New York Times Magazine* entitled “The Social Responsibility of Business Is to Increase Its Profits.”<sup>3</sup> Its closing paragraph said that “there is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.”

This stance, known as the “Friedman doctrine” and viewed as the hallmark of shareholder capitalism, seems at first glance to be extremely narrow-minded. It appears to argue that a company should squeeze every last drop of value from employees, customers, and other stakeholders in its single-minded pursuit of profit. With such a mindset, it’s no surprise that that shareholder capitalism is unpopular among many people.

But Friedman never advocated exploiting stakeholders. Indeed, many critics may not have actually read his article, thinking that the title already makes his position clear. Instead, Friedman took stakeholder value seriously but believed that maximizing profits was the best way to create stakeholder value. His argument is based on three points<sup>4</sup>:

1. Government policy ensures companies will engage in socially responsible behavior.
2. Maximizing shareholder value gives shareholders maximum freedom to support the social objectives they care about.
3. Maximizing shareholder value requires companies to invest in stakeholders.

Let’s consider each reason in turn.

### Government Policy Ensures Companies Will Engage in Socially Responsible Behavior

A nation’s prosperity depends on externalities, not just profits. But Friedman argued that externalities should be addressed not by companies, but by governments setting laws and taxes. That’s because citizens have different preferences over which externalities are important. Some argue that climate change is society’s biggest threat and would advocate closing all coal-fired power stations despite the ensuing job losses; others are more concerned with unemployment and inequality. A democratic government is elected by a nation’s citizens, and thus needs to set regulations at the level that best represents their aggregate preferences, else it will be voted out. Since governments still allow coal-fired energy, this must mean that the electorate believes that the social benefits outweigh the costs, according to Friedman.

Under this argument, a company is free to pollute as much as it wants to, as long as it pays any carbon taxes. Investing in reducing emissions (e.g., through carbon capture technology) is costly for society as it uses resources. Thus, it is socially optimal for a company to invest only if the cost of doing so is less than the social cost of the emissions. A profit maximising company will invest only if the cost of doing so is less than the carbon taxes saved by reducing emissions. Thus, if the government sets the carbon tax equal to the social cost of emissions, a profit-maximising company will take the socially optimal investment decision. Similarly, if the electorate believed that the harm from smoking outweighed customers’ enjoyment and employees’ jobs, it would vote for a government that bans smoking. Supporters of the tobacco industry can argue that since governments tax but don’t ban cigarettes, citizens have decided that this industry is legitimate as long as it pays cigarette taxes, which reflect the harm that smoking exerts on society.

<sup>3</sup>M. Friedman, “The Social Responsibility of Business is to Increase Its Profits,” *New York Times Magazine*, September, 1970.

<sup>4</sup>A. Edmans, “What Stakeholder Capitalism Can Learn From Milton Friedman,” *ProMarket* September 10, 2020.

In contrast, Friedman claimed that a CEO who pursues social causes is usurping the role of government: she “is in effect imposing taxes, on the one hand, and deciding how the tax proceeds shall be spent, on the other.” She may follow her own preferences, not society’s, which is dictatorship rather than democracy. Or she may pursue shareholders’ goals, since she is ultimately appointed by shareholders. However, investors disproportionately represent the elite since wealthy people hold more shares, in contrast to the political process where each citizen has one vote. Thus, a CEO who follows shareholders’ preferences may ignore the fact that closing a power plant will lead to blue collar job losses, since these employees may not own many shares.

### Maximizing Shareholder Value Allows Investors to Pursue Social Objectives

A company’s shareholders may have preferences that differ from the electorate as a whole and want it to go beyond simply complying with the law. For example, they may be local and thus are concerned about the company’s impact on their community. Regulations are typically decided at a national level and may underweight issues specific to that community, such as job losses from a plant closure. Or shareholders might care about other externalities, such as those on employees or the environment.

However, even if shareholders have social objectives beyond those imposed by the law, this doesn’t mean the companies they own should pursue these objectives. Let Carolina and Pierre both be investors in a company called Grindhouse. Carolina cares about cancer prevention, Pierre about the environment. If Grindhouse gave a large donation to the American Cancer Society, this would please Carolina but not Pierre. Instead, Grindhouse should make as high profits as possible, allowing it to pay as high dividends as possible. Then, Carolina can donate some of her dividends to the American Cancer Society, and Pierre his to Greenpeace.<sup>5</sup>

So Friedman did recognize that *individuals* may have social responsibilities beyond profits. He argued that the social responsibility of *business* is to increase profits because doing so gives individuals—Carolina and Pierre—maximum flexibility to choose which social responsibilities they wish to fulfill. This echoes the Fisher Separation Theorem of Chapter 1. There, we argued that managers should maximize shareholder wealth and leave it to investors to decide whether to consume from their wealth now or later. Similarly, managers should maximize shareholder wealth and leave it to investors to decide how much to give to which charity.

### Maximizing Shareholder Value Requires a Company to Invest in Stakeholders

What if a company’s investors *only* care about shareholder value? That still doesn’t mean the company will exploit its stakeholders. Instead, Friedman argued that increasing profits is socially desirable because doing so *requires* a company to take stakeholders seriously. In a competitive environment, the primary condition for the firm’s survival is that it looks after its customers. Similarly, if it fails to invest in its employees, they’ll be demotivated and unproductive; if it pollutes the environment, its reputation and brand will be hurt. Friedman also argued that companies may find it wise to pay special attention to the local communities where they operate: “[I]t may well be in the long run interest of a corporation that is a major employer in a small community to devote resources to providing amenities to that community or to improving

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<sup>5</sup>Note that Carolina and Pierre don’t need dividends to make charitable contributions. They can sell shares to raise cash. Or they can contribute shares of stock to charity instead of cash. This can have a significant tax advantage. U.S. tax law allows the full market value of contributed shares as a charitable deduction, with no realization of capital gains and no obligation to pay capital gains tax.

its government. That may make it easier to attract desirable employees, it may reduce the wage bill or lessen losses from pilferage and sabotage or have other worthwhile effects.”

So Friedman’s article doesn’t actually advocate the “Friedman doctrine” of ignoring stakeholders. Nor does the shareholder value framework that underpins this book. The NPV rule would give a big green light to investments in employee training programs, customer service centers, and reductions in energy usage, if the benefits outweigh the cost.

### 20.2 Self-Test

Does the claim that “the social responsibility of business is to increase its profits” imply that:

- a. Businesses should exploit society in the pursuit of profit (to the extent allowed by law)?
- b. Shareholders only care about profit?

### Enlightened Shareholder Value

The broader view of value maximization that we’ve just discussed is often known as *enlightened shareholder value* (ESV). “Enlightened” reminds people that creating shareholder value requires a company to invest in stakeholders. But there’s still one and only one objective: shareholder value. Companies should only invest in stakeholders if doing so is positive-NPV. Stakeholders are a means to an end, not an end in themselves. The Business Roundtable’s prior statement argues that “[T]he interests of other stakeholders are relevant as a derivative of the duty to stockholders.”

Proponents of ESV argue that this single objective has two practical advantages – it offers a clear criterion for making investment decisions and for judging performance.

**ESV Offers a Clear Decision Rule** Shareholder capitalism provides a clear decision rule for deciding whether to invest in stakeholders or, indeed, take any decision: Is the NPV positive? For example, suppose Grindhouse considers opening a daycare center for its employees’ children. There’s a simple decision rule: Grindhouse estimates the cost of the center and compares it with the extra cash flows that it will generate through making employees more productive. If the benefits exceed the costs, the NPV is positive, and Grindhouse should go ahead.

The single NPV objective of shareholder capitalism is particularly attractive since most corporate decisions affect multiple stakeholders. If an energy company shuts down a coal-fired power station, it will help the environment, but it may reduce jobs and also profits due to lower revenues. The NPV criterion combines these effects into one: The company estimates the reputational benefit (in dollar terms) from moving to clean energy, subtracts the reputational cost (also in dollar terms) from firing workers, and also deducts any lost profits. Because all of these effects are in dollar terms, the company is comparing apples with apples. It can add them all up and discount them to get the overall NPV of the closure.

