Taxes and Business Strategy A Planning Approach

Fifth Edition



Scholes • Wolfson • Erickson • Hanlon • Maydew • Shevlin

Fifth Edition

Taxes and Business Strategy

A PLANNING APPROACH

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Myron S. Scholes

Mark A. Wolfson

Merle Erickson

Michelle Hanlon

Edward L. Maydew

Terry Shevlin



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CONTENTS

----(0/0/0)**---**

Preface xiii
Acknowledgments xv
About the Authors xvi

CHAPTER 1 Introduction to Tax Strategy 1

- 1.1 Themes of the Book 1
 - Taxing Authority as Investment Partner 2

The Importance of a Contractual Perspective 4

1.2 Why Do Tax Rules Influence Before-Tax Rates of Return

and Investment Decisions? 4

Implicit Taxes and Tax Clienteles 5

Tax Planning as a Tax-Favored Activity 6

Why Study Tax Planning? 6

- 1.3 Topics Covered in This Book 7
- 1.4 Intended Audience for This Book 9

Summary of Key Points 11

Appendix 1.1 Overview of Calculation of U.S. Income Tax Liability 12

Discussion Questions 13

Exercises 14

Tax-Planning Problems 14

References 15

CHAPTER 2 Tax-Planning Fundamentals 16

2.1 Types of Income Tax Planning 17

Converting Income from One Type to Another 18

Shifting Income from One Pocket to Another 19

Shifting Income from One Time Period to Another 20

2.2 Restrictions on Taxpayer Behavior 21

Economic Substance, Business Purpose, and Substance over Form 21

Constructive-Receipt Doctrine 23

Related-Party versus Arms-Length Contracts 24

Assignment-of-Income Doctrine 24

2.3 The Legislative Process and Sources of Tax Information 25

Primary and Secondary Authorities 25

The Legislative Process 25

Regulations and Revenue Rulings That Result from the Passage of a Tax Act 26

The Role of Judicial Decisions 27

Secondary Authorities 27

Summary of Key Points 28

Appendix 2.1 Sources of Information on Tax Legislation 29

Appendix 2.2 More Detailed Examples of Tax Planning 30

Discussion Questions 31

Exercises 32

Tax-Planning Problems 33

References and Additional Readings 34

CHAPTER 3 Returns on Alternative Savings Vehicles 36

3.1 Intertemporally Constant Tax Rates 37

Review of Compound Interest 39

Investments in Savings Vehicles I and II 39

Hybrid Savings Vehicles 41

Differences in After-Tax Accumulations in Savings Vehicles I and II as a Function of Pretax Rates of Return 42

and it as a Function of Pretax Rates of Return

Investments in Savings Vehicle III 42

Comparison of Savings Vehicles II and III 43

Investments in Savings Vehicle IV 43

Investments in Savings Vehicle V 44

Investments in Savings Vehicle VI 45

Dominance Relations and Empirical Anomalies 46

- 3.2 Changes in Tax Rates over Time 46
- 3.3 More on Pension Plans 47

Traditional Deductible IRAs 48

Nondeductible IRAs 48

Roth IRAs 48

Comparison of the Deductible and Roth IRAs—New Contributions 49

Comparison of the Deductible and Roth IRAs—The Conversion Decision 51

Summary of Key Points 52

Discussion Questions 53

Exercises 54

Tax-Planning Problems 55

References and Additional Readings 57

CHAPTER 4 Choosing the Optimal Organizational Form 58

4.1 Organizational Forms for Producing Goods and Services 60

Data on Partnerships and LLCs 61

Data on Corporations 64

- 4.2 Computation of After-Tax Returns to Pass-Through and Non-Pass-Through Forms of Organization 64
- 4.3 Start-up Enterprises: Decision Factors, Expectations, and Observed Data 67
- 4.4 Changing Preferences for Organizational Forms Induced by Tax-Rule Changes 69

The Required Before-Tax Rates of Return on Corporate and Partnership Activities 70

The Required Rate of Return on Stocks in the Presence of Dividends 72

The Effective Annualized Tax Rate on Shares: t_s 72

Required Before-Tax Rate of Return: Corporations versus Partnerships: R_c^* 73

Post-1986 Tax Reform Act (1987, 1988–1990) 75

Further Analysis of the 2003 Tax Act 76

Progressive Personal Income Tax Rates, t_p and t_{cq} 78

4.5 Other Organizational Forms Through Which to Organize Production Activities 79

Summary of Key Points 81

Appendix 4.1 Dividend Imputation in the Corporate Form 82

Disc Exer Tax-i	endix 4.2 Other Investment Vehicles 84 ussion Questions 85 cises 85 Planning Problems 86 erences and Additional Readings 88
CHAPT	ER 5 Implicit Taxes and Clienteles, Arbitrage, Restrictions, and Frictions 90
5.1	Tax-Favored Status and ImplicitTaxes 92
5.2	The ImplicitTax Rate, the ExplicitTax Rate, and the Total Tax Rate 96
	Computing the Implicit Tax 96
- 0	Total Tax Rates in a Competitive Market 97
5.3	The Importance of Adjusting for Risk Differences 98
5.4	Clienteles 101
	Evidence on the Existence of Implicit Taxes and Clienteles 101
5.5	Implicit Taxes and Corporate Tax Burdens 103
5.6	Tax Arbitrage 104
5.7	Organizational-Form Arbitrage 105 Immediate Tax Rebates When Taxable Income Is Negative 105
	No Tax Rebates on Negative Taxable Income 106
	Restrictions on Organizational-Form Arbitrage 107
	Full Taxation with Deferral and Organizational-Form Arbitrage 107
	The Effects of Frictions on Organizational-Form Arbitrage 108
	Bankruptcy Rules and Organizational-Form Arbitrage 109
	Buying and Selling Implicitly Taxed Assets to Effect Organizational-Form Arbitrage 110
5.8	Clientele-Based Arbitrage 111
	Clientele-Based Arbitrage with Investments in Tax-Favored Assets Other Than Tax-Exempt Bonds 113
	Market Equilibrium with Tax-Exempt Entities 113
	mary of Key Points 114
	endix 5.1 Adjusting for Risk Using the Capital Asset Pricing Model 116
	ussion Questions 116 cises 117
	Planning Problems 118
	erences and Additional Readings 120
CHAPT	ER 6 Nontax Costs of Tax Planning 123
6.1	Symmetric Uncertainty, Progressive Tax Rates, and Risk-Taking 125
	R&D and O&G Activities 126
	Progressive Tax Rates and Hedging 128
6.2	Tax Planning in the Presence of Risk-Sharing and Hidden-Action Considerations 128
	Contracting in Capital Markets 129
	Contracting in Labor Markets 130
	Conflicts between Risk-Sharing and Tax Minimization 131
	Conflicts between Incentive Contracting

6.3 Tax Planning in the Presence of Hidden-Information Considerations 132

and Tax Minimization 131

6.4	Tax Planning	and Organizational Desi	an 134

6.5 Accounting for Income Tax Basics and the Importance of Financial Accounting Outcomes in Tax Plans 135

Accounting for Corporate Income Taxes—Rules and Disclosure Example 137

Examples of Temporary Differences 140

Examples of Permanent Differences 142

Interpreting Income Tax Expense Disclusures 143

Example Illustrating Corporate Income Tax Disclosures 144

FIN 48 Accounting for Uncertain Tax Benefits 149

Examples of Actual Corporate Disclosure 151

Other Details about Unrecognized Tax Benefits 156

Evidence about the Importance of Financial Accounting Income 160

Book-Tax Trade-off: Income Shifting across Time 160

Book-Tax Trade-off: LIFO/FIFO Studies 161

Regulatory Costs 162

Asset Divestitures 162

Dollar Estimates of Firms' Willingness to Forgo Tax Savings 163

Survey Evidence and Anecdotes of Lobbying Activity 163

Summary of Key Points 164

Discussion Questions 166

Exercises 170

Tax-Planning Problems 172

References and Additional Readings 172

CHAPTER 7 The Importance of Marginal Tax Rates and Dynamic Tax-Planning Considerations 175

7.1 Marginal Tax Rate: Definitional Issues 177

Scenario 1: $TI_t < 0$, $NOL_{t-1} = 0$ 178

Scenario 2: $TI_t < 0$, $NOL_{t-1} > 0$ 179

Scenario 3: $TI_t > 0$, $NOL_{t-1} = 0$ 179

Scenario 4: $TI_t > 0$, $NOL_{t-1} > 0$ 180

Evidence on NOLs for U.S. Corporations 180

Estimating Corporate Marginal Tax Rates 181

Additional Details on Local-Level Tax Rates and Individual-Level

Marginal Rates 183

Average and Effective Tax Rates 184

Problems with Average (and Effective) Tax Rates 185

- 7.2 Tax Planning for Low-Marginal-Tax-Rate Firms 186
- 7.3 Adaptability of the Tax Plan 187

