



University  
of Michigan  
Business

School **Management Series**

INNOVATIVE SOLUTIONS TO THE  
PRESSING PROBLEMS OF BUSINESS

M. P. Narayanan  
Vikram K. Nanda

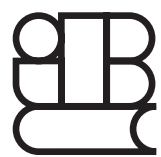


# Finance for Strategic Decision Making

**What Non-Financial  
Managers  
Need to Know**











**University  
of Michigan  
Business**

**School Management Series**

innovative solutions to the  
pressing problems of business

The mission of the University of Michigan Business School Management Series is to provide accessible, practical, and cutting-edge solutions to the most critical challenges facing business-people today. The UMBS Management Series provides concepts and tools for people who seek to make a significant difference in their organizations. Drawing on the research and experience of faculty at the University of Michigan Business School, the books are written to stretch thinking while providing practical, focused, and innovative solutions to the pressing problems of business.

**Also available in the UMBS series:**

*Becoming a Better Value Creator*, by Anjan V. Thakor

*Achieving Success Through Social Capital*, by Wayne Baker

*Improving Customer Satisfaction, Loyalty, and Profit*,  
by Michael D. Johnson and Anders Gustafsson

*The Compensation Solution*, by John E. Tropman

*Strategic Interviewing*, by Richaurd Camp, Mary Vielhaber,  
and Jack L. Simonetti

*Creating the Multicultural Organization*, by Taylor Cox

*Getting Results*, by Clinton O. Longenecker and  
Jack L. Simonetti

*A Company of Leaders*, by Gretchen M. Spreitzer and  
Robert E. Quinn

*Managing the Unexpected*, by Karl Weick and Kathleen Sutcliffe

*Using the Law for Competitive Advantage*, by George J. Siedel

*Creativity at Work*, by Jeff DeGraff and Katherine A. Lawrence

*Making I/T Work*, by Dennis G. Severance and Jacque Passino

*Decision Management*, by J. Frank Yates

*A Manager's Guide to Employment Law*, by Dana M. Muir

*The Ethical Challenge*, edited by Noel M. Tichy and  
Andrew R. McGill

*Competing in a Service Economy*, by Anders Gustafsson and  
Michael D. Johnson

*Energize Your Workplace*, by Jane E. Dutton

For additional information on any of these titles or future  
titles in the series, visit [www.umbsbooks.com](http://www.umbsbooks.com).



# Executive Summary

**N**onfinancial executives often would rather leave finance to financial experts. Lacking a clear understanding of the financial aspects of strategic decisions, they tend to unquestioningly delegate the numbers aspects of decision making to their finance colleagues. But finance is too important and too integral to the general manager's responsibilities to be delegated without a clear idea of what is going on. As a general manager you do not need to know everything about finance that your financial experts know, but you do need a framework for evaluating financial analysis, making decisions based on it, and monitoring their implementation.

This book provides that framework. Through a series of case-based discussions, it will demystify the financial implications of the major types of strategic decisions for which you are typically responsible. The increased sophistication of financial markets gives your firm innovative options in raising and managing capital, in structuring deals, and in managing operating risks. This book will equip you to provide the necessary leadership to evaluate alternative strategies in this sophisticated market and make full use of your financial experts.

All decisions examined in the book are analyzed from the perspective of maximizing shareholder value. Chapter One elaborates on this concept and the role of finance in corporate strategy.

Chapters Two and Three tackle the basic resource allocation decisions that you are often expected to make. What are the value drivers of a project? How much will the capital cost and do the benefits derived offset this cost? If the project is likely to be a good investment, how much value will it create for shareholders? These are the basic questions that these foundational chapters will answer.

Chapter Four expands on the issue of capital structure. Its basic question is, in the course of financing new projects, what mix of debt and equity capital should the company choose in order to minimize cost of capital and thereby maximize firm value? Chapter Five explores the complementary question of payouts (dividends or share repurchases). For example, does it make sense to hoard as much cash as possible in order to reduce the need to borrow? What sort of payout policy is appropriate for your firm?

Mergers, acquisitions, and divestitures are important resource allocation decisions that change the scope of the firm. In Chapters Six and Seven you will learn how to judge whether such a sweeping move really is likely to serve the interests of your shareholders.

In the volatile product and financial markets that managers face today, it is also important to understand how to manage a number of risks. How can specific risks be reduced? How should persisting risks be managed? Should the firm retain them or transfer them through the use of insurance, hedging, or some other device? Chapter Eight explores the problem.