In addition to providing a concrete rule for making a decision, shareholder value provides a concrete rule for deciding how much value to give to each stakeholder. For example, if a company had to balance shareholder value with worker happiness, it’s not clear how much it should pay its employees. But a company that seeks to maximize shareholder value needs only to determine what wage will contribute the most to shareholder value. This does not mean that the firm should pay its workers the minimum it can get away with without them quitting. It can be efficient to pay workers more than is necessary because doing so can increase their motivation and, thus, shareholder value. But again there is a clear rule to determine how much to “overpay” workers—only to the extent that it improves the company’s value.



**EXAMPLE 20.2 • Ford's wage policy**

More than a century ago, in the early days of mass-production auto assembly lines, Henry Ford recognized the value of committed and dependable workers. Work on assembly lines was repetitive and difficult. Employee turnover disrupted production, and the costs of finding and training replacements were heavy. Ford decided to pay workers \$5 per day, about double the prevailing wage at the time, in order to remove the incentive for workers to quit and move to easier jobs. That \$5 wage was motivated by a focus on shareholder value.

**ESV Offers a Clear Performance Criterion** Under shareholder capitalism, managers have a single objective: maximize shareholder value. Therefore, there is a clear criterion for judging, after the fact, whether managers have done a good job. When evaluating their performance, we do not need to consider separately whether they have treated other stakeholders well. If they have neglected their customers, employees, and other stakeholders, the effect will show up in the company's profitability and its stock price. Thus, the long-term stock price is the only metric we need to evaluate a manager's performance.

**20.3 Self-Test**

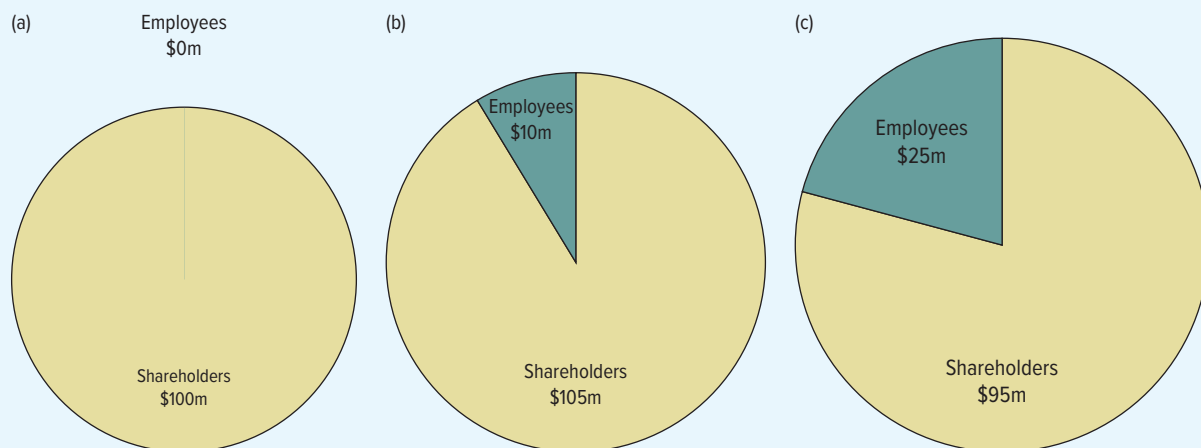
What are the two advantages of enlightened shareholder value over stakeholder capitalism?

**Decision Making under Enlightened Shareholder Value**

We've explained how ESV has much more in common with stakeholder capitalism than commonly believed: It takes seriously the importance of investing in stakeholders. Similarly, stakeholder capitalism recognizes that profits are important: Shareholders are part of the pie. The key difference is what comes first. ESV argues that a company's ultimate goal is to create shareholder value; by doing so, it will create value for society as a by-product. Stakeholder capitalism argues that a company's ultimate goal is to create value for society; by doing so, it will increase shareholder value as a by-product. A company's goal under ESV is to maximize shareholders' slice, whereas under stakeholder capitalism it's to maximize the size of the pie—value for society.

Figure 20.2a shows the pie for a firm that is tightly managed, with no special regard to stakeholders. Value equals the area of the circle—here, \$100 million. For simplicity we consider one class of stakeholders: employees. The employees in Figure 20.2a get their market wage, nothing more, and so get no slice of this pie.

Has this Scrooge-like firm really maximized shareholder value? The firm might improve productivity by offering extra wages and job security to employees. Perhaps more generous health insurance or pension contributions would bring forth more effort and loyalty. Then a patient and “enlightened” firm could increase shareholder value by investing more in its employees as stakeholders. Assume this investment costs  $PV = \$10$  million. Suppose it increases productivity and expands the pie to \$115 million, as in Figure 20.2b. Employees now get an extra 9.1% of the pie, worth \$10 million, versus nothing extra in Figure 20.2a. Shareholders get 90.9%, but the pie is larger, so they gain \$5 million. The investment in employees is positive-NPV because both shareholders and employees are better off. Friedman would endorse the outcome in Figure 20.2b.



**FIGURE 20.2**  
Different distributions of the value pie.

Some supporters of stakeholder capitalism regard the pie as fixed, in which case the only way to increase the stakeholders' slice is to reduce shareholders' slice—to them, stakeholder capitalism means “anti-shareholder capitalism.” Shareholders must lose from such redistributions. For example, giving employees 10% of the fixed pie in Figure 20.2a costs shareholders \$10 million.

More sophisticated stakeholder advocates would applaud the win–win gains in Figure 20.2b over 20.2a but would probably still argue for more. Figure 20.2c assumes further investment taking employees' value slice from \$10 million to \$25 million. The size of the pie increases from \$115 million to only \$120 million because the additional investment in employees yields diminishing returns. Shareholders' value slice drops back to \$95 million, less than in Figure 20.2a. Does this negative-sum game create “value for society”? Yes, because the value of the pie is larger. But Figure 20.2c is an example of an investment that advocates of enlightened shareholder value would *not* endorse.

### 20-3 The Case for Stakeholder Capitalism

Given the arguments for shareholder capitalism in the last section, you might think that the case for stakeholder capitalism is dead in the water. But each of the three arguments rests on a crucial assumption, which may not hold in practice.

Yet the Friedman argument is still useful because it highlights that stakeholder capitalism is justified *only if* Friedman's assumptions are violated. Rather than being viewed as a doctrine, Friedman's article should be seen as a theorem, similar to Modigliani-Miller.<sup>6</sup> In Chapters 16–18, we explained how capital structure is relevant in the real world. But the Modigliani-Miller theorem is still useful since it highlights that capital structure is relevant *only if* there

<sup>6</sup>See A. Edmans, “What Stakeholder Capitalism Can Learn from Milton Friedman,” *ProMarket*, September 10, 2020; and L. Zingales, “Friedman's Legacy: From Doctrine to Theorem,” *ProMarket*, October 13, 2020.

are capital market imperfections such as taxes and bankruptcy costs; capital structure cannot be relevant due to reasons unrelated to imperfections such as “debt is cheaper than equity.” Similarly, the Friedman theorem argues that companies should pursue social objectives *only if* its assumptions are violated; social objectives cannot be justified by arguments such as “shareholders care about more than just profit,” which Friedman already takes into account.

Let’s consider each assumption in turn.

### Well-Functioning Governments

The Friedman theorem assumes that the political process is perfect, so that the government reflects the nation’s aggregate preferences. However, there are several sources of imperfection:

- The government may be influenced by lobbying from companies. If companies are significant donors to political parties, a government may maximize its reelection chances by satisfying companies’ goals, not the electorate’s. For example, opponents of the tobacco industry argue that most citizens would like smoking to be banned but that the industry’s lobbying efforts have prevented such regulation.
- Elections only happen every four or five years. A government may have latitude to deviate significantly from the electorate’s preferences midway through a political cycle. Alternatively, it may not have incentives to respond to changes in preferences mid-cycle. For example, the U.K. government published the Dasgupta Report on biodiversity in 2021. However, the next election is not until 2024, so the government could have chosen not to take immediate action.
- Regulation is most effective at addressing measurable issues such as wages and carbon emissions—a government can set a minimum wage and a carbon tax. It’s much harder to regulate qualitative issues, such as providing employees with meaningful work and skills development. Thus, even if the electorate views these issues as important, the government may not pass a law to enforce them.