Transaction Costs and Tax Clienteles 188

Adaptability in Investment and Financing Decisions 189

- 7.4 Reversibility of Tax Plans 189
- 7.5 Ability to Insure against Adverse Changes in Tax Status 191
- 7.6 Tax Planning When a Taxpayer's Marginal Tax Rate Is Strategy-Dependent 194

Summary of Key Points 195

Appendix 7.1 196

Discussion Questions 196

Exercises 197 Tax-Planning Problems 198 References and Additional Readings 199

CHAPTER 8 Compensation Planning 201

8.1 Salary versus Deferred Compensation 201 Employer and Employee Tax Rates Both Expected to Fall 205 2012 Tax Planning with Deferred Compensation Plans 206 Summary of Deferred Compensation Plans 206

8.2 Salary versus Fringe Benefits 206

Analysis for Taxable Employer 208

Analysis for Tax-Exempt Employer 208

Employer-Provided Meals 208

- 8.3 Cash Bonus Plans 209
- 8.4 Stock-Based Compensation Components 209

Restricted Stock 209

Employee Tax Rates Expected to Rise 213

Long-Term Performance Awards 214

Employee Stock Options and Stock Appreciation Rights 215

Tax Issues Relating to Incentive Stock Options and Nongualified

Stock Options 216

NQOs versus ISOs 217

Evidence on the Role of Taxes in the Choice of ISOs 221

Disqualifying Dispositions of ISOs 222

The Role of Taxes in the NQO Exercise Decision 223

Financial Accounting and Tax Comparison of Restricted Stock, Performance Share Awards, Stock Appreciation Rights, and Stock Options 227

Other Differences between Restricted Stock

and SARS, PSAs, and ESOs 230

Compensation in Venture-Capital-Backed Start-Ups 231

Other Influences of Taxes on Compensation Structure 231

Concluding Remarks 232

Summary of Key Points 232

Appendix 8.1 Accounting for the Tax Benefits of Employee Stock Options 234

Appendix 8.2 SFAS 123 Accounting (up to 2005) for the Tax Benefits of Stock Options 240

Appendix 8.3 Backdating Stock Option Grants 245

Appendix 8.4 Incentive Stock Options and Alternative Minimum Tax Complications 249

Discussion Questions 252

Exercises 254

Tax-Planning Problems 256

References and Additional Readings 258

CHAPTER 9 Pension and Retirement Planning 260

- 9.1 Types of Pension Plans 261
- 9.2 A Comparison of Salary and Pension Compensation 264 Rates of Return on Investments In and Out of Pension Accounts 265 Antidiscrimination Rules 265
- 9.3 Deferred Compensation versus Pension 266

9.4	The Stocks-versus-Bonds Puzzle 267
9.5	Does It Pay to Maintain an Overfunded Pension Plan? 270
	Advantages and Disadvantages 270
	Empirical Evidence on Determinants of Defined Benefit Plan Pension Funding 273
9.6	Funding Post-Employment Health Care Benefits 274
	The Sweetened Pension Benefit Approach 275
	The Pay-as-You-Go Approach 276
0.7	Other Factors Relevant to the Funding Decision 277
	Employee Stock-Ownership Programs 277 mary of Key Points 279
	endix 9.1 Excise Tax Complications 281
	ussion Questions 281
	cises 282
	Planning Problems 283 rences and Additional Readings 285
	-
CHAPT	ER 10 Multinational Tax Planning: Introduction and Investment Decisions 287
10.1	Overview of Multinational Taxation 288
	Avoiding Worldwide Taxation 289
	Operating as a Branch, Partnership, or a Foreign Subsidiary 291
	Foreign Tax Credits 293
	Subpart F Income and Controlled Foreign Corporations (CFCs) 296
10.0	Inversion Transactions 297 How Taxes Affect the Location and Structure of Investments 299
10.2	Large Implicit Taxes and Foreign Investment Incentives 302
10.3	The Decision to Repatriate or Reinvest 304
10.0	Subpart F Income and Controlled Foreign Corporations 306
	A Tax Holiday for Repatriations 307
	Investment and Repatriation Policy When the Foreign Tax Rate Exceeds the Domestic Tax Rate 308
Sumi	mary of Key Points 308
	ussion Questions 309
	cises 309
	Planning Problems 310
	rences and Additional Readings 312
CHAPT	ER 11 Multinational Tax Planning: Foreign Tax Credit Limitations and Income Shifting 313
11.1	Foreign Tax Credit Limitations and Incentives 313
	Example of Excess FTC Limitation 314
	Example of Excess FTC Credit 315

C

Example of FTC with Multiple Subsidiaries 318 Country-by-Country FTC Limitations 319 Separate Basket Limitations 319 FTC Limitations and the Capital Structure of Foreign Subsidiaries 320 11.2 Shifting Income Across Jurisdictions 320

Transfer Pricing 320

Example of Shifting Income via Transfer Pricing 321 Rules to Mitigate Income Shifting via Transfer Pricing 322 Source-of-Income Rules 323 11.3 Attempts to Encourage Exports and/or Domestic Production 323 11.4 U.S. Tax Treatment of Foreign Investors 323 Summary of Key Points 324 Discussion Questions 325 Exercises 326 Tax-Planning Problems 326 References and Additional Readings 328	
CHAPTER 12 Corporations: Formation, Operation, Capital Structure, and Liquidation 330	
12.1 Corporate Formation 331	
12.2 Taxation of Corporate Operations 333	
Book-Tax Differences: Taxable Income versus GAAP Income 333	
Net Operating Losses 334	
Gains and Losses and Tax Basis 334	
Capital Gains and Losses 335	
Section 1231 Assets 335	
Dividends Received Deduction 335	
Consolidated Tax Returns 336	
12.3 Possible Tax Benefits of Leverage in Firms' Capital Structures 33	6
Theory of the Tax Benefits of Leverage 336	
Empirical Work on the Tax Benefits of Leverage 338	
12.4 Debt-Equity Hybrids 339	
Traditional Preferred Stock 339	
Trust Preferred Stock 340	
Zero-Coupon Bonds 342	
12.5 Taxation of Distributions and Share Repurchases 344	
The Concept of Earnings and Profits 345	
Special Kinds of Distributions 347	
Taxation of Share Repurchases 348	
12.6 Tax Planning Using the Tax Rules for Distributions and Share Repurchases 349	
12.7 Taxation of Liquidations 350	
Parent-Subsidiary Liquidations 350	
Summary of Key Points 350	
Discussion Questions 351	
Exercises 352	
References and Additional Readings 352	

CHAPTER 13 Introduction to Mergers, Acquisitions, and Divestitures 354

13.1 Overview of Issues 355

Reasons for Mergers, Acquisitions, and Divestitures 355 Types of Mergers, Acquisitions, and Divestitures 355

13.2	MajorTax Issues Associated with Mergers,
	Acquisitions, and Divestitures 356
	Shareholder Tax Liabilities 356
	Effect on Tax Attributes 357
	Target Corporate-Level Tax Effect of The Merger, Acquisition, or Divestiture 358
	Change in the Tax Basis of the Target or Divested Subsidiary Assets 358
	Effect of Leverage on Mergers and Acquisitions 358
13.3	Nontax Issues in Mergers, Acquisitions, and Divestitures 359
13.4	Five Basic Methods to Acquire a Freestanding C Corporation 359
13.5	Four Methods to Divest a Subsidiary or Line of Business 361
13.6	Tax Deductibility of Goodwill and Other Intangible Assets Under Section 197 362
Sumr	mary of Key Points 362
	ssion Questions 363
Refer	rences and Additional Readings 363
CHAPTE	R 14 Taxable Acquisitions of Freestanding C Corporations 365
	Tax Consequences of Alternative Forms of Corporate Acquisitions 366
	Case 1: Taxable Asset Acquisition Without a
	Complete Liquidation of the Target 367
	Case 2: Sale of the Target Firm's Assets Followed by a Liquidation 369
	Case 3: Purchase of the Target's Stock Followed by a Section 338 Election $$ 370 $$
	Case 4: Purchase of the Target's Stock Without a Section 338 Election 372
14.2	Comparison of Taxable Acquisition Structures 374
	Analysis of Acquiring Firm Indifference Price 378
14.3	Practical Issues Associated with Structuring and Pricing an Acquisition 380
	Estimating the Net Tax Basis of a Target's Assets 380
	mary of Key Points 383
	ssion Questions 384
	ences and Additional Readings 385
петег	erices and Additional neadings 365
CHAPTE	ER 15 Taxable Acquisitions of S Corporations 386
15.1	Tax Consequences of Taxable S Corporation
	Acquisition Structures 387
	Case 1: Taxable Asset Acquisition 388
	Case 2: Taxable Stock Acquisition with a Section 338(h)(10) Election 392
	Case 3: Taxable Stock Acquisition without a Section 338(h)(10) Election 393
	Which Structure Is Optimal in the Sale of an S Corporation? 394
	Advanced Analysis: S Corporation Acquisition 396
15.2	Comparison of the Sale of Similar S and C Corporations 399
	Tax Consequences for T1 and T2 Shareholders in a Taxable Stock Sale 401
	Valuation Consequences and Issues 405