Finally, Chapter Nine deals with performance evaluation and the concept of economic profit (or value added) by which you can monitor the success of a project over time, as well as evaluate the effectiveness of upper-level management.





# **Finance for Strategic Decision Making**

**What Non-Financial  
Managers Need to Know**

M. P. Narayanan  
Vikram K. Nanda



**JOSSEY-BASS**

A Wiley Imprint

[www.josseybass.com](http://www.josseybass.com)

Copyright © 2004 by John Wiley & Sons, Inc. All rights reserved.

Published by Jossey-Bass

A Wiley Imprint

989 Market Street, San Francisco, CA 94103-1741    [www.josseybass.com](http://www.josseybass.com)

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, 978-750-8400, fax 978-750-4470, or on the web at [www.copyright.com](http://www.copyright.com). Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, e-mail: [permcoordinator@wiley.com](mailto:permcoordinator@wiley.com).

Jossey-Bass books and products are available through most bookstores. To contact Jossey-Bass directly call our Customer Care Department within the U.S. at 800-956-7739, outside the U.S. at 317-572-3986 or fax 317-572-4002.

Jossey-Bass also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

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

Narayanan, M. P., date

Finance for strategic decision making : what non-financial managers need to know / M. P. Narayanan, Vikram Nanda.—1. ed.

p. cm.

Includes bibliographical references and index.

ISBN 0-7879-6517-0 (alk. paper)

1. Corporations—Finance. I. Nanda, Vikram K. II. Title.

HG4026.N365 2004

658.15—dc22

2003026449

Printed in the United States of America

FIRST EDITION

*HB Printing* 10 9 8 7 6 5 4 3 2 1

# Contents



Series Foreword **xi**

Preface **xiii**

- 1** Finance and Corporate Strategy **1**
- 2** The Resource Allocation Decision **13**
- 3** Cost of Capital **55**
- 4** Capital Structure and Financing **75**
- 5** Payout Policy **113**
- 6** Mergers and Acquisitions **137**
- 7** Divestitures **179**
- 8** Risk Management **211**
- 9** Performance Evaluation **247**

Notes **285**

The Authors **291**

Index **293**



# Series Foreword



Welcome to the University of Michigan Business School Management Series. The books in this series address the most urgent problems facing business today. The series is part of a larger initiative at the University of Michigan Business School (UMBS) that ties together a range of efforts to create and share knowledge through conferences, survey research, interactive and distance training, print publications, and news media.

It is just this type of broad-based initiative that sparked my love affair with UMBS in 1984. From the day I arrived I was enamored with the quality of the research, the quality of the MBA program, and the quality of the Executive Education Center. Here was a business school committed to new lines of research, new ways of teaching, and the practical application of ideas. It was a place where innovative thinking could result in tangible outcomes.

The UMBS Management Series is one very important outcome, and it has an interesting history. It turns out that every year five thousand participants in our executive program fill out a marketing survey in which they write statements indicating

the most important problems they face. One day Lucy Chin, one of our administrators, handed me a document containing all these statements. A content analysis of the data resulted in a list of forty-five pressing problems. The topics ranged from growing a company to managing personal stress. The list covered a wide territory, and I started to see its potential. People in organizations tend to be driven by a very traditional set of problems, but the solutions evolve. I went to my friends at Jossey-Bass to discuss a publishing project. The discussion eventually grew into the University of Michigan Business School Management Series—Innovative Solutions to the Pressing Problems of Business.

The books are independent of each other, but collectively they create a comprehensive set of management tools that cut across all the functional areas of business—from strategy to human resources to finance, accounting, and operations. They draw on the interdisciplinary research of the Michigan faculty. Yet each book is written so a serious manager can read it quickly and act immediately. I think you will find that they are books that will make a significant difference to you and your organization.

*Robert E. Quinn, Consulting Editor  
M.E. Tracy Distinguished Professor  
University of Michigan Business School*



# Preface

Central as finance is to strategic decision making, general managers are often unfamiliar with its principles. Those who try to inform themselves sometimes pick up a finance book but more often than not find themselves too bored to follow its discussion.

The problem they run into is that most finance books are not written for general managers; they're written for finance specialists or those who wish to specialize in finance. In addition, most finance books treat finance in isolation from other business functions. But general managers do not wish to learn finance (or marketing or human resource management, for that matter) for its own sake. They're looking for information to help them lead more effectively and make better corporate decisions. In this pursuit they need a comprehensive understanding of the financial model of the business but not of the computational details—they can delegate those to specialists. However, to delegate effectively and to comprehend the shareholder value implications of financial choices, general managers need a guiding framework not obscured by too much detail. This book provides that framework.