No political process is completely perfect, just like capital markets aren’t completely perfect. But the Friedman theorem is still useful because it highlights that stakeholder capitalism is justified *only if* regulation is imperfect. Thus, it’s often reasonable for companies to strive to provide meaningful work to their employees. But there are other cases in which regulation is generally effective. If a firm wishes to pay above the minimum wage, even if competitors aren’t doing so, it needs to have good arguments for why the government has set it wrongly. Moreover, any government failure to set the wage correctly must outweigh any managerial failure for company action to be justified. Even if shareholders are willing to pay slightly above the minimum wage due to concern for workers, the CEO may pay even more to avoid the effort of tough wage negotiations or reduce the risk that employees protest at her own pay. Thus, it can be socially undesirable to allow CEOs to sacrifice profits by giving stakeholders more than what is required by government regulation.

### No Comparative Advantage in Serving Society

The only socially responsible action that Friedman considers is donating to charity. He thus implicitly assumes that companies have no *comparative advantage* in serving society: \$1 spent on a social initiative creates the same value as \$1 spent by anyone else. While that’s true for charitable donations, it’s not true in two broad cases. First, a company typically has a comparative advantage in any activity it controls directly. If Grindhouse invests a dollar in designing a reduction in its plastic packaging, it helps the environment much more than if it paid out that dollar as dividends and Pierre donated it to Greenpeace to lobby for a tax on plastic bags. Second, a company may have a comparative advantage due to its expertise. During the pandemic, perfume companies pivoted to making sanitizer since they had expertise in

manufacturing alcohol-based products. Thus, companies may be justified in sacrificing profits to serve society if they do so in ways that leverage their comparative advantage.

The importance of comparative advantage is often overlooked. Many companies around the world donate millions to charity; India's government requires large companies to spend 2% of their profits on corporate social responsibility (CSR) initiatives.<sup>7</sup> But if you're a drinks company, your expertise is making drinks—not choosing which charitable causes are most worthy.

### Instrumental Decision Making Is Effective

We explained in Section 20-2 how enlightened shareholder value advocates investing in stakeholders. However, the motive is *instrumental*. A company exists exclusively to create shareholder value and will only make an investment if it can calculate, at least approximately, the impact it has on future profits. As we've highlighted in this book, calculation works for many investments. When contemplating a new factory, a CEO can forecast how many widgets it will produce and how much it can sell them for. Subtracting the cost gives her the factory's NPV. While the real world is risky, NPV is able to handle risk. As we showed in Chapter 10, the CEO can do a "sensitivity analysis," where she plugs in different assumptions and sees how the conclusion changes.

But this assumes no uncertainty. A risky problem can be analyzed if you have a rough idea of its parameters and can do a sensitivity analysis around them. With uncertainty, you have no idea what the parameters are. Let's go back to Grindhouse's decision to open the daycare center. While the cost is easy to estimate, the benefits are not. How many workers will the daycare center attract, and what's their value to the firm? How much will employee satisfaction rise with onsite childcare, and how much will this greater satisfaction translate into enhanced productivity? How many interactions between colleagues in different departments will the daycare center foster? These questions are almost impossible to answer. There's not even a baseline around which to conduct a sensitivity analysis. So you can't calculate the NPV of the daycare center, and without it, you can't justify the center under shareholder capitalism.

The claim that "increasing shareholder value" will lead a company to invest in stakeholders is only valid if future cash flows can be forecast with some degree of accuracy. For particularly uncertain investments, they can't. Thus, NPV would lead a company to forsake many investments in its employees, and also other stakeholders, ultimately destroying shareholder value. The mindset of maximizing shareholder value may actually lead to companies failing to do so.

That's where stakeholder capitalism comes in. A company with explicit stakeholder objectives makes investments for *intrinsic* reasons—to deliver value to its stakeholders—rather than to *instrumentally* increase shareholder value. Stakeholders are the end itself, not a means to an end. This approach leads it to make many investments that are ultimately profitable but couldn't be justified by a financial calculation. Estimating the contribution of Grindhouse's daycare facility to shareholder value is likely to be challenging, but the company could be fairly certain that it would be good for employees. So the case for the center is much easier to make under stakeholder capitalism. Grindhouse would only need to ask whether the facility creates value for employees, even if it reduces shareholder value. A justification might be: "I know the staff would welcome better daycare. Shareholders have had a good year and we can afford to be generous to our employees." With stakeholder capitalism, what's good for employees (or other stakeholders) is intrinsically good and therefore worth doing.

Importantly, it may ultimately be worth doing for shareholders, not just employees. The daycare center may improve employee recruitment, retention, and motivation, likely increasing shareholder value as a by-product, even if this increase couldn't be quantified at the outset. Thus, *even if* shareholders care only about shareholder value and not externalities, they may surprisingly prefer stakeholder capitalism, because it frees them to make investments that

<sup>7</sup>Donating to charity could be in shareholders' interest if doing so supports a key stakeholder (e.g. the local community) or improves the company's brand among its target customer base. However, many charitable donations are unlikely to do so enough to justify the cost.

ultimately improve shareholder value but this improvement was difficult to capture in an NPV analysis. “Maximize shareholder value” is difficult to operationalize for many important decisions, but “create value for stakeholders” can be a valuable decision tool under uncertainty.

The idea that we can have harmonious, win–win outcomes where stakeholders and shareholders simultaneously benefit might seem a “too good to be true” pipe dream. But research shows that investments in stakeholder capital have been rewarded by the stock market.<sup>8</sup>

- Stocks of firms that treat their employees well, as measured by listing on the “100 Best Companies to Work For in America,” beat their peers by 2.3% to 3.8% per year from 1984–2011.<sup>9</sup> They also enjoyed positive future earnings surprises, suggesting that the higher stock returns weren’t simply due to risk or that employee satisfaction was a result of the company already performing well.
- Companies in the top 20% of the American Customer Satisfaction Index earned just under double the returns of the Dow Jones Industrial Average over 1997–2003.<sup>10</sup>
- A measure of “eco-efficiency” from Innovest Strategic Value Advisors gauges the value of a company’s goods and services relative to the waste it generates. Highly ranked stocks beat lowly ranked ones by 5% per year between 1995 and 2003.<sup>11</sup>
- What about the impact of shareholder proposals to improve a company’s environmental and social performance? Such proposals increase shareholder value. Stock prices rose by 1.77% on average when a proposal was adopted.<sup>12</sup>

These three reasons are why some *shareholders* advocate stakeholder capitalism. In January 2018, BlackRock CEO Larry Fink wrote an open letter to the CEOs of companies BlackRock invests in, highlighting their need to serve wider society rather than just shareholders. He stressed that “the public expectations of your company have never been greater. Society is demanding that companies, both public and private, serve a social purpose. To prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society. Companies must benefit all of their stakeholders, including shareholders, employees, customers, and the communities in which they operate.”

#### 20.4 Self-Test

What are the three reasons shareholders may prefer stakeholder capitalism to shareholder capitalism?

### The Challenge of Stakeholder Capitalism

The potential advantage of stakeholder capitalism is that it frees managers to pursue stakeholder interests even if doing so can’t be justified by an NPV calculation. However, this freedom comes at a potentially significant cost—there’s no clear rule to replace NPV with,

<sup>8</sup>These excess returns require stakeholder capital not only to be valuable to shareholders, but also for this value to be not fully incorporated by the stock market. In an efficient market, the future value of stakeholder capital is fully incorporated in today’s stock price, and, therefore, should not affect future returns.

<sup>9</sup>A. Edmans, “Does the Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices,” *Journal of Financial Economics* 101 (2011), pp. 621–640; and A. Edmans, “The Link between Job Satisfaction and Firm Value, with Implications for Corporate Social Responsibility,” *Academy of Management Perspectives* 26 (2012), pp. 1–19.

<sup>10</sup>C. Fornell, S. Mithas, F. V. Morgeson III, and M. S. Krishnan, “Customer Satisfaction and Stock Prices: High Returns, Low Risk,” *Journal of Marketing* 70 (2006), pp. 3–14.

