# Strategic Corporate Finance

Applications in Valuation and Capital Structure

JUSTIN PETTIT



John Wiley & Sons, Inc.

## **Contents**

Preface	Xİ
List of Figures	Xiii
List of Tables	XV
Acknowledgments	xvii
About the Author	xix
PART ONE	
Managing the Left-Hand Side of the Balance Sheet	
CHAPTER 1 The Cost Of Capital	3
Calculation Pitfalls	3
Market Risk Premium (MRP) Toward a Better Beta	5 10
The "Riskless Rate"	13
The Cost of Debt	14
Global Capital Costs	16
WACC and Hurdle Rates	23
CHAPTER 2	
Fix: Finding Your Sources of Value	26
Why Shareowner Value?	27
Performance Measurement Pitfalls	28
Measuring Economic Profit and Value	30
Analyzing the Corporate Portfolio	35
Incorporating the Cost of Capacity Value-Based Strategies and Tactics	39 43
Managing for Value	45
Balancing Performance with Value	52
7 7 7 7	3 <b>2</b>

**VIII** CONTENTS

CHAPTER 3	
Sell: Creating Value Through Divestiture	54
Divestiture Creates Value	56
Sources of Value: Motives for Divestiture	58
Alternative Methods of Disposition	60
What Works Best for Whom?	63
What Happens Longer Term?	64
Practical Impediments to Divestiture	65
Financial Policy Considerations	70
Tax Considerations and Structural Refinements	70
CHAPTER 4	
Grow: How To Make M&A Pay	73
M&A Today	73
Transactions that Create Value	77
M&A Fact and Fallacy	81
RX for the "Conglomerate Discount"	86
EVA and M&A	88
How "Serial Acquirers" Create Value	90
Financial Policy Considerations	93
Financing Growth	94
CHAPTER 5	07
Cash and The Optimal Capital Structure	97
Trends and Implications	98
How Much Is Too Much?	100
The Costs and Benefits of Excess Cash	105
How the Market Views Excess Cash	108
Optimal Capital Allocation	109
PART TWO	
Managing the Right-Hand Side of the Balance Sheet	
CHAPTER 6	447
An Executive's Guide to Credit Ratings	117
Trends and Implications	117
Empirical Evidence	123
Limitations of Quantitative Credit Analysis	123
What Metrics Matter Most?	126

<u>Contents</u> ix

Case Study: Treatment of Pension and Postretirement	
Liabilities	131
Multivariate Credit Models	133
Industry Considerations	135
Case Study: Property and Casualty Insurance	135
Application Issues	137
How to Manage Your Agencies	137
Case Study: Illustration of Secured and Unsecured Notching	139
CHAPTER 7 Today's Optimal Capital Structure	141
Value-Based Financial Policy	141
Less Debt Is Now "Optimal"	143
Extend Duration When Rates Are Low	146
Maintain Financial Liquidity to "Insure" Your Equity	149
A New Perspective on Equity	151
Case Study: Does Tech Need Debt?	154
CHAPTER 8	
Dividends and Buybacks: Calibrating Your Shareholder Distributions	160
The Cash Problem	162
Dividends Are Back	163
How Dividends and Buybacks Create Value	165
Should You Increase Your Dividend?	171
How Large Should Your Buyback Program Be?	178
How to Execute Your Share Repurchase Program	181
CHAPTER 9	407
The Stock Liquidity Handbook	187
Measuring Stock Liquidity	188
The "Liquidity Discount"	191
Implications of Stock Illiquidity	192
Solutions to Illiquidity	193
Stock Splits	195
PART THREE	
Managing the Enterprise	
CHAPTER 10	
Strategic Risk Management: Where ERM Meets Optimal	
Capital Structure	203
The Value of Risk Management	204

X CONTENTS

Mapping and Modeling Risk	209
Managing to a Benchmark	213
External Considerations and Constraints	216
ERM Case Study: Metallgesellschaft AG	219
Capital Structure Solutions	220
CHAPTER 11	
Best Practices In Hedging	<b>22</b> 4
Which "Exposure" to Hedge	225
Hedge Horizon	230
Hedge Ratio	232
Options versus Forwards	233
Accounting Considerations	235
Implementation	236
CHAPTER 12	
ERM Case Study: Reengineering The Corporate Pension	238
Why Now?	239
The Problems with Equity	240
The Case for More Bonds	243
Optimal Capital Structure Reprise	246
Capital Markets Solutions	248
The Boots Case	251
Why It Still Hasn't Happened	252
APPENDIX A	
Resources	<b>25</b> 4
Tools and Portals	254
New Research and Literature Search	254
Economic Research and Data	254
News and Market Data	254
Corporate Governance and Compensation Other Agencies	255 255
Endnotes Control of the Control of t	256
References	268
Index	277

#### **Preface**

trategic Corporate Finance provides a "real-world" application of the principles of modern corporate finance, with a practical, investment banking advisory perspective. Building on 15 years of corporate finance advisory experience, this book serves to bridge the chronic gap between corporate finance theory and practice. Topics range from weighted average cost of capital, value-based management and M&A, to optimal capital structure, risk management and dividend/buyback policy.