The inspiration to write this book grew out of our extensive interaction with general managers in the course of more than thirty years' collective experience as consultants and instructors in executive education programs. It grew out of the recognition that while general managers were adept at formulating strategy, they would welcome some help in assessing alternatives from a financial perspective—in the context of strategic decisions that the general manager faces.

We have aimed to present finance in an easily understandable fashion, demystifying and clarifying a subject that many general managers surrender to specialists to a counterproductive extent. The reality is that general managers' involvement in financial analysis is critical to sound decision making, and productive involvement depends on knowing more about finance than general managers often pick up through osmosis. Such partial knowledge without a clear understanding of the complete framework leaves them vulnerable to many misconceptions about financial decision making. A simplified presentation that clarifies the framework helps them avoid such misconceptions.

The book focuses on the goal of creating shareholder value and shows how every managerial decision can be linked to shareholder value. The content covers three broad but interrelated groups of topics. The first group has to do with internal resource allocation decisions that typically are regarded as the main province of the general manager. Chapter Two focuses on the cash flow drivers, a topic important in itself, and also one with implications for other topics such as mergers and acquisitions and performance evaluation. Chapter Three explores the cost of capital, which again is of great importance for other topics. Mergers, acquisitions, and divestitures, being important resource allocation decisions that change the scope of the firm, are dealt with separately in Chapter Six and Chapter Seven, respectively.

The second group of topics concerns the financial policies of the firm. Chapters Four and Five discuss financing and payout





policies, respectively, while Chapter Eight discusses risk management issues.

While the first two groups of topics are related to making decisions to enhance shareholder value, the third one deals with evaluating the outcomes of these decisions. We cover this part of the overall problem as performance evaluation, the topic of Chapter Nine.

### ■ Acknowledgments

Many people have contributed to this book. We would like to thank our colleagues at the University of Michigan Business School with whom we have discussed many of the ideas presented in the book over the course of several years. Thanks are also due to the many executives who discussed these ideas with us and helped us refine them. We have also benefited from comments on earlier chapters by anonymous reviewers.

We would like to thank the Jossey-Bass team, especially Kathe Sweeney and John Bergez, for helping us improve the writing style to make the book more accessible to the intended audience. Special thanks are due to Alan Venable for editing our original manuscript and for showing incredible patience with us.

Finally, we would like to thank our spouses, Lakshmi Narayanan and Nandini Nanda, for behind-the-scenes support and inspiration. Vikram would also like express his gratitude to Sudershan and Satayander for unflinching love and indulgence.

*January 2004  
Ann Arbor, Michigan*

M. P. Narayanan  
Vikram K. Nanda



# **Finance for Strategic Decision Making**



# Finance and Corporate Strategy

Finance is a mystery to many general managers. Nonfinancial executives often view finance (and accounting) as best left to experts. As a result they sometimes unquestioningly delegate the numbers aspects of decision making to their finance colleagues. Finance is, however, too important to be left to the experts!

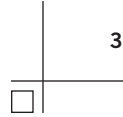
When nonfinancial managers do not fully understand what the numbers represent and the assumptions behind the analysis, it is all too likely that they will make poor, value-destroying decisions. That same lack of understanding on general managers' part can also limit the usefulness of their financial managers' expertise, since the former may lack clear knowledge of the kind of



information that the latter needs and may not be able to provide appropriate feedback about the operational aspects of the company. Contributing to this lack of information interchange is the fact that financial managers are often viewed as “numbers oriented,” unable to comprehend the strategic implications of a decision. Unhappily, it is not uncommon to hear the refrain “though the numbers said otherwise, we decided to go ahead with the decision for strategic reasons,” implying that finance and strategy are somehow independent of one another.

This arm’s-length relationship that general managers have with finance often results in value-destroying decisions. For instance, it is well known that half of all acquisitions do not create shareholder value—and a major reason for this is overpayment by the acquirer. In other words, the acquisition has the potential to increase your firm’s value, but not by as much as you paid for it, and therefore net value is actually lost. This unfortunate situation can easily be averted if the general manager can both recognize the value-creating potential of an acquisition and also quantify this value. In this book we discuss the pitfalls in acquisitions and how to avoid them, while also explaining how to evaluate an acquisition to avoid overpayment.