Summary of Key Points 406
Discussion Questions 406
Tax-Planning Problems 407

References and Additional Readings 409

CHAPTER 16 Tax-Free Acquisitions of Freestanding C Corporations 4	CHAPTER 10	Tax-Free Ac	quisitions o	f Freestanding	C	Corporations	4
---	-------------------	-------------	--------------	----------------	---	--------------	---

- 16.1 Basic Types of Tax-Free Reorganizations 411 General Requirements for Tax-Free Treatment under Section 368 411
- 16.2 Section 368 "A" Reorganization: Statutory Merger 413 Requirements to Qualify for Tax-Free Treatment under Section 368(a)(1)(A) 414 Tax Consequences of a Section 368 "A" 414 Nontax Issues Associated with the Section 368 "A" Structure 416 Triangular Mergers 416
- 16.3 Section 368 "B" Reorganization: Stock-for-Stock Acquisition 416 Requirements to Qualify for Tax-Free Treatment under Section 368(a)(1)(B) 417 Tax Consequences of a Section 368 "B" 418 Nontax Issues Associated with the Section 368 "B" Structure 419
- 16.4 Section 368 "C" Reorganization: Stock-for-Assets Acquisition 419 Requirements to Qualify for Tax-Free Treatment Under Section 368(a)(1)(C) 419 Tax Consequences of a Section 368 "C" 420
- 16.5 Tax-Free Reorganizations Under Section 351 421 Requirements for Tax-Free Treatment under Section 351 421 Tax Consequences of a Section 351 Merger 421 Comparison of Tax-Free Acquisition Structures 423
- 16.6 Limitations on Target Firm Tax Attributes 424 How Much Are the Target Firm's NOLs worth? 427 General Limitations on a Firm's NOLs and NOL Poison Pills 428
- 16.7 Quantifying Pricing Differences Between Taxable and Tax-Free Acquisitions of Freestanding C Corporations 428 Additional Complexities 433
- 16.8 Comparison of Taxable and Tax-Free Acquisitions of Freestanding C Corporations 434 Advanced Techniques to Provide Diversification and

Tax-Free Treatment 436 Summary of Key Points 437 Discussion Questions 437 Tax-Planning Problems 438 References and Additional Readings 441

CHAPTER 17 Tax Planning for Divestitures 442

17.1 Subsidiary Sales 443 Tax-Free Subsidiary Sales 443 Taxable Subsidiary Sales 443 Comparison of Taxable Acquisition Structures 450 Additional Complexities: Subsidiary Sale 454 Difference between Subsidiary Sales and Sales of Freestanding C Corporations 456 Valuation Effects 457

17.2 Tax-Free Divestiture Methods 458 Equity Carve-Outs 458 Tax-Free Spin-Offs 461 Factors That Influence Divestiture Method Choice 462 Summary of Key Points 463

Discussion Questions 464

Tax-Planning Problems 464

References and Additional Readings 466

CHAPTER 18 Estate and Gift Tax Planning 467

18.1 Fundamentals of Estate and Gift Taxation 469

Specifics of the Gift Tax 470

Specifics of the Estate Tax 471

Income Tax Consequences of Gifts and Bequests 473

Generation-Skipping Transfer Tax 473

18.2 Estate- and Gift-Planning Strategies 474

Making Full Use of the Annual Gift Tax Exclusion 474

Paying for the Kids' and Grandkids' Educational and Medical Expenses 474

Gifting in Excess of the Annual Exclusion 475

Keeping Life Insurance Out of the Gross Estate 475

Using Each Spouse's Lifetime Exclusion: Credit-Shelter or Bypass Trusts 476

Using the Marriage Deduction to Defer Estate Taxation: QTIPs 476

Family Limited Partnerships 477

Transfers of Knowledge, Information, and Services 477

Charitable Remainder Trusts and Grantor Retained Trusts 478

18.3 Monetizing Appreciated Assets without

Triggering Taxation: A Case Study 478

Taxation of Short Sales 479

The Strategy 479

Congress Takes Action 480

Avoiding the Constructive Sale Rules 480

- 18.4 The Tax Subsidy to Charitable Giving 481
- 18.5 A Model of the Trade-offs Between Gifting now Versus by Bequest 482 The Trade-offs between Gifting and Losing the Step-Up

in Basis on Bequests 483

Summary of Key Points 484

Discussion Questions 485

Exercises 486

Tax-Planning Problems 486

References and Additional Readings 487

Glossary 488

Index 499

PREFACE

his book is written for anyone with an interest in learning about tax strategy. We initially wrote the book for MBA students, but it is also appropriate for undergraduate students, masters of accounting or finance students, and doctoral students. More specifically, this book is appropriate for those embarking on (or already in) careers in investment banking, corporate finance, strategy consulting, money management, or venture capital. The book is valuable to accountants and attorneys who want a rigorous framework for thinking about tax strategy and how tax strategy interacts with other aspects of the firm. In addition, those starting their own businesses and even just managing their own finances will find many aspects of this book valuable.

We recognize that executives, entrepreneurs, and finance professionals are typically not aiming to become tax specialists. However, for each of these paths there is a competitive advantage that comes from a solid understanding of (1) the decision contexts that give rise to tax-planning opportunities, (2) how to integrate tax strategy into the bigger picture of corporate decision making, and (3) the dramatic impact that changes in transaction structure can have on after-tax cash flows.

Every top business school program teaches its students the fundamentals of corporate finance, financial statement analysis, valuation, and investments. Every business school graduate knows how to perform a discounted cash flow analysis and apply the net present value (NPV) criterion—these are valuable skills, but not something that differentiates oneself. Business school programs historically have been deficient, however, at teaching their students about the pervasive role taxes play in decision making. Each of the authors has taught taxes and business strategy at the MBA level and often to students in other business school programs as well. Their courses have been, and are, uniformly popular at their respective institutions. Former students have reported back that they possess a competitive advantage over their peers who know little or nothing about tax strategy. The material in this book draws from and builds on the authors' classroom and business experiences, as well as the experiences of colleagues around the country, and is not duplicated in any other text.

The book's focus comes from integrating the tax law with the fundamentals of corporate finance and microeconomics. Through integration with traditional business school topics, the book provides a framework for understanding how taxes affect decision making, asset prices, equilibrium returns, and the financial and operational structure of firms. Relative to legal-based tax books, this text focuses more on the economic consequences of alternative contracting arrangements than on the myriad details and exceptions of the tax laws governing the arrangements. It is not meant to imply that the details of the tax laws are unimportant; they certainly are important. In fact, students new to tax law will find that this text provides them with significant tax legal knowledge in certain key areas where taxes play a big role in decision making and areas that business school graduates are likely to encounter in their careers (e.g., mergers and acquisitions, employee stock options, international tax). In addition, the book integrates tax with financial accounting by emphasizing differences and tradeoffs between the taxation and the financial accounting of a transaction. Finally, the book presents many general rules about tax law, tax accounting, and financial accounting. The discussion herein is purposefully general to increase user accessibility and readability. However, readers should note that there are exceptions to many of the rules and concepts in this text, and those exceptions can be and often are important.

This book provides a general framework for thinking about tax strategy. Readers should consult professional advisors for advice specific to their fact pattern. Tax laws contain many exceptions and grey areas, and are subject to change. The application of tax law to specific fact patterns can vary widely.