Chief Financial Officers, Treasurers, M&A and Business Development executives, and their staffs will find this book to be a useful reference guide, with an emphasis more on actionable strategic implications, than tactical methodology per se. Board members and senior operating executives may use this book to better understand issues as well as to prompt questions to ask, and frameworks to employ, to get them to the answers they need. Similarly, investors who read this book will benefit from an improved practical understanding of the corporate finance issues, the degrees of freedom in their management, and their impact on company performance and value. Investment bankers and consultants will use this book for training, and as a general reference guide. Finally, students who wish to better understand how their corporate finance knowledge, skills, and tools might be put to use in the real world should read, and re-read, this book.

Each chapter in this book represents a recurring theme or topic in terms of actual client questions. The material is based on real-world advice and includes much of the thought process and some of the analytics that were undertaken to develop the recommendations. In getting to these views, significant input is drawn from the literature—both the theory and the empirical research—as well as our own empirical work. Early work in the public domain is cited.

This book is organized into three parts. Part One addresses the "left-hand side" of the balance sheet and related performance measurement and valuation topics. Part Two deals with the "right-hand side" of the balance sheet and topics in optimal capital structure. Part Three addresses enterprise management in a holistic approach, as corporate finance issues increasingly require. Each chapter begins with an executive summary to make reading this book a realistic possibility for the reader.

**Xİİ** PREFACE

Part One outlines the principal topics in managing the left-hand side of the balance sheet, following the prevalent "Fix, Sell, Grow" mantra in use today, with an intrinsic value perspective. Chapter 1 provides a comprehensive user's guide to the weighted average cost of capital and all the practical complications that arise in estimating and applying WACC in practice. In Chapter 2 we put this benchmark for value creation to use. Our solution is a deep dive on how to find the sources of value creation, by overcoming the allocation and cost accounting issues that often plague the economic profit framework, as well as traditional performance measures. Chapter 3 makes the case for divestitures, outlining who, why, how, and when. Chapter 4 tackles growth, a difficult step for many that remains under-served by much of the existing literature today, and a topic that demands thoughtful consideration by value-based management enthusiasts. Chapter 5 rounds out Part One with today's hot topic of excess cash: when it matters and what to do about it.

Part Two moves to the right-hand side of the balance sheet to address optimal capital structure. Chapter 6 provides an executive's guide to credit ratings, with trends and implications of today's new ratings climate, discussion of the quantitative approaches to ratings and their limitations, an understanding of the qualitative analysis, and specific discussion around ratings challenges like pensions, excess cash, notching, and the investment grade versus speculative grade worlds. Chapter 7 outlines a framework for optimal capital structure, with special consideration to the key factors and what is different today, and their implications for financial policy. Chapter 8 is a handbook for setting dividend and share repurchase policy, with special attention given to today's growing problem of too much cash. Chapter 9 addresses stock liquidity, an important problem for many smaller and middle market domestic companies, as well as American Depositary Receipts (ADRs) and the vast majority of stocks listed on overseas exchanges.

Part Three elevates the discussion to an enterprise-wide perspective of capital management. Chapter 10 introduces the strategic risk management concept and frameworks, with examples of the interplay between process control efforts, financial and operational hedging, and capital structure solutions. Chapter 11 outlines best practices in financial hedging. Chapter 12 serves as an enterprise risk management (ERM) case study by showing how corporate pensions can be re-engineered to create considerable shareholder value.

# **List of Figures**

Figure 2.1	Cost of Capacity Framework	41
Figure 2.2	Economic Run Length	48
Figure 2.3	Product Value versus Set-Up Time/Cost	49
Figure 2.4	Modified Build to Order (BTO) Concept	50
Figure 2.5	Performance/Value Matrix	52
Figure 3.1	Distribution of Divestiture Returns	57
Figure 4.1	2004 GV and COV per \$1 of Book Capital	74
Figure 4.2	EVA-Based Postacquisition Audit	90
Figure 5.1	Stochastic Solution to Requisite Operating Liquidity	105
Figure 5.2	WACC Considerations	111
Figure 6.1	Short-Term versus Long-Term Ratings	130
Figure 6.2	Illustration of Pension Adjustments	132
Figure 6.3	Regression-Based Credit Model	134
Figure 6.4	Illustration of Notching Up and Notching Down	139
Figure 7.1	Framework for Financial Policy	142
Figure 7.2	Value Proposition of Debt	144
Figure 7.3	Dynamic Strategies Outperform Efficient Frontier	147
Figure 7.4	Volatility and Outlook Drive Liquidity	151
Figure 7.5	WACC Minimization Doesn't Equal	
	Value Maximization	155
Figure 7.6	Framework for Optimal Financial Strength	156
Figure 8.1	Technology Sector Dividends and Buybacks	161
Figure 8.2	Technology Sector Cash and Debt	162
Figure 8.3	Dividend Capacity Analysis	173
Figure 8.4	Dividend Policy	177
Figure 10.1	Lower Volatility Associated With Higher	
	Credit Quality	206
Figure 10.2	The Value of Risk Management Varies	208
Figure 10.3	Components of Enterprise Risk	210
Figure 10.4	Strategic Risk Management Spectrum	220
Figure 11.1	Hedging Alternative Exposures	226
Figure 11.2	Illustration of Layered Hedges	231