Another cause of value destruction is poor oversight of financial managers. General managers, often because of limited knowledge or outright ignorance, do not rein in financial managers who, in the guise of managing the risk of the company, indulge in speculative investments, sometimes even crossing the line into criminal activity. It is important for general managers to understand risk management tactics and their potential for value creation well enough to set risk management policy and place limits on what financial managers can do. For that reason, this book delineates exactly how risk management can create value, including a section on derivatives as a risk management tool. Such knowledge is essential to the general manager who oversees financial managers.



## ■ Taking the Mystery Out of Finance

The main objective of this book is to demystify finance for the general manager and show how to use economic reasoning to enhance the quality of strategic decision making. Finance is an integral part of evaluating decisions and monitoring their implementation. Without a complete understanding of how to evaluate the alternatives, it is impossible for the general manager to make the value-maximizing choice. Moreover, since most realistic decisions are complex, any financial analysis is likely to have limitations that the general manager must clearly understand so as to avoid taking it as more definitive than it really is. Similarly, the monitoring of past decisions is critical to ensure that future opportunities for shareholder value creation are not missed and that adequate resources are directed to promising investments while unpromising ones are reduced in scale or scope. Value-based performance evaluation can also reduce the mystery in the challenge of rewarding your value-creating managers and pruning your value-destroying ones. In general, a deeper understanding of the financial framework makes it possible for general managers to monitor the implementation of their strategic decisions and ensure that they create value.

Another important objective of the book is to dispel common misconceptions about financial decisions. Many general managers have just enough finance knowledge to be dangerous—enough knowledge to understand generally what is being said, but not enough to analyze or question the actions being proposed. Proposed actions, though erroneous, often sound quite plausible. For example, most general managers know that “debt is cheaper than equity.” They instinctively understand that shareholder value is enhanced if capital is raised at the lowest cost. Therefore, a recommendation that the company increase debt in its capital structure might sound like a value-increasing decision. But in practice value creation is not simply a matter of substituting



debt for equity, and the decision might well prove far too costly. Similarly, companies often throw good money after bad projects. The reasoning is that “we have so much invested in this project” that it would be a shame to waste what’s already been spent, even though spending still more offers little hope of improving the results. To replace this sort of wishful thinking, we present a set of clearer frameworks for you to use in evaluating many different types of important decisions, guiding you through the right questions to ask.

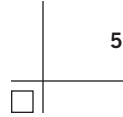
Our approach differs from that of a standard finance textbook in three important ways. First, we recognize that managers are busy, so we focus on the essentials of finance without subjecting you to an overwhelming amount of detail. Second, we skip the technical details found in a typical finance textbook; you can delegate those details to finance professionals in your organization. Finally, we focus on decision making rather than on finance theory, presenting only those concepts necessary to reach a sound decision.

We assume that you already know the basics of accounting, the language of business, and that you have some familiarity with financial statements: balance sheets, income statements, and cash flow statements. We recognize that most likely you already have had some exposure to finance (perhaps you have taken a short executive education seminar or an internal company seminar, or have learnt it through osmosis!), but we do not presume that you have more prior finance knowledge than that.

## ■ It’s All About Shareholder Value

This book champions shareholder value. It advocates that the focus of all decisions be shareholder value maximization. Shareholder value maximization is not “the flavor of the week” but the *raison d’être* of a for-profit company. Shareholder value is





realized through cash dividends and share value appreciation. For a publicly traded company, shareholder value is therefore easily observable. For a private company it is still the central idea, though harder to ascertain because the lack of a market price makes it difficult to measure shareholder value unless the company is being sold.

There is some debate about the extent to which companies should focus on shareholder value. Some argue that shareholders are but one of the stakeholders of a company (the others being customers, employees, suppliers, lenders, and the community at large), and that the company should not ignore these stakeholders and focus exclusively on shareholder value. This argument is specious; there is no conflict between shareholder value and value to these other stakeholders. Shareholder value cannot be created without providing value to these stakeholders. By shortchanging customers or employees, for instance, the company might be able to boost short-term profit but only at the expense of future profits and hence, at the expense of shareholder value. However, this does not imply that value to these other stakeholders should be *maximized*. No one in their right mind would advocate that a company maximize customer value by supplying top-quality goods or services for free. (Or better still, paying customers to accept such goods or services!)

The key is to understand that shareholder value can be *maximized* only by *optimizing* the value to other stakeholders. Optimizing involves providing a fair value: for example, employees should be compensated on the basis of what they can earn elsewhere. Since shareholders are the residual claimants (they are paid only after all other stakeholders are paid) of a company's assets, it is fair that their value be maximized while other stakeholders' values are only optimized.