<sup>11</sup>J. Derwall, N. Guenster, R. Bauer and K. Koedijk, “The Eco-Efficiency Premium Puzzle,” *Financial Analysts Journal* 61 (2005), pp. 51–63.

<sup>12</sup>C. Flammer, “Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach,” *Management Science* 61 (2015), pp. 2549–2568.

leading to arbitrariness. How much shareholder value should managers sacrifice for each shareholder, and how should they assess trade-offs between stakeholders? Should the weight be 50% on shareholders, 15% on employees, and 35% on the environment, or should it be something else? Also, while shareholder value is always expressed in dollars, it's not always clear how to measure stakeholder value. For workers, what matters isn't just their salary, but their overall "utility" or happiness, which includes meaningful work, skills development, and working conditions. For the environment, it's even less clear what the yardstick should be (let's call it "conservation"). So even if we had a clear weighting formula, we'd be hamstrung by the fact that the impacts on different stakeholders are in different terms—profits, utility, and conservation. We're comparing apples and oranges.

As a result, even though a manager under stakeholder capitalism knows she should take externalities into account, it's not clear *how* to do so. If she closes a coal-fired power station, there's no unambiguous way to assess whether the positive externalities to the environment outweigh the negative externalities to workers. Moreover, even if she estimated that an investment yielded positive externalities overall, she doesn't know how much profit she should be willing to sacrifice to create these externalities. Should she choose Figure 20.2c (a bigger pie) over Figure 20.2a (a bigger slice for shareholders)? It's unclear.

Recall the Council of Institutional Investors' worry that "accountability to everyone means accountability to no one." Critics of stakeholder capitalism worry that managers will let their own personal preferences decide which stakeholders the firm should help most. She may end up supporting social causes that she cares about, even if her employees and shareholders don't, or that powerful politicians favor in order to increase the chance of a political appointment after retiring as CEO. (Some cynics have suggested that this is why many CEOs favor stakeholder capitalism.)

### Summary

Stakeholder capitalism encourages firms to deal generously with its various stakeholders and to mitigate adverse externalities caused by the firm's operations. It focuses on benefits to society, not just shareholders. However, which externalities they should mitigate, and how much shareholder value to sacrifice to do so, is unclear.

Overall, neither focusing exclusively on the size of the pie nor focusing exclusively on shareholders' slice is likely to be optimal. Corporations in developed economies will probably end up following some blend of shareholder and stakeholder capitalism. Moreover, this blend should recognize the critical importance of growing the pie, not just redistributing it. We stress this point in the next section.

## 20-4 Responsible Business

Should companies pursue shareholder capitalism or stakeholder capitalism? As with most decisions, the correct answer usually is, "It's a mixture." We now describe a mixture called "responsible business."

### Defining Responsible Business

A **responsible business** is one that seeks to *create value for shareholders through creating value for society*. Let's unpack this definition. The need to "create value for society" shouldn't be surprising. However, a responsible business also has a duty to shareholders. Often, shareholders are seen as less worthy than employees or the environment, but they are mostly ordinary citizens (such as parents saving for their children's education) or organizations representing them (such as pension schemes investing for their retirees or insurance

companies investing to cover future claims). Shareholders are not “fat cats” who already have more money than they need. Delivering returns to shareholders is a critical social function.

Sometimes responsibility is assumed to mean prioritizing stakeholders and underplaying shareholders, but a responsible business has a duty to both. However, while profits are important, they are a by-product: The primary goal of a responsible business is to create value for society.

**Corporate Social Responsibility** Responsible business is sometimes confused with corporate social responsibility (CSR). While there are similarities, there are two fundamental differences. First, CSR typically refers to noncore activities that are delegated to a CSR department in order to improve a company’s public image. A tobacco firm could have a CSR department that donates part of its profits to charity. Responsible business is about a company’s core activities and ensures that the primary way it generates profits is through offering products and services that create value for society. Thus, a tobacco firm would typically not be viewed as responsible, even if it engages in corporate philanthropy.

Second, CSR focuses on splitting the pie, not growing it. CSR advocates paying workers equitably, not price-gouging customers and not avoiding tax. Indeed, a common dictum of CSR is “do no harm” by not taking from society. Responsible business also stresses that a fair distribution of the pie is important, but it’s not enough. It’s even more important for a company to *grow the pie*—to “actively do good” by creating value for society. As mentioned in Chapter 1, *errors of omission* (failing to take good actions, such as pursuing excellence in its existing product offerings and inventing new ones) are often even more serious than *errors of commission* (paying the CEO generously).

### EXAMPLE 20.3 • Vodafone and M-Pesa

In 2007 Vodafone launched M-Pesa, a mobile-money service in Kenya that allows users to transfer money with their mobile phones. This had a substantial social benefit. Many Kenyans had no access to bank accounts, and so relied on cash, which could be forged or stolen. A study found that M-Pesa lifted 196,000 Kenyan households (2% of the population) out of poverty by 2014.<sup>13</sup> The effect was particularly strong among households headed by women because M-Pesa allowed them to switch from agriculture to retail and other businesses.

The goal of a responsible business to create value for society has important implications for the governance mechanisms discussed in Chapter 19. We discussed how very large executive pay packages are controversial. The controversy has hatched proposals to crack down on the level of pay so that the savings can be redistributed to other stakeholders. But this solution assumes a fixed pie. If reform is needed, it would be better to redesign compensation to incentivize the CEO to create long-term value for society. Indeed, evidence shows that the long-term incentives advocated in Section 19-5 improve not only profitability, but also innovation and the value delivered to suppliers, customers, society, and particularly employees. Thus, they encourage the CEO to create value for both stakeholders and shareholders alike.<sup>14</sup>

<sup>13</sup>T. Suri and W. Jack, “The Long-Run Poverty and Gender Impacts of Mobile Money,” *Science* 354 (2016), pp. 1288–1292.

<sup>14</sup>C. Flammer and P. Bansal, “Does Long-Term Orientation Create Value? Evidence from a Regression Discontinuity,” *Strategic Management Journal* 38 (2017), pp. 1827–1847.

## Responsible Business and the Coronavirus Crisis

» The coronavirus pandemic of 2020 shrunk the pie for everyone. Many companies responded by reducing compensation to investors and executives and by providing products or services free or at low cost to stakeholders. For example, Unilever donated €100 million of soap, sanitizer, bleach, and food to communities; provided €500 million of liquidity by paying suppliers early and extending credit to customers; and safeguarded the jobs of its 155,000 workers, including contractors such as cleaners and catering staff in addition to direct employees. Executives of companies such as Boeing and United Airlines worked for zero pay for several months.

Such responses were indeed great acts of responsibility. However, not all companies could engage in them. For example, companies in industries unrelated to the crisis didn't have products they could give to communities. Smaller companies didn't have €500 million lying around that they could lend to customers and suppliers. But many companies found ingenious ways to help. Here are some examples:

- The New England Patriots did not have a product that could help in the crisis. Football tickets and replica merchandise were of little value. But it creatively decided to use its plane to fly 1.2 million N95 masks from China to Boston.
- Mercedes's precision engineers typically made pistons and turbochargers for Formula 1 engines, but Formula 1 was canceled at the start of the pandemic. So they teamed up with University College London to reverse-engineer a breathing aid and improve its design so that it could be manufactured at scale. Within 100 hours, they had a prototype, and then repurposed existing machines to mass-produce it.
- Qantas Airways could not afford to keep paying its staff since air travel was almost entirely shut down. It entered into a partnership with Woolworths, a grocery store, to redeploy its furloughed staff. This not only safeguarded their incomes, but also served wider society given the spike in demand for groceries.
- Barry's is a boutique fitness studio. Its fitness instructors offered free live-streamed workouts through Instagram for people who had to self-isolate at home. Some of Barry's desk staff were actors who worked at Barry's to supplement their income given the volatility of an acting career. They used their skills in entertaining to read stories to children using videoconference facilities, taking the load off working parents who had their children at home due to school closures.

