

GLOBAL
EDITION



Taxes and Business Strategy

A Planning Approach

FIFTH EDITION

Scholes • Wolfson • Erickson • Hanlon • Maydew • Shevlin

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Fifth Edition
Global Edition

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A PLANNING APPROACH



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CONTENTS



Preface 13
Acknowledgments 15
About the Authors 16

CHAPTER 1 Introduction to Tax Strategy 19

- 1.1 Themes of the Book 19
 - Taxing Authority as Investment Partner 20
 - The Importance of a Contractual Perspective 22
- 1.2 Why Do Tax Rules Influence Before-Tax Rates of Return and Investment Decisions? 22
 - Implicit Taxes and Tax Clienteles 23
 - Tax Planning as a Tax-Favored Activity 24
 - Why Study Tax Planning? 24
- 1.3 Topics Covered in This Book 25
- 1.4 Intended Audience for This Book 27

Summary of Key Points 29
Appendix 1.1 Overview of Calculation of U.S. Income Tax Liability 30
Discussion Questions 31
Exercises 32
Tax-Planning Problems 32
References 33

CHAPTER 2 Tax-Planning Fundamentals 34

- 2.1 Types of Income Tax Planning 35
 - Converting Income from One Type to Another 36
 - Shifting Income from One Pocket to Another 37
 - Shifting Income from One Time Period to Another 38
- 2.2 Restrictions on Taxpayer Behavior 39
 - Economic Substance, Business Purpose, and Substance over Form 39
 - Constructive-Receipt Doctrine 41
 - Related-Party versus Arms-Length Contracts 42
 - Assignment-of-Income Doctrine 42
- 2.3 The Legislative Process and Sources of Tax Information 43
 - Primary and Secondary Authorities 43
 - The Legislative Process 43
 - Regulations and Revenue Rulings That Result from the Passage of a Tax Act 44
 - The Role of Judicial Decisions 45
 - Secondary Authorities 45

Summary of Key Points 46
Appendix 2.1 Sources of Information on Tax Legislation 47
Appendix 2.2 More Detailed Examples of Tax Planning 48
Discussion Questions 49
Exercises 50
Tax-Planning Problems 51
References and Additional Readings 52

CHAPTER 3 Returns on Alternative Savings Vehicles 54

- 3.1 Intertemporally Constant Tax Rates 55
 - Review of Compound Interest 57
 - Investments in Savings Vehicles I and II 57
 - Hybrid Savings Vehicles 59
 - Differences in After-Tax Accumulations in Savings Vehicles I and II as a Function of Pretax Rates of Return 60
 - Investments in Savings Vehicle III 60
 - Comparison of Savings Vehicles II and III 61
 - Investments in Savings Vehicle IV 61
 - Investments in Savings Vehicle V 62
 - Investments in Savings Vehicle VI 63
 - Dominance Relations and Empirical Anomalies 64
- 3.2 Changes in Tax Rates over Time 64
- 3.3 More on Pension Plans 65
 - Traditional Deductible IRAs 66
 - Nondeductible IRAs 66
 - Roth IRAs 66
 - Comparison of the Deductible and Roth IRAs—New Contributions 67
 - Comparison of the Deductible and Roth IRAs—The Conversion Decision 69
- Summary of Key Points* 70
- Discussion Questions* 71
- Exercises* 72
- Tax-Planning Problems* 73
- References and Additional Readings* 75