CHANGES IN THE FIFTH EDITION

The text, for the most part, retains the same chapter and topic structure as the prior edition. Our objectives for the revision include:

- Updating the text to reflect major changes in the tax laws
- Adding analyses of selected major tax law changes
- Adding examples relevant to today's economy
- Replacing some old analyses with new, more relevant analyses
- Updating discussion of the empirical literature that provides evidence on many of the predictions emanating from the analyses in the text
- Updating the lists of additional readings, which should be particularly useful to faculty and doctoral students

All chapters have been updated for tax law and financial accounting rule changes since the last edition.

In Chapter 2, we added new examples of tax planning as well as a discussion of the partial codification of the judicial doctrine of economic substance. We updated and moved the material previously in Appendix 2.2 to Chapter 6. This material is a description of the accounting for income tax for financial accounting purposes. The material is now integrated into Chapter 6 where we discuss nontax costs to tax planning because financial accounting effects, including how the taxes are accounted for, are one of the most important nontax costs for firms (especially publicly traded firms).

In Chapter 4, we added a discussion of start-up organizations and the organizational form choice for these businesses. In this discussion, we include the findings from recent research on the topic. We also added data from the Internal Revenue Service (IRS) on organizational form choice over time.

In Chapter 6, beyond integrating the accounting for income taxes into this chapter, we also added a discussion of the increasingly global nature of companies in today's economy and how this affects estimates of taxable income from financial statement information. We also include discussions of recent research on the book-tax tradeoff.

We updated Chapters 8 and 9 to reflect recent compensation practices based on compensation studies.

In Chapters 10 and 11, we expanded the discussion of transfer pricing, updated to reflect the trend toward territorial taxation by most countries other than the United States, updated for changes to the anti-inversion rules, updated for changes to the taxation of people who renounce their U.S. citizenship, and added a description of the efforts to curb cross-border tax evasion.

In Chapter 12 we updated the discussion of the tax benefits of debt to include recent empirical research, and we updated the discussion of debt-equity hybrid securities to account for regulatory changes applicable to banks since the prior edition.

Chapters 13–17 (mergers and acquisitions) are updated to reflect recent tax-law changes as well as to provide additional examples of tax benefits in acquisitions.

In Chapter 18, we updated to account for the back-and-forth changes to the estate and gift tax laws since the prior edition. We also expanded the discussion of estate and gift tax planning using 529 accounts and other aspects of giving for educational expenses, and included a discussion of the new portability feature of unused estate and gift tax exclusions.

For the Instructor

The solutions manual to accompany this text is available for download by instructors only at our Instructor Resource Center at www.pearsonhighered.com/irc.

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Ernest Carraway North Carolina State University

Xia Chen

Singapore Management University

Anthony P. Curatola Drexel University

Dan S. Dhaliwal *University of Arizona*

John R. Dorocak California State University-San Bernadino

Courtney Edwards *University of North Carolina*

Alexander Gelardi University of St. Thomas

Dan Gode Stern School of Business, New York University

John Graham

Duke University

Paul A. Griffin
University of
California–Davis

Steven J. Huddart Pennsylvania State University Stacie Kelley LaPlante
University of Wisconsin

Kimberly G. Key *Auburn University*

Mike R. Kinney
Texas A&M University

Taylor Klett
Sam Houston State
University

Michael Knoll University of Pennsylvania

Lynn Krausse

Bakersfield College

Gil B. Manzon Jr. *Boston College*

Kevin Markle University of Waterloo

Barry Marks
University of
Houston-Clear Lake

Robert Martin

Kennesaw State University

Brian S. Masterson Georgetown University Law Center

Gary L. Maydew

Iowa State University,

retired

Jeffrey Maydew Baker & McKenzie

Robert McDonald Northwestern University

Lil Mills University of Texas-Austin

Mary Margaret Myers
University of Virginia

Kaye J. Newberry *University of Houston*

Patricia Nodoushani *University of Hartford*

Thomas C. Omer University of Nebraska Sonja Rego Indiana University

John R. Robinson University of Texas-Austin

Richard C. Sansing

Dartmouth College

Jim A. Seida University of Notre Dame

Douglas A. Shackelford

University of North

Carolina

Keith Smith George Washington University

William D. Terando Butler University

Ralph B. Tower
Wake Forest University

Shiing-wu Wang University of Southern California

Ira Weiss *University of Chicago*

Craig White
University of New Mexico

Jeffrey Wong
University of Nevada at
Reno

Ronald Worsham Jr. *Brigham Young University*

Robert W. Wyndelts

Arizona State University,
retired

Robert J. Yetman *University of California–Davis*

Frank Zhang Yale School of Management

ABOUT THE AUTHORS

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Myron S. Scholes is the Frank E. Buck Professor of Finance Emeritus at the Stanford University Graduate School of Business since 1996. He was called back to active service in 2010. Professor Scholes is widely known for his seminal work in options pricing, capital markets, tax policies, and the financial services industry. He is co-originator of the Black–Scholes options pricing model, which is the basis of the pricing and risk-management technology that is used to value and to manage the risk of financial instruments around the world. For devising the technology to price options, he was awarded the Alfred Nobel Memorial Prize in Economic Sciences in 1997.

He was the Frank E. Buck Professor of Finance at the Stanford University Graduate School of Business from 1983 to 1996 and a Senior Research Fellow at the Hoover Institution from 1987 to 1996. He received a Ph.D. in 1969 from the University of Chicago, where he served as the Edward Eagle Brown Professor of Finance in the Graduate School of Business from 1974 to 1983 and Director of the Center for Research in Security Prices from 1976 to 1983. He was an Assistant and Associate Professor of Finance at Sloan School of Management, MIT, from 1969 to 1974.

Professor Scholes is a member of the Econometric Society and served as President of the American Finance Association in 1990. Professor Scholes has honorary doctorate degrees from the University of Paris, McMaster University, Louvain University, and Wilfred Laurier University. He has honorary professorships at Nanjing University and Xiamen University, China.

Professor Scholes has consulted widely with many financial institutions, corporations, and exchanges. He is currently Chairman of the Board of Economic Advisers of Stamos Capital Management. He was a Principal and Limited Partner of Platinum Grove Asset Management from 2000–2010. He was a Principal and Limited Partner at Long-Term Capital Management, L.P., an investment management firm, from 1993 to 1998. From 1991 to 1993, he was a Managing Director at Salomon Brothers, a member of Salomon's risk management committee, and Co-Head of its Fixed Income Derivatives Sales and Trading Department, where he was instrumental in building Salomon Swapco, its derivatives intermediation subsidiary, and in expanding its derivative sales and trading group. He currently serves on the mutual fund boards of the Dimensional Fund Advisors Mutual Funds, American Century (Mountain View) Mutual Funds. He was a former director of the Chicago Mercantile Exchange.

Mark A. Wolfson is a Founder and Managing Partner of Jasper Ridge Partners, a discretionary asset manager to prominent families, foundations, and global institutions. He is also a Senior Advisor of Oak Hill Capital Management, LLC. From 1995 to 2013, Mark was affiliated with the Robert M. Bass/Oak Hill organizations. During his tenure with these organizations, he played key roles in the formation of Jasper Ridge Strategic Partners, Jasper Ridge Diversified, and Oak Hill Capital Partners. Mark has served on the boards of directors of numerous public and private companies.

Prior to becoming an investment professional, Dr. Wolfson published extensively on subjects ranging from the financial structure of, and incentive arrangements in, business organizations; to taxes and business strategy; to the effect of information disclosures on the valuation of financial claims. He has won research awards in each of these areas. His current interests, in addition to those already stated, include the industrial organization of the global private equity and investment management industries.

Dr. Wolfson holds the title of Consulting Professor at the Stanford Graduate School of Business, where he has been a faculty member since 1977, including a 3-year term as Associate Dean, and formerly held the title of Dean Witter Professor. He has also taught at the Harvard Business School and the University of Chicago and has been a Visiting Scholar at the Sloan School of Management at the Massachusetts Institute of Technology and the Hoover

Institution at Stanford University. Dr. Wolfson has been a Research Associate at the National Bureau of Economic Research, serves on the Board of Advisors and Executive Committee of the Stanford Institute for Economic Policy Research, and advises the Investment Committee of the William and Flora Hewlett Foundation.