### Decision Making in Responsible Businesses

We explained earlier that a key argument against ESV is that the NPV rule is very difficult to implement in practice for some investments. That's because it's impossible to forecast, even very roughly, the cash flow implications of these actions. But, under responsible business, there appears to be an even bigger problem: There isn't even a decision rule to begin with. We don't know how to convert the value delivered to different stakeholders into a common unit, nor how to weight the different stakeholders. So you can't measure overall social value and then estimate how a decision will affect it.

Yet nearly every real-life decision involves multiple criteria that can't be weighted. When a worker chooses a job, he doesn't just maximize his income. He also considers his passion for the work, the amount and flexibility of the hours, and the camaraderie with his colleagues. There's no formula telling him how to weight each factor, but this need not matter. Citizens comfortably make decisions with multiple objectives every day using not a *calculation* like NPV but *judgment*—their own internal assessment of the importance of each criterion.

But while a citizen acts for himself, a manager acts for shareholders. The problem with delegating corporate decisions to the manager's judgment is that it gives her freedom to do



whatever she pleases. Under responsible business, a manager's judgment is guided by principles, to help ensure that any actions to create value for society also create value for shareholders—or at least don't reduce shareholder value significantly. There are three principles that she should follow:

- The *principle of multiplication* ensures that the social benefits of an investment exceed its private costs, so that the investment delivers value to society.
- The *principle of comparative advantage*, combined with the principle of multiplication, ensures that the social benefits of an investment exceed its social costs, so that the investment creates value for society.
- The *principle of materiality*, combined with the first two principles, makes it more likely that the social value created will ultimately increase shareholder value—the activity creates value for shareholders through creating value for society.

Let's look at these three principles in turn.

**Multiplication** The *principle of multiplication* asks the following: If I spend \$1 on a stakeholder, does it generate more than \$1 of benefit to the stakeholder? In other words, does the activity multiply the money I spend on it? If not, the social benefit is less than the private cost—the social NPV is negative—and the activity doesn't deliver value. The company could instead pay the dollar directly to the stakeholder (e.g., higher wages to employees or lower prices to customers), who can then use it more effectively.

Let's apply this principle to Grindhouse's decision to open a daycare facility. How do we estimate the benefit to the relevant stakeholders (employees in this example)? We could look at membership prices of local daycare facilities and estimate how many workers would use Grindhouse's. Multiplying the two gives a lower bound to the benefit of the facility to the Grindhouse workforce. It's only a lower bound because employees will value an onsite center more highly due to its convenience; as with all decisions, there's a limit to what can be quantified. But the calculation is still useful because it provides a bound on how big the nonquantifiable benefits must be to flip the decision. Say the cost of the Grindhouse center is \$2,500 per employee per month, perhaps because few workers are likely to use it, and the highest-quality local facility costs \$1,000. It's unlikely that the nonquantifiable benefits will be as much as \$1,500, so the principle of multiplication is violated. Rather than building the daycare center, Grindhouse could pay higher wages, which some employees could spend on external daycare.

While the principle of multiplication should help a manager turn down some activities, it alone is too easy to satisfy. Under this principle, Grindhouse should allow the homeless to eat in its staff canteen for free since food likely benefits them more than it costs Grindhouse—in the extreme, \$1 of food may save someone's life. Thus, the principle of multiplication is an incomplete decision rule.

**Comparative Advantage** The *principle of comparative advantage* asks the following: Can my company deliver more value through an activity than others? If and only if so, undertaking the activity inside the firm creates net value for society. This principle is more stringent than the principle of multiplication because it requires the benefit to stakeholders to exceed not \$1 (the private cost of \$1 of investment), but the value that others could deliver with \$1 (the social opportunity cost). In other words, the company needs to satisfy the principle of multiplication by more than other companies. Only then does it create rather than merely deliver value.

Although feeding the homeless may satisfy the principle of multiplication, it fails the principle of comparative advantage. Food that costs Grindhouse \$1 might provide \$2 of benefit to the homeless because they're hungry. But a soup kitchen might turn \$1 into \$3 of benefit because it has a comparative advantage in feeding the homeless: It knows what food best addresses their

nutritional needs and is conveniently located. Grindhouse thus doesn't have a comparative advantage in feeding the homeless, so it shouldn't do so. It could instead pay higher wages to employees or deliver higher profits to investors, who can then donate to soup kitchens.

Applying the principle of comparative advantage doesn't require a company to calculate the value it would create with a certain set of resources, and compare it with the value every other company might create. Instead, it needs to *judge* what its comparative advantage is. As discussed earlier, there are two broad cases in which the principle is usually satisfied. First, a company typically has a comparative advantage in any activity it controls directly. While charities can feed the homeless, only Grindhouse affects the plastic packaging it uses for its products. Second, a company may have a comparative advantage due to its expertise, as with perfume companies making sanitizer.

### 20.5 Self-Test

What is the difference between the principles of multiplication and comparative advantage?

**Materiality** Even the principle of comparative advantage could be too weak. A company has a comparative advantage in virtually every activity that it affects directly, so it might invest without limit in everything it controls, leaving few profits for investors.

That's where the *principle of materiality* comes into play. It asks the following: Are the stakeholders the activity benefits material to the company's business? If so they move toward the head of the queue of stakeholders. For example, suppliers such as Corning and Finisar are particularly important to Apple since they provide high-tech, bespoke inputs. Thus, Apple invests in them through a \$5 billion Advanced Manufacturing Fund that supports innovation in its suppliers. Suppliers are less important to a plastics or paints manufacturer that uses commodity chemicals as inputs.

While a company has some responsibility to all stakeholders, it's important to prioritize the most material ones because investing in them is more likely to improve profits. Indeed, a study find that firms with high performance across all stakeholders did not actually outperform the stock market—potentially because they are overinvesting in less important stakeholders. Instead, only those that score highly on material stakeholder dimensions and less on immaterial factors beat the market.<sup>15</sup>

### Summary

How then is the standard for responsible business different from ESV, which invests in stakeholders only when doing so creates positive NPV for shareholders?

- The primary objective for a responsible business is to create value for society, not just for shareholders. This involves taking investments with significant positive externalities even if they couldn't be fully justified with an NPV calculation, and relieving negative externalities if the cost to shareholders is not too high. In particular, responsible businesses have to act with little thought of profits at times of national crisis, such as war or pandemic (see the earlier box on the coronavirus pandemic.)
- A responsible business also sees intrinsic value in stakeholders but does not assume that more for stakeholders is always better. The stakeholders' slices of the pie have to be designed, and sometimes constrained, to ensure that the firm can stay competitive, expand

<sup>15</sup>M. Khan, G. Serafeim, and A. Yoon, "Corporate Sustainability: First Evidence on Materiality," *The Accounting Review* 91 (2016), pp. 1697–1724.

and innovate, and provide shareholders with an adequate return on investment. The principles of multiplication, comparative advantage, and materiality provide such constraints.

- A responsible business believes that acting to create value for society creates value for shareholders in the long run.

Responsible businesses have to manage a balancing act of the interests of shareholders and stakeholders, which will sometimes conflict. The balancing act won't always work, but responsible businesses believe that the balancing act is a better bet than the pure versions of shareholder and stakeholder capitalism.

## 20-5 Responsible Business in Practice

Even if a company wishes to practice stakeholder capitalism or responsible business, is it legally entitled to do so? We'll first look at what the law allows and then study the steps a company can take to pursue responsible business even if the legal regime is one of shareholder primacy.

### Shareholder Primacy in the United States and United Kingdom

Most U.S. public corporations are incorporated in Delaware, where the directors have a *fiduciary duty* to act in the interests of shareholders. In describing directors' responsibilities, the former Chief Justice of the Delaware Supreme Court stated: “[D]irectors must make stockholder welfare their sole end, and . . . other interests may be taken into consideration only as a means of promoting stockholder welfare.”<sup>16</sup>

### EXAMPLE 20.4 • Craigslist and eBay

In 2004, eBay invested \$32 million in the stock of craigslist, the online classified advertising company, and later offered to buy the entire company. Craigslist's founders blocked the purchase. Craigslist explained that it put the interests of its customers ahead of the interests of its shareholders. It feared that eBay would “monetize” classified advertising to generate excessive profits for eBay shareholders. Craigslist lost; an excerpt from the judge's opinion follows.<sup>17</sup>

I personally appreciate and admire Jim's and Craig's [the founders'] desire to be of service to communities. [But they] opted to form craigslist, Inc. as a *for-profit Delaware corporation* and voluntarily accepted millions of dollars from eBay as part of a transaction whereby eBay became a stockholder. Having chosen a for-profit corporate form, the craigslist directors are bound by the fiduciary duties and standards that accompany that form. These standards include acting to promote the value of the corporation for the benefit of its shareholders.