CHAPTER 4 Choosing the Optimal Organizational Form 76

- 4.1 Organizational Forms for Producing Goods and Services 78
 - Data on Partnerships and LLCs 79
 - Data on Corporations 82
- 4.2 Computation of After-Tax Returns to Pass-Through and Non-Pass-Through Forms of Organization 82
- 4.3 Start-up Enterprises: Decision Factors, Expectations, and Observed Data 85
- 4.4 Changing Preferences for Organizational Forms Induced by Tax-Rule Changes 87
 - The Required Before-Tax Rates of Return on Corporate and Partnership Activities 88
 - The Required Rate of Return on Stocks in the Presence of Dividends 90
 - The Effective Annualized Tax Rate on Shares: t_s 90
 - Required Before-Tax Rate of Return: Corporations versus Partnerships: R_c^* 91
 - Post-1986 Tax Reform Act (1987, 1988–1990) 93
 - Further Analysis of the 2003 Tax Act 94
 - Progressive Personal Income Tax Rates, t_p and t_{cg} 96
- 4.5 Other Organizational Forms Through Which to Organize Production Activities 97
- Summary of Key Points* 99
- Appendix 4.1 Dividend Imputation in the Corporate Form* 82

<i>Appendix 4.2 Other Investment Vehicles</i>	84
<i>Discussion Questions</i>	103
<i>Exercises</i>	103
<i>Tax-Planning Problems</i>	104
<i>References and Additional Readings</i>	106

CHAPTER 5 Implicit Taxes and Clienteles, Arbitrage, Restrictions, and Frictions 108

5.1	Tax-Favored Status and Implicit Taxes	110
5.2	The Implicit Tax Rate, the Explicit Tax Rate, and the Total Tax Rate	114
	Computing the Implicit Tax	114
	Total Tax Rates in a Competitive Market	115
5.3	The Importance of Adjusting for Risk Differences	116
5.4	Clienteles	119
	Evidence on the Existence of Implicit Taxes and Clienteles	119
5.5	Implicit Taxes and Corporate Tax Burdens	121
5.6	Tax Arbitrage	122
5.7	Organizational-Form Arbitrage	123
	Immediate Tax Rebates When Taxable Income Is Negative	123
	No Tax Rebates on Negative Taxable Income	124
	Restrictions on Organizational-Form Arbitrage	125
	Full Taxation with Deferral and Organizational-Form Arbitrage	125
	The Effects of Frictions on Organizational-Form Arbitrage	126
	Bankruptcy Rules and Organizational-Form Arbitrage	127
	Buying and Selling Implicitly Taxed Assets to Effect Organizational-Form Arbitrage	128
5.8	Clientele-Based Arbitrage	129
	Clientele-Based Arbitrage with Investments in Tax-Favored Assets Other Than Tax-Exempt Bonds	131
	Market Equilibrium with Tax-Exempt Entities	131
	<i>Summary of Key Points</i>	132
	<i>Appendix 5.1 Adjusting for Risk Using the Capital Asset Pricing Model</i>	134
	<i>Discussion Questions</i>	134
	<i>Exercises</i>	135
	<i>Tax-Planning Problems</i>	136
	<i>References and Additional Readings</i>	138

CHAPTER 6 Nontax Costs of Tax Planning 141

6.1	Symmetric Uncertainty, Progressive Tax Rates, and Risk-Taking	143
	R&D and O&G Activities	144
	Progressive Tax Rates and Hedging	146
6.2	Tax Planning in the Presence of Risk-Sharing and Hidden-Action Considerations	146
	Contracting in Capital Markets	147
	Contracting in Labor Markets	148
	Conflicts between Risk-Sharing and Tax Minimization	149
	Conflicts between Incentive Contracting and Tax Minimization	149

6.3	Tax Planning in the Presence of Hidden-Information Considerations	150
6.4	Tax Planning and Organizational Design	152
6.5	Accounting for Income Tax Basics and the Importance of Financial Accounting Outcomes in Tax Plans	153
	Accounting for Corporate Income Taxes—Rules and Disclosure Example	155
	Examples of Temporary Differences	158
	Examples of Permanent Differences	160
	Interpreting Income Tax Expense Disclosures	161
	Example Illustrating Corporate Income Tax Disclosures	162
	FIN 48 Accounting for Uncertain Tax Benefits	167
	Examples of Actual Corporate Disclosure	169
	Other Details about Unrecognized Tax Benefits	174
	Evidence about the Importance of Financial Accounting Income	178
	Book-Tax Trade-off: Income Shifting across Time	178
	Book-Tax Trade-off: LIFO/FIFO Studies	179
	Regulatory Costs	180
	Asset Divestitures	180
	Dollar Estimates of Firms' Willingness to Forgo Tax Savings	181
	Survey Evidence and Anecdotes of Lobbying Activity	181
	<i>Summary of Key Points</i>	182
	<i>Discussion Questions</i>	184
	<i>Exercises</i>	188
	<i>Tax-Planning Problems</i>	190
	<i>References and Additional Readings</i>	190