Merle Erickson is a Professor of Accounting at the Booth School of Business at the University of Chicago, where he teaches "Taxes and Business Strategy" in the MBA program. He also teaches a variety of executive education courses dealing with tax planning, financial statement analysis, and GAAP accounting. He received his Ph.D. in 1996 from the University of Arizona and has been at Chicago Booth since then. Professor Erickson's research focuses on issues related to tax and financial accounting in a variety of contexts, and has been published in a number of top journals. He was a co-editor of the Journal of Accounting Research from 2005-2011, and has previously been on the editorial boards of other academic journals. He is the author/editor of Cases in Tax Strategy, and has received national awards for both his teaching and research. Over the course of his career, Erickson has consulted on complex GAAP and tax accounting issues in a variety of contexts (e.g., acquisition, bankruptcy, structured finance, investment planning). His clients have included, among others, the U.S. Department of Justice; the Internal Revenue Service; Fortune 500 companies in various industries; financial institutions including investment banks, law firms, and accounting firms; and individual taxpayers. Professor Erickson is an avid fisherman and received the Angler Award from the Billfish Foundation for releasing the most striped marlin worldwide in 2003.

Michelle Hanlon is the Howard W. Johnson Professor and Professor of Accounting at the MIT Sloan School of Management. She is the Chair of the Accounting Group and the Chair of the Undergraduate Education Committee for Sloan. She also serves as an editor for one of the leading accounting research journals, the Journal of Accounting and Economics.

Professor Hanlon earned her Ph.D. from the University of Washington in 2002 and prior to that worked at KPMG LLP. She teaches taxes and business strategy to Sloan students. She teaches and has taught a variety of other courses, including financial accounting (introductory and intermediate levels) to undergraduates, masters of finance students, and MBA students. She also teaches executive education courses at Sloan and a Ph.D. seminar that is attended by students at Sloan and at other schools via videoconference. Professor Hanlon recently received Sloan's prestigious Jamieson Prize for Excellence in Teaching.

Her research spans both tax areas and financial accounting areas, focusing primarily on the intersection of taxation and financial accounting. Professor Hanlon's recent work examines the economic consequences of U.S. international tax policies for multinational corporations, the capital market and reputational effects of corporate tax avoidance, and the extent of individuallevel offshore tax evasion. She has presented her research at many universities, conferences, and policy forums. Her work has been published in a variety of academic journals and she has won several awards for her research.

In 2012, Professor Hanlon testified in two separate hearings before the U.S. Senate Committee on Finance and the U.S. House of Representatives Committee on Ways and Means about U.S. corporate tax policy. Professor Hanlon was a U.S. delegate to the American Swiss Foundation's Young Leaders Conference in Basel, Switzerland, in 2010.

Edward L. Maydew is the David E. Hoffman Distinguished Professor of Accounting at the University of North Carolina (UNC), Kenan-Flagler Business School. He teaches in the MBA, Masters of Accounting, and Ph.D. programs and is Director of Research at the UNC Tax Center. His research and teaching interests include taxation, accounting, and their roles in economic decisions. He has served on the faculty at the University of Chicago and been a visiting professor at Cornell University. He earned his Ph.D. in 1993 from the University of Iowa and prior to that was employed by a predecessor of PricewaterhouseCoopers in Chicago.

Professor Maydew has published in the Journal of Accounting and Economics, Journal of Accounting Research, The Accounting Review, The Journal of Finance, Review of Accounting Studies, Contemporary Accounting Research, Journal of Public Economics, Auditing: A Journal of Practice and Theory, Journal of the American Taxation Association, and National Tax Journal. He has received a number of research awards, including the Outstanding Manuscript Award from the American Taxation Association three times and the Notable Contributions to the Auditing Literature Award. Business Week named him one of the top professors at his school three times, and he has received teaching awards from his school in each of the following programs: MBA, Masters of Accounting, and Ph.D.

Professor Maydew has served as Chair of the Accounting Area at UNC, a Trustee of the American Taxation Association, and a member of the Board of Directors of the National Tax Association. He consults on accounting and tax issues for a variety of organizations. He has served as an associate editor at the *Journal of Accounting and Economics* and on the editorial boards of several other journals.

Terry Shevlin holds a Paul Merage Chair in Business at the Paul Merage School of Business at the University of California–Irvine (UCI). Currently he serves as the Chair of the American Accounting Association (AAA) Publications Committee, is a member of the AAA Publications Ethics Task Force, and is a member of the Pathways Commission. He serves as the Ph.D. Program Faculty Director and Accounting Area Coordinator at UCI. Prior to joining UCI in the summer of 2012, he worked at the University of Washington Foster School of Business for 26 years, where he was the Paul Piggot/PACCAR Professor of Business Administration and was Chair of the Department of Accounting. He received his Ph.D. from Stanford University in 1986. He teaches or has taught financial accounting at the undergraduate level, taxes and business strategy at the graduate level, and seminars in empirical tax research and capital markets research at the Ph.D. level. He has presented talks on research in taxation at the AAA Doctoral Consortium on three separate occasions and given presentations at the Big 10, PAC 10, and American Taxation Association Doctoral Consortiums.

Professor Shevlin's research has been published in *The Accounting Review, Journal of Accounting Research, Journal of Accounting and Economics, Contemporary Accounting Research, Journal of the American Taxation Association, Journal of Accounting, Auditing and Finance, Review of Accounting Studies, and Accounting Horizons.* In addition to his interest in taxation, his research interests include earnings management, capital markets, and employee stock options. He has been awarded the American Accounting Association Competitive Manuscript Award (twice) and the American Taxation Association Tax Manuscript Award (three times). He has served as editor on three academic journals–*Journal of the American Taxation Association* (1996–1999); Senior Editor, *The Accounting Review* (2002–2005); and Co-editor, *Accounting Horizons* (2009–2012)–and on numerous editorial boards (including the top four accounting journals). He served as President of the American Taxation Association from 2007 to 2008. He was awarded the 2005 Ray M. Sommerfeld Outstanding Tax Educator and was named the AAA 2012 Outstanding Educator.

Introduction to Tax Strategy

After completing this chapter, you should be able to:

- 1. List and briefly explain the three key themes underlying our approach to effective tax planning.
- **2.** Briefly explain the concept of implicit taxes.
- **3.** Briefly explain the concept of tax clienteles.
- **4.** Explain the difference between effective tax planning and tax minimization.
- **5.** Understand that explicit taxes affect pretax rates of return.
- **6.** Understand that tax planning is a tax-favored activity.

ur broadest objective in this book is to provide you with a framework that is useful for thinking about how taxes affect decisions—both at the individual level and within organizations.

The framework we develop is highly integrative. For example, **investment strategies** and **financing**

policies within firms are linked through taxes. That is, the investments that a firm undertakes depend on how they are financed. In addition, financing decisions depend on the investments that the firm undertakes. By investments we mean not only the actively managed assets the firm uses to run its business but also passive assets such as bonds, stocks, and direct investments in other entities.

Although we discuss start-up entities and choice of organizational form to some extent, much of our focus is on the evolving strategies applicable to existing firms. These firms make incremental investment and financing decisions that depend, in part, on past investment and financing decisions. New strategies depend on past strategies because it is costly to adjust investment and financing decisions once they have been made. From this brief introduction, it is obvious that we take a rather broad look at how taxes affect decisions and strategies.

1.1 THEMES OF THE BOOK

We adopt a planning approach to taxes and business strategy. More precisely, we adopt a global planning approach. The three key themes of this book's global planning framework are:

- 1. Effective tax planning requires the planner to consider the tax implications of a proposed transaction for *all parties* to the transaction. This is a global or multilateral, rather than a unilateral, approach.
- 2. Effective tax planning requires the planner to consider *all taxes*. For example, in making investment and financing decisions, we consider not only **explicit taxes** (tax dollars paid directly to taxing authorities) but also **implicit taxes** (taxes that are paid indirectly in the form of lower before-tax rates of return on tax-favored investments). We are interested in a global measure of taxes, not simply explicit taxes.

3. Effective tax planning requires the planner to recognize that taxes represent only one among many business costs and that *all costs* must be considered in the planning process. For example, to be implemented, some proposed tax plans may require exceedingly costly restructuring of the business.

It is important to recognize that effective tax planning and tax minimization are very different things. Effective tax planning involves considering the role of taxes when implementing the decision rule of maximizing after-tax returns. In a world of costly contracting, implementation of tax-minimization strategies can introduce significant costs along nontax dimensions. For example, suppose an employer's tax rate is expected to increase while the employee's tax rate is expected to remain constant in the next period. Deferring payment of compensation to the employee until a later period saves taxes but subjects the employee to the risk of nonpayment if the firm goes bankrupt. The employee may require an additional payment (a risk premium) to compensate him or her for the increased risk. Therefore, the tax-minimization strategy may be undesirable. A particularly easy way to minimize taxes is to avoid investing in profitable ventures, but this does not maximize after-tax returns. Our framework emphasizes the various elements a tax planner needs to take into account in maximizing the after-tax return on any transaction being considered.