Craigslist could have avoided this hassle by becoming a *benefit corporation*, which can commit to objectives other than shareholder value. We discuss benefit corporations later in this section.

<sup>16</sup>Leo E. Strine, Jr., “The Dangers of Denial: The Need for a Clear-Eyed Understanding of the Power and Accountability Structure Established by Delaware Corporate Law,” Institute for Law and Economics, University of Pennsylvania, Research Paper 15-08 (2015), p. 10.

<sup>17</sup>*eBay Domestic Holdings, Inc. v. Newmark*, Delaware Chancery Court 2010.

Importantly, Delaware law (and U.S. law generally) gives directors and managers wide discretion in deciding how to enhance shareholder value. They can take a long-run view of value, not necessarily dancing to the tune of today's stock price. The *business judgment rule* protects them from liability so long as they use judgment to try to benefit shareholders. They can act in the interests of other stakeholders if it promotes shareholder value in the long run. For example, directors may judge it worthwhile to invest significantly in training its employees, because the long-term benefits outweigh shareholders' immediate sacrifice. Moreover, *even if* a company is practicing responsible business, and investing in its employees slightly beyond the point that can be justified with an NPV analysis, it will be very difficult for a court to rule on this, since the benefits to shareholders are almost impossible to quantify.

Shareholder primacy is not guaranteed in all U.S. states. Thirty-five of them states have *constituency statutes*, which allow directors to consider the interests of constituencies (stakeholders) other than shareholders. For example, the constituency statute in Connecticut states that a director may consider "the interests of the corporation's employees, customers, creditors and suppliers, and . . . community and societal considerations." In nearly all cases, constituency statutes are permissive rather than mandatory; directors *may* consider stakeholder interests, but have no obligation to do so.<sup>18</sup>

U.K. law states the following:

[A] director . . . must act . . . in good faith . . . to promote the success of the company for the benefit of its [shareholders] as a whole, and in doing so have regard to . . . the interest of the company's employees; the need to foster the company's business relationships with suppliers, customers and others; the impact of the company's operations on the community and the environment.<sup>19</sup>

U.K. directors' primary duty is to act for the benefit of shareholders, and "in doing so have regard" to other stakeholders. The corporation is to respect and support the interests of other stakeholders *in order to* benefit shareholders. However, note that the "benefit of shareholders" may include more than shareholder wealth. As discussed previously, shareholder welfare may also include externalities, and so companies should take externalities into account, particularly if shareholders have communicated their important to them. Thus, shareholder primacy does not mean an exclusive focus on shareholder wealth.<sup>20</sup>

In contrast to the U.S. and the U.K., employees have enhanced stakeholder status in several developed countries. For example, German corporate law emphasizes the protection of all stakeholders, especially employees and lenders. A proportion of the members of the supervisory board are elected by employees, not only in Germany, but also in Denmark, Norway, and Sweden. In Japan, managers usually put the interests of employees and customers on a par with, or even ahead of, the interests of shareholders. The Netherlands requires directors to take stakeholders into account, particularly in takeover situations.

<sup>18</sup>Even in states without constituency statutes, shareholder primacy has been successfully challenged in some cases. In the 1968 *Shlensky vs. Wrigley* case, the Illinois Court of Appeal upheld a decision that took stakeholder interests into account, even though Illinois didn't have a constituency statute at the time. The Chicago Cubs baseball team decided not to install lights at Wrigley Field and play night games, despite the potential higher revenues, due to the negative impact on the local community.

<sup>19</sup>From Section 172 of the U.K. Companies Act 2006.

<sup>20</sup>M. Jensen and W. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *Journal of Financial Economics* 3 (1976), pp. 305–360.

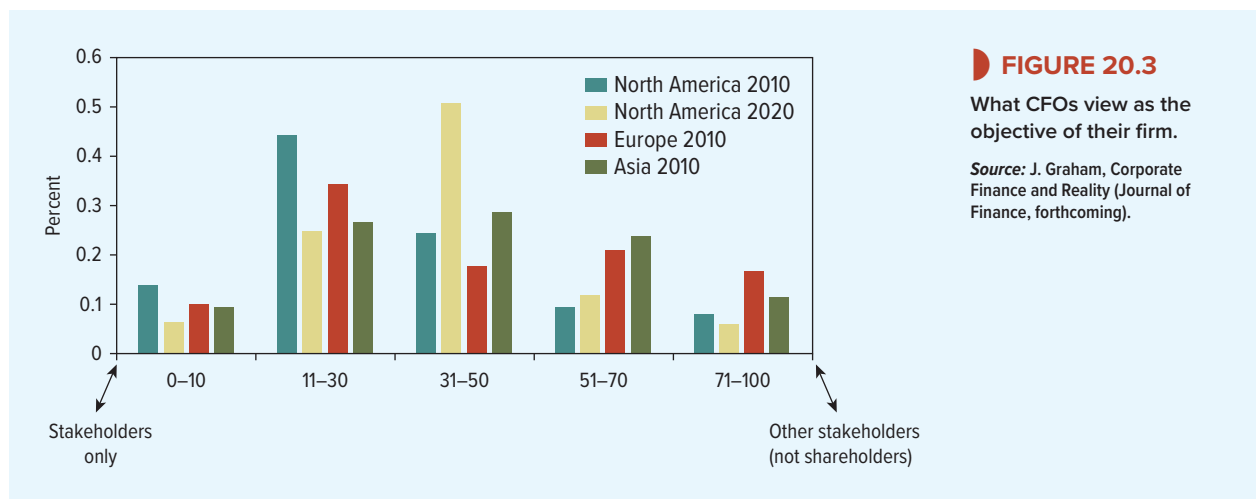
### EXAMPLE 20.5 • Akzo Nobel vs. PPG

In 2017, the Dutch company Akzo Nobel rejected several takeover bids from PPG Industries. CEO Ton Büchner claimed that the bids were not only too low for shareholders, but also made “no substantive commitment to stakeholders” because of the risk of layoffs and PPG’s different approach to sustainability. Akzo Nobel’s largest shareholder, Elliott Advisors, sued but lost because Dutch law requires directors to consider stakeholder interests. The Dutch Enterprise Chamber ruled that Akzo Nobel’s board was fulfilling its duties by considering “the interests of all those involved in the corporation.”<sup>21</sup>

Figure 20.3 summarizes the results of a survey of chief financial officers (CFOs) around the world on what they believed was their chief objective. A score of zero means that the CFO focused exclusively on shareholders. A score of 100 means that she focused exclusively on other stakeholders. The modal response is in the 31–50 range, suggesting that CFOs around the world place most weight on shareholders’ interests but do not give shareholders absolute primacy.

Shareholder capitalism is often portrayed as a relentless pursuit of profit motivated by the mantra that “greed is good.” However, as we’ve discussed, it requires companies to make substantial investments in their stakeholders. Conversely, under stakeholder capitalism, companies cannot ignore the need to earn the shareholders’ cost of capital, otherwise they’d fail to attract financing. The United States and Japan are often portrayed as respective exemplars of shareholder and stakeholder capitalism, but as Figure 20.3 shows, national differences in company objectives are not large. A Martian who compared the business decisions, shareholder returns, and stakeholder performance of Toyota and Ford might find it difficult to believe that the companies had different objectives.

Moreover, differences in national objectives are converging. In Japan, changes in the corporate governance code and the growing involvement of U.S. activist investors have meant an



**FIGURE 20.3**

What CFOs view as the objective of their firm.

Source: J. Graham, Corporate Finance and Reality (Journal of Finance, forthcoming).