## **List of Tables**

Table 1.1	Market-Implied Cost of Equity	8
Table 1.2	Segment Beta Regression Illustration	12
Table 1.3	Multivariate Regression Beta Illustration	13
Table 1.4	Anatomy of a Convertible	15
Table 1.5	Weighted Average Cost of a Convertible	16
Table 1.6	Global Capital Cost Illustration	23
Table 1.7	Lower Hurdle Rates Lead To Higher Returns	
	and Values	25
Table 2.1	Starving the Stars and Feeding the Dogs	30
Table 2.2	Economic Versus Standard Costing	42
Table 2.3	How Operating Initiatives Create Intrinsic Value	48
Table 3.1	Summary of Academic Findings	56
Table 3.2	Divestitures and Dilution	65
Table 4.1	Sustainable Growth	77
Table 4.2	Chemical Sector Earnings Offset Market Multiples	84
Table 4.3	Acquisitions and Dilution	86
Table 4.4	Derivation of Requisite EVA Growth	90
Table 4.5	Select DHR Transactions	92
Table 5.1	Illustration of Strategic Decapitalization	113
Table 6.1	Multicollinearity Matrix	125
Table 7.1	Value Proposition of Excess Cash	159
Table 8.1	Aggregate Shareholder Distribution Practices	
	By Sector	175
Table 8.2	Materiality Levels for Share Buybacks	179
Table 8.3	Sizing and Pricing a Leveraged Recapitalization	180
Table 8.4	Dutch Auction Illustration	185
Table 12.1	Tax Arbitrage Illustration	245
Table 12.2	Roots Case Intrinsic Value	252

## **Acknowledgments**

would like to thank Steve O'Byrne for kindly providing the impetus and resources to produce this book. I would also like to thank Don Chew for his help, and David Champion and Krista Pettit, for teaching me not to write like a scientist. Joel Stern and Bennett Stewart deserve special thanks for their original inspiration, as well as Paul Pilorz and the many other Stern Stewart alum who have provided a valuable sounding board and support network over the years.

Thanks also to the many coverage bankers who repeatedly entrusted me with clients and their questions: Bill Brenizer, Kevin Cox, Rob DiGia, Hakan Erixon, David Gately, Chris Hite, Andrew Horrocks, Tom Ito, Eric Kaye, Karl Knapp, Jan Krizan, Michael Martin, David McCreery, Jeff McDermott, Steve Meehan, Evan Newmark, Michael Robinson, Alejandro Przybygoda, Jeff Sine, Steve Trauber, and Brian Webber, just to name a few. I would also like to acknowledge the contribution of the many capital markets bankers who invested time with me on client issues, aiding my own understanding of their respective "crafts," including, Arun Bansal, Mike Collins, John Doherty, Craig Fitt, Tad Flynn, Adam Frieman, Brian Jennings, Michael Katz, Ryan Lee, Kevin Reynolds, Matt Sperling, Tim Steele, Christian Stewart, Selim Toker, and Adriaan VanDerKnapp. From research, I thank Stephen Cooper and his team. Thanks also to Armen Hovakimian and Tom Copeland for methodological assistance, and the many consulting and banking analysts, who have worked with me on these issues and provided invaluable support. All errors and omissions remain purely my own.

Finally, I wish to thank the many clients who have challenged and entrusted me with their corporate finance concerns and encourage them to continue to do so!

### **About the Author**

nvestment banker and management consultant Justin Pettit draws on his 15 years of corporate finance advisory experience to bring a uniquely practical perspective to the issues and applications of modern corporate finance theory. He advises Boards and senior executives on financial planning, cash and liquidity, dividends and buybacks, optimal capital structure, funding and financing decisions, capital costs and hurdle rates, risk management, and valuation and business strategy.

A popular guest lecturer in advanced corporate finance at Business Schools, seminars, and public conferences such as the Brookings Institute, the Financial Management Association, and Finance Executives Institute, he leads topics in valuation, value-based strategy, and financial policy. He has reviewed for the *Journal of Applied Corporate Finance*, the *Journal of Pension Economics and Finance*, and *Quantitative Finance*. He has assisted the Canadian Institute of Chartered Accountants and the Certified Management Accountants of Canada with issues of disclosure and valuation and performance measurement, and he has been retained by leading Wall Street Analysts for proprietary research support in these areas.

A highly ranked author on the Social Sciences Research Network (ssrn.com), Justin's publications include articles for the *Harvard Business Review*, *Journal of Applied Corporate Finance*, *Corporate Finance Review*, *Industrial Management*, *Business Quarterly*, *Shareholder Value Magazine*, *Air Finance Journal*, and a chapter for the book, *Real Options and Business Strategy*. Justin holds an MBA from the University of Western Ontario, and a BASc in mechanical engineering from the University of Toronto. His author page is www.ssrn.com/author=102597 and email address is justin\_pettit@msn.com.