We view efficient tax planning as part of the larger problem of the efficient design of organizations. In developing this organizational design theme, we adopt a **contractual perspective**. Contracts specify the rights of various parties to make decisions and to receive cash flows in differing circumstances. We focus on how the tax-related cash flows specified by contracts affect the prices at which assets are traded. We further stress how these cash flows affect the ways in which production is organized by business units.

Taxing Authority as Investment Partner

All of the interesting problems in tax planning arise because, from the standpoint of taxpaying entities, the taxing authority is an uninvited party to all contracts. The taxing authority brings to each of its "forced" ventures with taxpayers a set of contractual terms (tax rules). Unlike other contracting parties, the taxing authority generally does not negotiate these terms separately for each venture. Such a policy would simply be too expensive. Instead, it announces a standard set of terms taxpayers must accept. In addition, although the taxing authority claims an interest in taxpayer profits, it exercises no voting rights. Moreover, being a partner in all firms enables the taxing authority to determine when taxpayers are reporting results far out of line with what other taxpayers are reporting in similar situations (information that is used to select returns for audit).

The specific contractual rules (the U.S. Tax Code) that the taxing authority imposes on its joint venturers result from a variety of socioeconomic forces. Among other things, taxes are designed (1) to finance public projects (such as national defense and a legal system that enforces property rights), (2) to redistribute wealth (high-income individuals pay tax at higher rates than do low-income individuals), and (3) to encourage a variety of economic activities deemed by Congress to be in the public interest (such as research and development and oil and gas exploration).

From a social policy standpoint, tax rules are most controversial when they are designed to discriminate among different economic activities. Success is achieved when the tax rules subsidize activities that benefit society as a whole more than they benefit the individuals engaging directly in the activities. For example, Congress subsidizes research and development (R&D) through a tax credit based on R&D spending by the firm. Society benefits to the extent that the tax credit stimulates additional R&D. But this desirable outcome is by no means guaranteed because it is possible that special tax favors are bestowed undeservedly on taxpayers who mount successful lobbying efforts.

For better or for worse, **tax-favored treatment** is granted to a variety of activities by taxing authorities around the world. Common examples include the favorable treatment accorded charitable organizations and educational institutions, energy-related investments, research and

development activities, agricultural production, investments in productive equipment, foreign export activities, retirement-oriented savings vehicles, and entrepreneurial risk-taking activities.

Noble as the objectives listed earlier might be (finance public projects, redistribute wealth, and encourage economic activities), any tax system designed to achieve a variety of social goals inevitably provides considerable private incentives to engage in tax planning. Any tax system that seeks both to redistribute wealth as well as to subsidize certain economic activities gives rise to explicit marginal tax rates that may vary widely from one contracting party to the next, for a given contracting party over time, and for a given contracting party over different economic activities.

Most taxpayers around the world pay no more tax than they believe they must and they spend nontrivial resources to arrange their affairs to keep the tax bite as painless as possible. It is precisely this behavior that provides tax policy with so much potential as a means of achieving a variety of social goals.

To illustrate, consider the case of low-income housing that U.S. citizens, through their elected representatives, have chosen to subsidize for many years through various tax benefits. If taxpayers were not responsive to these tax incentives (and refused to build low-income housing to garner the tax benefits), subsidizing low-income housing through tax policy would be ineffective. Instead, the government would have to enter on the expenditure side, engaging directly in the construction and management of the low-income housing itself. Both tax subsidies and direct government expenditures to increase the supply of low-income housing generate deadweight costs. This suggests that we must be careful in criticizing tax subsidies if we desire to achieve our social objectives. The direct government expenditure alternative might be far more costly than a tax system that favors private construction of the properties.

Another example is renewable energy credits, which are offered by states and the federal government. Many of these credits are allowed to be "sold" to other taxpaying entities that can use the credits, leading to tax-equity investment structures. One form of this structure is where high-rate taxpayers finance projects in exchange for partial ownership and access to the energy credits from low-tax-rate energy developers, thus providing financing to the renewable-energy venture. Such tax-credit transfers have led to a new line of work as well—"tax-credit brokers" to match buyers and sellers (e.g., Tax Credits, LLC and Clocktower Tax Credits). One alternative would be for the government to give grants directly to the low-tax-rate energy developer instead of the tax credits that then need to be sold. Indeed, the American Recovery and Reinvestment Act of 2009 allowed taxpayers eligible for the Federal Renewable Electricity Production Tax Credit (PTC) to take the Federal Business Energy Investment Tax Credit (ITC) or to receive a grant from the U.S. Treasury Department instead of taking the PTC for new installations. The grant was only available to systems where construction began prior to December 31, 2011.

Although the deadweight costs associated with time spent in tax planning may seem socially wasteful, the relevant question is how much waste would exist using alternative means to achieve the same social goals. In other words, how does the net benefit of the altered economic activity brought about by the tax system compare with the net benefits of the next best alternative? Obviously, if we could implement social policy through a mechanism that would result in zero waste, we would do so, but this is not always a realistic goal.

Tax planning (or tax avoidance, as it is sometimes more pejoratively labeled) has long earned the blessing of the U.S. courts. For example, in a famous 1947 court opinion, Judge Learned Hand wrote (and similar statements appear in official documents of other countries as well):

Over and over again courts have said that there is nothing sinister in so arranging one's affairs as to keep taxes as low as possible. Everybody does so, rich or poor, and all do right, for nobody owes any public duty to pay more than the law demands: taxes are enforced exactions, not voluntary contributions. To demand more in the name of morals is mere cant.

The Importance of a Contractual Perspective

Morality issues aside, let us now return to the first of the three key themes that run throughout the book, namely, that to organize production to maximize after-tax return requires that the tax positions of all parties to the contract be considered, both at the time of contracting and in the future. To avoid operating at a competitive disadvantage, managers must understand how changes in tax rules influence the behavior of their customers, their employees, their suppliers, and their competitors. Among other things, this observation exposes the naiveté of distinguishing between business tax planning and personal tax planning, or of tax planning for one type of business in isolation from tax planning for all other types of business.

For example, as we will see in later chapters, it is costly to prescribe an effective compensation policy for a firm without simultaneously conducting some personal tax-planning analysis for each of its employees. Similarly, it is costly to prescribe an effective capital structure policy for a firm (that is, determining whether operations should be financed with debt, preferred stock, common stock, or other financial instruments) without simultaneously considering how the returns to prospective lenders and shareholders of the firm will be taxed.

To be more concrete, consider the decision of whether business equipment should be bought or leased. In the United States, as in most countries around the world, the government encourages capital investment by permitting rapid depreciation on buildings, equipment, and machinery. That is, the business can deduct the cost of the investment from its taxable income using a schedule in which the write-off rate for tax purposes exceeds the rate of economic depreciation of the investment. Alternatively, if a business entity rented plant and equipment over its economic life, the rental payments could be deducted only as they were made. The present value of rental deductions is often far less than the present value of depreciation deductions.

We cannot conclude, however, that owning assets minimizes the taxes of all firms using machinery and equipment in their businesses. Once we analyze the tax positions of both low-tax-bracket and high-tax-bracket taxpayers, we might find low-tax-bracket taxpayers are better off passing up tax savings and renting. The reason is that low-tax-bracket and high-tax-bracket businesses will find it desirable to enter into a contract that arranges property rights so that the low-tax-bracket businesses effectively sell their tax benefits to high-tax-bracket businesses. This is accomplished by reducing the rental rate to the low-tax-bracket taxpayer in exchange for the right to take rapid depreciation, for tax purposes, on the equipment.

1.2 WHY DO TAX RULES INFLUENCE BEFORE-TAX RATES OF RETURN AND INVESTMENT DECISIONS?

Tax rules affect the **before-tax rates of return** on assets. By before-tax rate of return, we mean the rate of return earned from investing in an asset before any taxes are paid to domestic and foreign federal, state, and local taxing authorities. To illustrate our point, let r = R(1-t) where R is the before-tax rate of return, t is the tax rate, and t is the after-tax rate of return. A superficial analysis of this relation suggests that if we increase the tax rate, that is, increase t, then the after-tax rate is lowered (and vice versa). However, this analysis ignores the possibility that the tax rules affect the before-tax rate of return. If we expand the analysis to include multiple taxpayers facing different tax rates and multiple assets with their returns being taxed differently, then this simple result is no longer valid. Consider two bonds, a tax-exempt municipal bond where the interest on the bond is tax exempt at the federal level and a fully taxable corporate bond where the interest is fully taxed at the federal level. Further assume there are taxpayers facing a low tax rate and others facing a high tax rate. Taxpayers facing a high tax rate are expected to bid up the price of the tax-exempt municipal bond because this bond or cash flow stream is tax favored to them. Bidding up

the price for a given promised cash flow stream will lower the before-tax rate of return, *R*. Thus, the tax rules affect before-tax rates of return.