<sup>21</sup>Elliott International, *L.P.*, et al. v. *Akzo Nobel, N.V.*, 200.215.330/01, Amsterdam (2017).

increasing focus by Japanese boards on shareholder value. At the same time, law changes in the United States, combined with shareholder pressure, have made U.S. corporations pay much more attention to employees, communities, and the environment. As Figure 20.3 shows, North American CFOs in 2020 placed much greater weight on stakeholders than they did in 2010.

Overall, while some argue that U.S. and U.K. law needs to be changed away from shareholder primacy for responsible business to become widespread, the law does not appear to impose any significant constraint on company decisions outside of takeover situations. Managers have substantial latitude to serve stakeholders even under shareholder primacy. Many of the examples of responsible behavior discussed in this chapter were undertaken by U.S. and U.K. companies and involve substantial sacrifices of shareholder value, such as Unilever's actions in the coronavirus pandemic.

### Benefit Corporations

Suppose a U.S. company does not accept shareholder value as its primary objective. It wants to commit to other goals. It can create a legal obligation to do so by becoming a **benefit corporation**, which is permitted in 36 U.S. states, including Delaware. A benefit corporation states specific public benefits in its articles of incorporation. For example, outdoor apparel company Patagonia states that it will strive “to build the best products and cause no unnecessary harm to the planet or its inhabitants.” Crowdfunder Kickstarter pledges to “annually donate 5% of its after-tax profit towards arts and music education, and to organizations fighting to end systemic inequality.”

A benefit corporation legally requires directors to deliver its stated benefits, else shareholders (although not other stakeholders) have the right to sue them for failing to do so. It also protects directors from dismissal for poor shareholder returns, as long as the company is fulfilling its stakeholder obligations. Benefit corporations must publish annual *benefit reports* explaining how their commitments were fulfilled, and document their social and environmental performance using a third-party standard.

Other countries have similar arrangements. For example, since 2019, French law provides for the *entreprise à mission* corporation, which requires:

1. Statement of a “mission” in the company’s articles of association.
2. A mission committee, distinct from the board of directors, which must include at least one employee. The committee monitors whether the company is acting in accordance with its mission. An independent third party must verify execution of the mission.

In May 2020, the food company Danone became the first listed *entreprise à mission*, promising to “bring health through food to as many people as possible.” Danone North America, its biggest subsidiary, was also the world’s largest benefit corporation.

While the concept of benefit corporations seems logical, it is unclear what it means in practice. We are not aware of any cases in which shareholders have successfully sued a benefit corporation for failing to deliver the stated public benefits, potentially because it is difficult to prove failure. How do we know whether Patagonia truly built the “best” products and that any harm that it caused was truly “unnecessary”? Another benefit corporation, Lemonade Inc., has a stated purpose to “harness technology and social impact to be the world’s most loved insurance company.” It’s not clear whether it seeks the love of shareholders, customers, employees, or other stakeholders, or whether it seeks to be loved for its provision of insurance or charitable donations.<sup>22</sup>

<sup>22</sup>J. Fisch and S. D. Solomon, “The “Value” of a Public Benefit Company,” forthcoming in Research Handbook on Corporate Purpose and Personhood (Elizabeth Pollman & Robert B. Thomson, eds., Elgar).

## B Corps

A company that wishes to pursue objectives beyond shareholder value can also become a B Corp. Unlike a benefit corporation or “entreprise à mission,” a B Corp has no legal status but is an independent third-party certification by B Lab, a global nonprofit. To be certified, a company must receive a minimum score on the B Impact Assessment, which scrutinizes its societal and environmental performance. (This contrasts with a benefit corporation, where the Benefit Report does not need to be externally certified, and there’s no minimum score to be hit.) A B Corp must make a commitment to serve stakeholders other than shareholders, either by becoming a benefit corporation in states that allow it or by including this commitment in the B Corp Agreement for Certification.

Since B Corp certification has no legal status, it doesn’t protect directors from being sued for failing to deliver shareholder returns. However, it attracts investors who have broader objectives than financial returns. Thus, a B Corp’s shareholders are unlikely to sue its directors for prioritizing stakeholders.

There are over 3,000 B Corps worldwide. It’s possible to be a B Corp without being a benefit corporation (Ben & Jerry’s ice cream and Burton Snowboards), to be a benefit corporation without being a B Corp (Imperfect Foods, Interface Foundry, and Visionary Organics), and to be both (Patagonia, Kickstarter, and Danone North America).

While there are advantages to becoming a B Corp, it is not necessary to ensure that a company acts responsibly. As we will shortly discuss, companies can commit to reporting on societal and environmental performance even without becoming a B Corp. For a B Corp, breaking such a commitment will lead to the loss of B Corp status. For a standard company, doing so will lead to a significant loss of investor and stakeholder trust. In addition, B Corps are not necessarily more responsible than other companies. Some responsible companies may not view themselves as needing to get certified. In addition, as discussed later, ESG ratings disagree significantly, highlighting the subjectivity in assessing a company’s responsibility. The B Lab assessment is only one view.

### 20.6 Self-Test

What is the difference between a benefit corporation and a B Corp?

### Purpose

A simpler way to implement responsible business is for a company to have a public statement of how it seeks to serve society. This is typically referred to as a company’s *purpose*: It explains why a company exists, who it serves, its reason for being, and the role it plays in the world.<sup>23</sup> For example, Merck aims “To make a difference in the lives of people globally through our innovative medicines, vaccines, and animal health products.” Nestlé’s purpose is to “unlock the power of food to enhance quality of life for everyone, today and for generations to come.” Importantly, neither company’s purpose is to maximize shareholder value. Instead, these companies view shareholder value as the consequence of achieving their mission. Shareholder value is increased if Merck develops innovative medicines or Nestlé produces foods that enhance the quality of life.

Of course, fine words cost little, but a responsible business must put its purpose into practice. For example:

- The pharmacy CVS’s purpose is “helping people on their path to better health.” In 2014, CVS announced that it would stop selling cigarettes even though they generated \$2 billion in sales. As CEO Larry Merlo said, “put simply, the sale of tobacco products is inconsistent with our purpose.”

<sup>23</sup>Sometimes this is referred to as a company’s mission (as in the case of France’s “entreprise à mission”) or vision.

- In 2013, Barclays Bank closed a division that helped clients avoid tax, sacrificing £1 billion of revenue and contributing to the loss of 2,000 jobs. CEO Antony Jenkins explained: “There are some areas that relied on sophisticated and complex structures, where transactions were carried out with the primary objective of accessing the tax benefits. Although this was legal, going forward such activity is incompatible with our purpose. We will not engage in it again.”

Again, even though such actions imposed significant short-term costs on shareholders, it would be difficult for a court to conclusively rule that these costs would not be outweighed by the long-term benefits, and so these actions were entirely feasible under shareholder primacy. Indeed, while CVS’s stock fell by 1% on the day after the announcement, it rose steadily over the following weeks.

Often directors’ main concern isn’t shareholders suing them for pursuing a purpose beyond shareholder value, but voting them out or selling their shares. One way to mitigate this risk is to put the company’s purpose statement to a shareholder vote, which is known as say-on-purpose.<sup>24</sup> For example, the U.K. consumer goods company Unilever put its climate action transition plan to a shareholder vote in May 2021 (to be repeated every three years) to ensure that shareholders concerned about climate believed that it was sufficiently ambitious and also that they were comfortable with any costs that it would entail.

## Reporting

Even without becoming a benefit corporation or B Corp, a company is free to report on the value that it delivers to stakeholders. For example, it may disclose quantitative factors, such as the percentage of female employees, greenhouse gas emissions, and the number of new patents generated. However, since many key dimensions of stakeholder value are intangible, qualitative reporting is also critical, such as explaining the mechanisms through which a company involves its workers in decision making.