It is, therefore, important for the general manager to link every decision to measures of shareholder value. In principle this may seem easy and the "right thing to do," but general

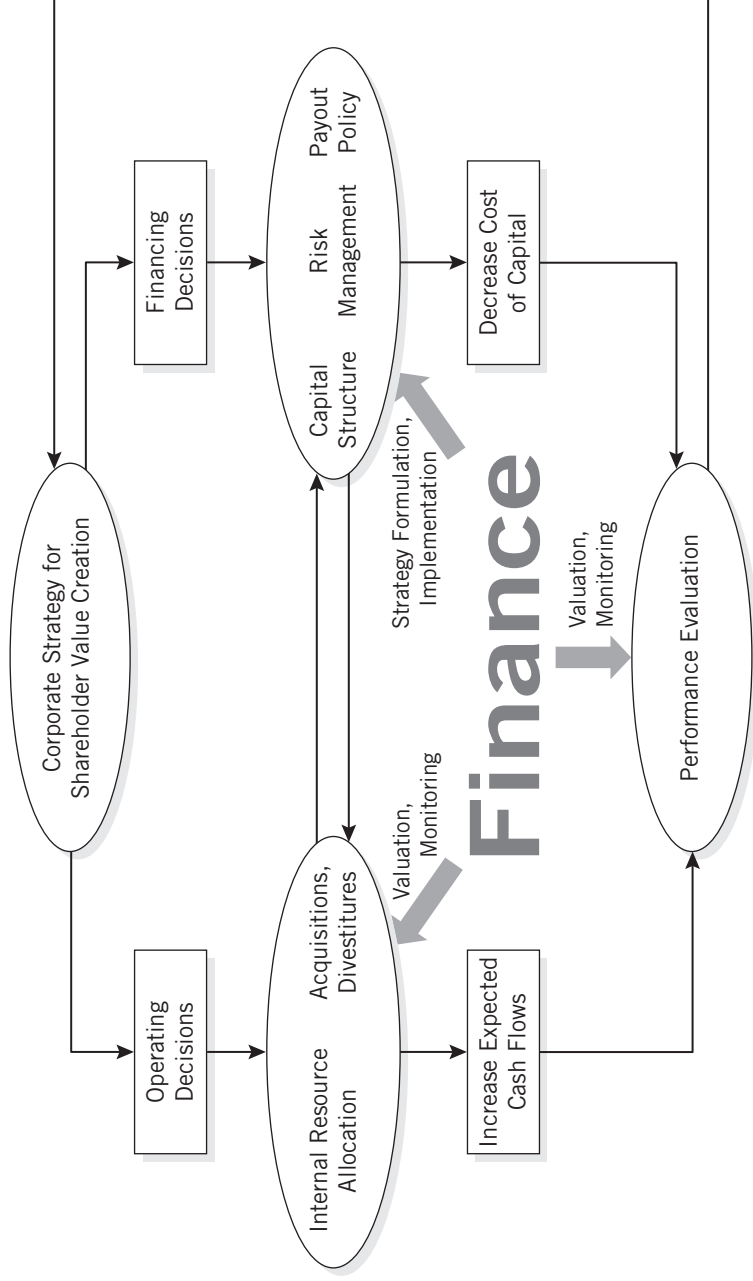


managers face problems when implementing this central idea. The first and foremost problem is that general managers are often unsure what the appropriate metric of shareholder value is for the particular decision at hand. Even for a publicly traded company with an observable share price, the share price cannot ordinarily be used directly for decision making. This is because the share price is the outcome of your decisions and the market's expectations regarding the firm's prospects. This means that the general manager needs internal measures that are correlated to shareholder value to help in the decision-making process. And the real problem is not the lack of such measures but the surfeit of them. The general manager is often presented with measures that appear to be related to shareholder value, such as net income or earnings per share. It is important to know which of these measures are most closely linked to shareholder value. In this book we show the appropriate metrics to use and link each decision to shareholder value through the use of these metrics.

## ■ The Role of Finance in Corporate Strategy

Figure 1.1 shows the role of finance in corporate decision making and its interaction with corporate strategy. As the figure shows, corporate managers choose value-creating strategies from a set of available choices. These strategies may involve operating decisions (where do we allocate our resources, which businesses do we divest, and the like) and financing decisions (what should be our capital structure, which risks do we need to manage and how, and so on).