This simple example explains why some taxpayers select investments with high before-tax rates of return whereas others select assets with low before-tax rates of return even when both types of investments are available to all taxpayers. On the assets side of the economic balance sheet, we emphasize that before-tax rates of return differ because (1) the returns on different types of assets are taxed differently, (2) the returns on similar assets are taxed differently if they are located in different tax jurisdictions, (3) the returns on similar assets located in the same tax jurisdiction are taxed differently if they are held through different legal organizational forms (such as a corporation versus a sole proprietorship), and (4) the returns on similar assets located in the same tax jurisdiction and held through the same legal organizational form are taxed differently depending on such factors as the operating history of the organization, the returns to other assets held by the organization, and the particular characteristics of the individual owners of the organization.

Tax rules also influence the financing decisions of firms through their effect on the cost of financing the firms' activities. A firm is said to make a "capital structure decision" when it decides how it will finance its activities. The capital structure of a firm is composed of various types of ownership claims, some called debt and others called equity. We emphasize that the cost of issuing a capital structure instrument depends on the tax treatment it is accorded, which, in turn, depends on whether the instrument (1) is *debt*, *equity*, or a *hybrid*; (2) is issued to an *employee*, a *customer*, a *related party*, a *bank*, or a number of other special classes of suppliers of capital; and (3) is issued by a *corporation*, *partnership*, or some other legal *organizational form*. It also depends on the tax jurisdiction in which the capital structure instrument is issued.

Implicit Taxes and Tax Clienteles

The earlier leasing example and the municipal bond example both illustrate two very important concepts we will encounter time and time again throughout the text:

- 1. Implicit taxes
- 2. Tax clienteles

Implicit taxes arise because the before-tax investment returns available on tax-favored assets are less than those available on tax-disfavored assets. In the rent-or-buy example, a reduction in the rental rate is required to induce renters to forego the tax benefits of ownership, and this decreases the pretax investment return garnered by property lessors. Another example of implicit taxes is our example of the reduced yield available on tax-exempt municipal bonds in the United States relative to taxable corporate bonds of equal risk. Here, the reduced yield represents an implicit tax paid to the issuing municipalities rather than to the federal government.

As an example of the common misunderstanding of implicit taxes, consider an article published by the *Wall Street Journal* when John Kerry was running for president and his wife, Teresa Heinz Kerry, released her tax returns. The article stated that because Mrs. Kerry had \$2.78 million in tax-exempt interest from municipal bonds that she was not paying her fair share of taxes because her tax rate was below other wealthy Americans and also below many in the middle class. What the author of the article was incorrectly ignoring is the implicit taxes that Mrs. Kerry was paying by accepting a lower pretax rate of return on the municipal bond investment. Once the implicit tax (lower pretax return) is taken into account, her total tax rate was much higher than the 12.4% computed in the article.

^{1 &}quot;Teresa's Fair Share," Wall Street Journal, October 18, 2004.

The **tax clienteles** and implicit tax concepts are closely related. Tax clienteles arise because of cross-sectional differences in tax rates. Certain taxpayers are more likely than others to own various kinds of assets or to organize production in particular ways. Examples of tax clienteles are high-tax-bracket taxpayers who are more likely to hold tax-exempt municipal bonds rather than taxable corporate bonds and who are more likely to be lessors and owners of depreciable equipment rather than lessees. In our previous example, Teresa Heinz Kerry is more likely to own a municipal bond because she is a high-explicit-rate taxpayer, and the after-tax return on the municipal bond is likely higher than the after-tax rate of return on fully taxed bonds and assets. Mrs. Kerry, as someone in the highest income tax bracket, bears implicit taxes on municipal bonds at a rate slightly lower than the explicit tax rate she would otherwise be subject to on fully taxable income. With every topic we cover throughout the book we will encounter implicit taxes, tax clienteles, or both concepts.

Tax Planning as a Tax-Favored Activity

One reason governments use tax policy to encourage (or discourage) a variety of economic activities is that tax planning itself is a tax-favored activity. Specifically, money spent on tax planning is tax deductible, whereas any tax savings arising from the tax planning are effectively tax exempt because they reduce taxes payable.

Suppose a taxpayer could invest \$10,000 in fully taxable corporate bonds for 1 year that yield 10% per annum before taxes. If the taxpayer faces a marginal tax rate of 28%, the after-tax rate of return is 7.2% (calculated as $.10 \times [1 - .28]$). Alternatively, suppose the taxpayer could invest in tax-planning services for \$10,000 to save \$11,000 in taxes in the current year. The pretax rate of return is 10%. However, the after-tax rate of return is 13.89%, calculated as the tax savings net of the tax-planning cost, \$1,000, divided by the after-tax cost of the tax-planning services, $10,000 \times (1-.28)$ or 1,000/\$7,200. Note that the tax-favored treatment of tax planning results here in an after-tax rate of return higher than the pretax rate of return. In this case, tax planning is more tax favored than is tax exemption (a situation in which an asset escapes explicit taxation such that the after-tax rate of return equals the pretax rate of return). Note also that the aftertax return to tax planning depends on the taxpayer's marginal tax rate. For a taxpayer facing a marginal tax rate of 15%, the after-tax rate of return is 11.76%, calculated as 1,000/ 10,000 \times (1-.15)]. For a taxpayer facing a 35% tax rate, the after-tax rate of return is 15.38%, or \$1,000/ $[$10,000 \times (1-.35)]$. The after-tax returns are largest for high-tax-rate investors, so these taxpayers tend to be most responsive to tax-rule changes and tend to spend the most on the services of tax accountants and tax lawyers.

Why Study Tax Planning?

We answer this question with the following simple example. Suppose there were two skills that you could acquire: tax-planning and investing expertise. Further suppose you could only learn one. You are faced with the following fact pattern. You are endowed with \$5,000 of after-tax cash, have a 20-year investment horizon, and face a current marginal tax rate of 35%, which also is the rate you expect to face over the next 20 years. You expect that investing passively in an index fund will generate a 10% pretax return each year for the next 20 years.

You choose to learn tax-planning skills and invest passively. You invest in a pension plan (such as a 401[k] plan, discussed in more detail in Chapter 3) such that the after-tax cost of the investment is \$5,000. The investment is tax deductible, whereas tax on the returns in this plan is deferred until the end of the investment horizon. The after-tax accumulation from this investment is²

$$\frac{\$5,000}{(1-.35)} (1+.10)^{20} (1-.35) = \$33,650.$$

² The formula used to calculate the accumulations is developed and discussed in more detail in Chapter 3. Our purpose here is simply to show the after-tax accumulations under the various alternatives and the advantages of (or returns to) tax-planning skills.

Suppose instead you choose investing expertise and behave as a day trader, actively moving in and out of stocks. You hold stock no longer than 1 month and thus there is no deferral of taxes on your annual returns. How much would you have to earn pretax to match the returns to the basic tax-planning example just presented? Because the basic tax planning example earns 10% after-tax per year, you would need to earn 15.38% pretax per year on your actively managed portfolio to earn 10% after-tax per year (15.38%[1-.35] = 10%).

But what if, more realistically for most taxpayers, you just *thought* you could beat the market but really could not, and your active portfolio management yielded a 10% pretax return per year? In this case you would accumulate after-tax after 20 years as follows:

$$5,000 (1 + .10 [1 - .35])^{20} = $17,618$$

which is substantially less than the return to basic tax planning.

But, of course, tax planning and investing expertise are not mutually exclusive. Consider now what happens if you can beat the market *and* be a good tax planner. That is, you invest in a pension plan such as a 401(k) plan *and* actively manage the investment in the plan, earning a 14% annual pretax rate of return for the next 20 years. Because the investment is in a 401(k) plan, the tax on the annual returns is deferred until the funds are withdrawn in 20 years. The after-tax accumulation at the end of 20 years is now

$$\frac{\$5,000}{(1-.35)} (1+.14)^{20} (1-.35) = \$68,717.$$

Firms spend billions of dollars on tax-planning activities and on tax compliance, which refers to record-keeping and return-preparation activities. For example, Slemrod and Blumenthal (1993) report that the 1,329 active firms in the Internal Revenue Service's Coordinated Examination Program spent approximately \$1.4 billion on federal-tax-related activities in 1991. These firms paid \$51 billion in taxes, or over 50% of the total corporate tax revenues, in 1991. Mills, Erickson, and Maydew (1998) estimate that large corporations save, on average, \$4 for every \$1 spent on tax-planning activities. Thus not only is tax planning a big business, but the returns on investment in tax planning can be very large.