A significant challenge with nonfinancial reporting is comparability; there’s a wide range of potential metrics, and different companies may report different metrics or measure the same one in different ways. To address this issue, several frameworks aim to harmonize reporting by stipulating which items to report and how to measure them. Three examples follow:

- The International Integrated Reporting Council (IIRC) provides principles on how to structure a Sustainability Report or Integrated Report. For example, it states that a company should report the value of six capitals (financial capital, manufacturing capital, human capital, social and relationship capital, intellectual capital, and natural capital or natural resources).
- The Global Reporting Initiative (GRI) provides standards to guide what ESG information to report. For example, for air pollution, it recommends that a company discloses its emissions of nitrogen oxides, sulfur oxides, and persistent organic pollutants.
- The Sustainability Accounting Standards Board (SASB) provides standards that differ by industry. For example, clothing firms should report supply chain water consumption and pollution, labor conditions, and material sourcing; in contrast, banks should disclose data security, financial inclusion, and risk management. The SASB standards are focused on the information that’s relevant to investors, while GRI aims to be relevant to both investors and stakeholders. In June 2021, IIRC and SASB merged into a new organization, the Value Reporting Foundation, to further increase comparability.

<sup>24</sup>A. Edmans and T. Gosling, “How to Give Shareholders a Say in Corporate Social Responsibility,” *The Wall Street Journal*, December 6, 2020.



Even if companies report their ESG performance comprehensively, investors typically like a single number to assess a company with regard to all three, just as a credit rating summarizes all the factors that affect a stock's creditworthiness. This is what ESG ratings aim to do. They are provided by companies such as MSCI, Sustainalytics, Refinitiv, and Vigeo Eiris. Unlike credit ratings, ESG ratings typically disagree quite significantly across providers due to the subjectivity in assessing ESG performance.<sup>25</sup>



**KEY  
TAKEAWAYS**

- **Stakeholders** The stakeholders of a company include employees, customers, suppliers, communities, the government, and the environment.
- **Shareholder capitalism** Advocates of shareholder capitalism argue that the system does not ignore the interests of stakeholders. For example, value is created only when the company has satisfied customers and a motivated workforce. Other stakeholder interests can be addressed by regulation or charitable donations, and maximizing market value maximizes the ability of shareholders to contribute to charities.

Shareholder capitalism has two further practical advantages. First, it provides a concrete decision rule: Accept all (and only) investments with a positive NPV. Second, since the company has the single objective of increasing shareholder value, management can be judged by the extent that it meets this objective.

- **Stakeholder capitalism** Maximizing shareholder value does not maximize social welfare if there are negative externalities not addressed by regulation and that companies have a comparative advantage in addressing. For example, a company seeking to maximize shareholder value may turn a blind eye to costs of environmental damage not borne by the company. Therefore, supporters of stakeholder capitalism argue that the welfare of *all* stakeholders should be the company's primary objective.

An additional advantage of stakeholder capitalism is that it may be a practically more useful way to increase shareholder value in a world of uncertainty, because it allows companies to make decisions on intrinsic rather than purely instrumental reasons. However, critics of stakeholder capitalism argue that it leads to arbitrariness: There is no rule stating how the company should weight the interests of different stakeholder groups or how one should judge the performance of a company with multiple objectives.

- **Responsible business** A responsible business seeks to create value for shareholders through creating value for society. It recognizes the need to undertake investments that create stakeholder value, but also to constrain such investments to ensure that managers remain accountable to shareholders. The principles of multiplication, comparative advantage, and materiality provide such constraints.
- **Corporate objectives and the law** In the United States, the United Kingdom, and other Anglo-Saxon economies, the law specifies that shareholders are the owners of the firm and that directors are generally obliged to act in the shareholders' interests by seeking to maximize value, as in shareholder capitalism. By contrast, in Europe and Japan, directors generally have a wider legal responsibility to serve the interests of both shareholders and stakeholders, as in stakeholder capitalism.
- **Implementing responsible business** Some companies may seek to implement responsible business by becoming a benefit corporation or obtaining B Corp certification. Alternatively, they can state a clear purpose, take actions consistent with that purpose, and report on the delivery of its purpose.

<sup>25</sup>F. Berg, J. Kölbel and R. Rigobon, "Aggregate Confusion: The Divergence of ESG Ratings," *Review of Finance*, forthcoming.

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## FURTHER READING

- D. Denis, “Corporate Governance and the Goal of the Firm: In Defense of Shareholder Wealth Maximization,” *Financial Review* 51 (November 2016), pp. 467–480.
- A. Edmans, *Grow the Pie: How Great Companies Deliver Both Purpose and Profit* (Cambridge, U.K.: Cambridge University Press, 2020).
- A. Edmans, “What Stakeholder Capitalism Can Learn from Milton Friedman,” *ProMarket*, September 10, 2020.
- A. Edmans, “What Stakeholder Capitalism Can Learn from Jensen and Meckling,” *ProMarket*, May 9, 2021.
- M. Friedman, “The Social Responsibility of Business Is to Increase Its Profits,” *New York Times Magazine*, September 13, 1970.
- O. Hart and L. Zingales, “Companies Should Maximize Shareholder Welfare Not Market Value,” *Journal of Law, Finance, and Accounting* 2 (November 2017), pp. 247–274.
- L. Zingales, “Friedman’s Legacy: From Doctrine to Theorem,” *ProMarket*, October 13, 2020.

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## PROBLEM SETS



**connect**<sup>®</sup>

Select problems are available in McGraw Hill’s *Connect*. Please see the preface for more information.

1. **Stakeholder capitalism (S20-1)** Who are the main stakeholders of a company?
2. **Shareholder capitalism (S20-2)** What did Milton Friedman argue in 1970, and how did he support his argument?
3. **Shareholder capitalism (S20-2)** Name two parties that will protect stakeholder welfare under shareholder capitalism.
4. **Shareholder capitalism (S20-2)** Why is enlightened shareholder value referred to as “enlightened”?
5. **Shareholder capitalism (S20-2)** What is the objective of the corporation under
  - a. Shareholder capitalism?
  - b. Stakeholder capitalism?
6. **Shareholder capitalism (S20-3)** Name two advantages of having shareholder value as the only goal of a corporation.
7. **Stakeholder capitalism (S20-3)** How did the Business Roundtable change its Statement on the Purpose of a Corporation in 2019?
8. **Stakeholder capitalism (S20-3)** Give three reasons stakeholder capitalism might be more effective than shareholder capitalism.
9. **Responsible business (S20-4)** What is the definition of a responsible business?
10. **Responsible business (S20-4)** What principles can a responsible business use to make decisions?
11. **Responsible business in practice (S20-5)** What does shareholder primacy mean? Give examples of countries where shareholder primacy is in operation.
12. **Responsible business in practice (S20-5)** Can companies invest in stakeholders under shareholder primacy?

**13. Responsible business in practice (S20-5)**

- a. What is a benefit corporation?
- b. What is a B Corp?
- c. How do they differ?

**14. Responsible business in practice (S20-5)** What is a company's purpose, and what steps can it take to put purpose into practice?

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**20.1** A company's stakeholders are its employees, customers, suppliers, communities, the government, and the environment.

**20.2** a. No. It is in companies' interest to invest in stakeholders to the extent that the NPV of doing so is positive.

b. No. Shareholders may care about externalities. However, these externalities are best addressed by regulation, or by the company maximizing shareholder value and shareholders donating to social causes.

**20.3** Enlightened shareholder value provides managers with a clear criterion against which to assess any decision: Does it increase NPV? It also provides investors with a clear criterion against which to evaluate a manager's performance: Has she increased shareholder value? Under stakeholder capitalism, there are multiple objectives, and it is unclear how to weight each one.

**20.4** a. Shareholders may care about externalities, and the company has a comparative advantage in addressing these externalities.

b. Shareholders may care about externalities, and the government is unable to regulate them or has failed to regulate them.

c. Stakeholder capitalism may be a more successful way of increasing shareholder value in a world of uncertainty.

**20.5** The principle of multiplication argues that it requires \$1 of investment to create more than \$1 of social value. The principle of comparative advantage requires \$1 of investment to create more value than another company could create with that \$1.

**20.6** A benefit corporation legally requires a company to pursue the public benefits stated in its articles of association. A B Corp is a certification by B Lab, a global nonprofit, that a company's environmental and social performance is above a certain benchmark.

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Visit <https://www.gresham.ac.uk/lectures-and-events/purposeful-business> for a Gresham College public lecture entitled "Purposeful Business: The Evidence and the Implementation" by Alex Edmans.

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