The role of finance in operating decisions is primarily one of valuation and monitoring. Finance helps managers evaluate the operational alternatives available to them, and helps them monitor the decisions that are implemented. Such monitoring is



**Figure 1.1.1. Role of Finance in Corporate Strategy**



critical to the evolution of corporate strategy: it helps management change or adjust its strategy based on the outcomes of earlier strategies. The outcome of a well-thought-out and carefully monitored operating decision is higher future expected cash flow for the company. In addition to their impact on expected future cash flows, operating decisions can often have an impact on financing decisions. For example, if an energy company with generating plants decides to focus more on energy trading and less on generation, its tangible asset base will be depleted and so will its borrowing capacity. Such a company will need to invest more in risk management techniques and pay out less earnings as dividends.

The role of finance is obviously greater in financing decisions. Finance plays a major role in formulating the financing strategy, evaluating the alternatives, and monitoring the outcomes. The objective of the financing strategy is to raise capital at the lowest cost, which in turn increases shareholder value. At first glance, it might appear that these decisions are the purview of the CFO and others need not get involved in them. However, just as operating decisions have an impact on financing policies, so financing decisions can affect operating strategies. For example, a company whose financing decisions have led it into too much debt might not have the financial flexibility to raise capital quickly enough for needed growth. Or, on a positive note, a company whose financial policies include good risk management might be able to create a competitive advantage for itself by offering products that limit customer risk as well. Therefore, a general manager with a clear understanding of financial policies can leverage them to create value for shareholders. The role of finance in performance evaluation is identical to its role in operating decisions: valuation and monitoring.

The bottom of Figure 1.1 draws attention to performance evaluation. As mentioned earlier, general managers have two reasons for evaluating the performance of business units on a



periodic basis. The first is to ensure that earlier decisions have yielded the predicted results and, if not, to decide the modifications needed: invest more, for instance, in outperforming projects and less in underperforming ones. The second reason is to provide the appropriate incentives to managers based on the performance of their units. It is critical, though, that the metric used to measure performance be congruent with shareholder value (as indicated by the feedback arrow in the figure from performance evaluation to shareholder value creation). If the evaluation metric and shareholder value diverge, it doesn't matter what other controls the decision-making process may include. Shareholder value creation will be unlikely, as the managers will maximize their own metric rather than shareholder value.

### ■ Handling a Range of Decisions

The book is organized in chapters that focus on a variety of strategic decisions designed to maximize shareholder value creation. Each chapter revolves around a case and gives you a conceptual framework with which to analyze decisions. Outside this systematic treatment, it also provides answers to additional questions that, in our experience, managers frequently ask.

Business strategy involves resource allocation, the subject of Chapter Two. By covering this central problem, the chapter lays the foundation for later chapters on topics such as mergers, acquisitions, and divestitures. The chapter provides decision rules congruent with shareholder value. It also explains the cash flow drivers and provides a template that can be used to estimate cash flows for resource allocation proposals.

Chapter Three deals with the cost of capital. This again is a central topic as the goal of any for-profit company is to provide a return in excess of the cost of capital. The chapter explains the drivers of the cost of capital: cost of debt, cost of



equity, and the debt-equity ratio. It shows how to estimate costs of debt and equity.

Chapter Four deals with financing and capital structure (debt-equity ratio) choices. We explain how capital structure—and other corporate finance decisions such as payout policy—can be chosen to maximize firm value in the presence of market imperfections such as taxes, bankruptcy, and information problems. This imperfect market framework is used to understand the timing and the type of security sold when external financing is raised.

Chapter Five explores payout policy. It explains the significant differences between the two common methods of payout—dividends and share repurchases. It also explains the usefulness of payout in providing positive information about firm value and a commitment by managers to return shareholder money—despite the fact that payouts may require the firm to raise additional external financing.

Chapter Six deals with mergers and acquisitions. While many companies view acquisitions as an important vehicle for growth, research shows that acquisitions often do not create value for the acquirer. The chapter discusses the reasons for this dismal outcome and outlines steps that companies can take to ensure that their acquisitions not only increase revenue but also increase shareholder value. It explains how to value a prospective target, the most important step in ensuring a successful acquisition. Finally, it provides a brief discussion about bidding strategy and how to structure the payment.

Chapter Seven explains how divestitures can and should be part of a company's strategic tool kit. Even a growth company needs to constantly prune its underperforming units and use the resources to expand its core businesses. Several specific rationales for divestiture are discussed, such as increasing focus, raising capital, meeting regulatory requirements, and address-