1.3 TOPICS COVERED IN THIS BOOK

We have outlined some of the major themes of the book, so let us now describe how the book develops. In the next chapter, we cover some fundamentals of tax planning: the structure and evolution of tax laws, including a discussion of how tax laws are changed in the United States. This material is important if we are to appreciate current and future tax-rule uncertainty. In Chapters 3 and 4, we illustrate how *identical production and investment strategies* can be undertaken by taxpayers through a variety of different legal organizational forms, each of which is taxed very differently. We go on to show how the after-tax returns from investing through some organizational forms dominate the returns from investing through other organizational forms. We also discuss the nontax costs that might weigh on the decision about which organizational form to choose.

In Chapter 5, we focus on *different investments* undertaken within a *given organization*. Differences in the tax treatment of investment returns give rise to implicit taxes that bring after-tax returns of these differentially taxed assets into closer alignment with one another. We also demonstrate that when there are *no costs* to implementing certain tax-planning strategies, the availability of alternative legal organizational forms and investment projects that are taxed differently provides an opportunity to eliminate all income taxes through simple **arbitrage techniques**

³ Firms are included in the Coordinated Examination Program based on their size and complexity of return: the larger and more complex the return, the greater the likelihood of inclusion in the program. The tax returns of most of these firms are audited by the Internal Revenue Service each year.

(generating positive after-tax returns by buying one asset while simultaneously selling another asset with neither investment cost nor risk). In addition, we show that when there are no costs to implementing certain tax-planning strategies, differentially taxed assets force all taxpayers in the economy to pay taxes on their last dollar of income at identical tax rates, no matter how wealthy they are and no matter how progressive the legislated tax-rate schedule is. Again, the availability of simple arbitrage techniques ensures this outcome. A corollary here is that there will be no distinct tax clienteles. At the margin, all taxpayers will be indifferent to whether they hold tax-favored or tax-disfavored investments.

But these results have miserable predictive power. Even the most casual empiricists can confirm two counterpropositions: (1) the government collects substantial tax revenues and (2) taxpayers do not all face the same marginal tax rate; tax clienteles not only exist, they are pervasive.

Obviously, some important economic forces have been omitted from the analysis in the first five chapters. We complete Chapter 5 by incorporating the importance of frictions and tax-rule restrictions. By **frictions**, we mean transaction costs incurred in the marketplace that make implementation of certain tax-planning strategies costly. By **tax-rule restrictions**, we mean restraints imposed by the taxing authority that prevent taxpayers from using certain tax-arbitrage techniques to reduce taxes in socially undesirable ways. It is these frictions and restrictions that make the potential returns to tax planning so high. Once tax-planning strategies have been implemented, they may be very costly to reverse or change as economic circumstances, including the tax rules themselves, change. We complete the development of the conceptual framework in Chapters 6 and 7 by exploring tax planning in the presence of (1) uncertainty concerning pretax investment returns and tax rules, (2) nontax costs, and (3) difficulties of estimating taxpayers' marginal tax rates. Chapter 6 also includes an explanation of the accounting rules for corporate income taxes. Knowledge of these rules can help tax planners interpret firms' disclosures and possibly glean information about their tax-planning activities. Furthermore, the accounting for income taxes is an important nontax factor in firms' tax decisions.

In the second part of the book, we apply the concepts developed in the first seven chapters to a variety of organizational settings. We begin in Chapters 8 and 9 with compensation and pension planning, respectively, where we emphasize the importance of considering the tax consequences of compensation alternatives to both the employer *and* the employee. We also stress the importance of nontax factors in designing efficient compensation policies.

In Chapters 10 and 11 we add a crucial dimension to the tax-planning problem by introducing different tax jurisdictions and multinational tax planning. In multinational businesses, a given taxpayer may face different tax rates in different tax jurisdictions. Such a taxpayer may have an incentive to enter into transactions that transfer income out of highly taxed pockets and into modestly taxed pockets in the same pair of trousers. But one need not own pants with differentially taxed pockets to exploit differences in tax rates across taxpayers. Unrelated taxpayers facing different tax rates can also contract with one another to shift taxable income from those facing high tax rates to those facing low tax rates.

In Chapter 12, we apply the framework to an analysis of corporate capital structure decisions. Here we see that taxes encourage two kinds of marriages between firms and capital suppliers: those between high-tax-rate firms and low-tax-rate capital suppliers and those between low-tax-rate firms and high-tax-rate capital suppliers. Moreover, the kinds of financial instruments issued in the two relationships are very different. This chapter also emphasizes that financing decisions cannot be made without simultaneously considering the tax characteristics of the asset side of the firm's balance sheet. We describe a number of legal organizational forms that have arisen to effect a repackaging of claims to both tax deductions and different types of taxable (and nontaxable) income.

Chapters 13 through 17 are devoted to corporate reorganizations and restructurings. Among the distinctive features of these chapters is the way we model the effect of taxes on acquisition and divestiture structures and pricing. These analyses explicitly incorporate the tax preferences of buyers and sellers of corporate ownership rights.

In Chapter 18, our final chapter, we emphasize the importance of integrating estate and gift-tax-planning considerations into the income-tax-planning problem. We consider the degree to which tax laws encourage both charitable and noncharitable gifts. Moreover, we assess the extent to which the tax laws encourage charitable transfers relative to noncharitable transfers. We further analyze the trade-offs between lifetime transfers of wealth and bequests. We examine the most common estate-planning techniques, including family limited partnerships, life insurance trusts, bypass trusts, and charitable remainder trusts. As in most of the other applications chapters, we pay considerable attention to the nontax aspects of the tax-planning problem.

1.4 INTENDED AUDIENCE FOR THIS BOOK

This book is appropriate for two categories of people:

- 1. Tax planners: Those who wish to avoid being beaten by other tax planners and by social planners. We use the term tax planners broadly. All individuals earning an income by working either for themselves or for another taxpayer can be viewed as tax planners, as they will find themselves encountering transactions and decisions with tax implications. This is especially true for MBA students, graduate tax students, undergraduate business and law students, and entrepreneurs from a variety of fields, the intended target audiences for this book.
- **2.** Social planners: Those who wish to participate in the design of effective social policies, while at the same time avoid being beaten by other social planners and by tax planners.

We believe that a course built around the ideas developed in this book differs fundamentally from traditional courses offered in business schools, law schools, and economics programs. These other courses tend to focus on: (1) tax policy, with the objective of exploring the macroeconomic effects of existing or proposed tax systems, or (2) tax law, concerned with principles of tax laws and judicial doctrines or with the details of the tax rules themselves and the ways to minimize taxes for a given set of transactions. Neither of these courses focuses on planning which transactions ought to take place, and our book falls into neither of these camps. We develop neither a macro-tax-policy approach nor a transactional-tax-law approach. Instead, we adopt a *microe*conomic perspective. Our interest is in the implications of tax rules for individual and firm behavior.

Similarly, our primary goal is neither to evaluate the welfare effects of various tax rules nor to provide narrow training to exploit "tax loopholes." It is true that we will occasionally appear to take much pleasure in describing clever tax-planning techniques. And although our objective is certainly *not* to teach you how to "beat" the tax system, we will provide you with the tools necessary to successfully tax plan. This means that we are providing you with the tools to evaluate whether the tax system is meeting its various legislative objectives without giving rise to excessive distortions in economic activity. And perhaps most important, we hope that you will come away from reading this book recognizing that our framework applies to far broader issues than simply how taxes factor into business decisions. The framework can be applied to many nontax policies and regulations or many nontax costs as well.

Our intent is that this framework can be applied with respect to tax planning in many jurisdictions and over time. For example, global tax systems are constantly evolving to deal with changing revenue needs and changing economic forces. Thus, the tax rules vary across jurisdictions (countries and jurisdictions within countries) and the rules in almost all jurisdictions change over time. For example, what many call the last major restructuring of the U.S. Tax Code was instigated by the Tax Reform Act of 1986. However, the Tax Reform Act of 1986 is unusual only in the *degree* of change it introduced into the U.S. Tax Code; congressional bills that introduce major changes in tax rules are by no means unusual. Congress passed bills that changed the U.S. Tax Code in 20 of the 25 years preceding the 1986 restructuring and in nearly every year since 1986. Calls for major tax reform have been growing in the past decade and getting louder in the past few years. Absent a framework to determine the implications of the rules for business