CHAPTER 7 The Importance of Marginal Tax Rates and Dynamic Tax-Planning Considerations 193

7.1	Marginal Tax Rate: Definitional Issues	195
	Scenario 1: $TI_t < 0$, $NOL_{t-1} = 0$	196
	Scenario 2: $TI_t < 0$, $NOL_{t-1} > 0$	197
	Scenario 3: $TI_t > 0$, $NOL_{t-1} = 0$	197
	Scenario 4: $TI_t > 0$, $NOL_{t-1} > 0$	198
	Evidence on NOLs for U.S. Corporations	198
	Estimating Corporate Marginal Tax Rates	199
	Additional Details on Local-Level Tax Rates and Individual-Level Marginal Rates	201
	Average and Effective Tax Rates	202
	Problems with Average (and Effective) Tax Rates	203
7.2	Tax Planning for Low-Marginal-Tax-Rate Firms	204
7.3	Adaptability of the Tax Plan	205
	Transaction Costs and Tax Clienteles	206
	Adaptability in Investment and Financing Decisions	207
7.4	Reversibility of Tax Plans	207
7.5	Ability to Insure against Adverse Changes in Tax Status	209
7.6	Tax Planning When a Taxpayer's Marginal Tax Rate Is Strategy-Dependent	212
	<i>Summary of Key Points</i>	213
	<i>Appendix 7.1</i>	214

Discussion Questions 214
Exercises 215
Tax-Planning Problems 216
References and Additional Readings 217

CHAPTER 8 Compensation Planning 219

- 8.1 Salary versus Deferred Compensation 219
 - Employer and Employee Tax Rates Both Expected to Fall 223
 - 2012 Tax Planning with Deferred Compensation Plans 224
 - Summary of Deferred Compensation Plans 224
- 8.2 Salary versus Fringe Benefits 224
 - Analysis for Taxable Employer 226
 - Analysis for Tax-Exempt Employer 226
 - Employer-Provided Meals 226
- 8.3 Cash Bonus Plans 227
- 8.4 Stock-Based Compensation Components 227
 - Restricted Stock 227
 - Employee Tax Rates Expected to Rise 231
 - Long-Term Performance Awards 232
 - Employee Stock Options and Stock Appreciation Rights 233
 - Tax Issues Relating to Incentive Stock Options and Nonqualified Stock Options 234
 - NQOs versus ISOs 235
 - Evidence on the Role of Taxes in the Choice of ISOs 239
 - Disqualifying Dispositions of ISOs 240
 - The Role of Taxes in the NQO Exercise Decision 241
 - Financial Accounting and Tax Comparison of Restricted Stock, Performance Share Awards, Stock Appreciation Rights, and Stock Options 245
 - Other Differences between Restricted Stock and SARS, PSAs, and ESOs 248
 - Compensation in Venture-Capital-Backed Start-Ups 249
 - Other Influences of Taxes on Compensation Structure 249
 - Concluding Remarks 250
 - Summary of Key Points* 250
 - Appendix 8.1 Accounting for the Tax Benefits of Employee Stock Options* 252
 - Appendix 8.2 SFAS 123 Accounting (up to 2005) for the Tax Benefits of Stock Options* 258
 - Appendix 8.3 Backdating Stock Option Grants* 263
 - Appendix 8.4 Incentive Stock Options and Alternative Minimum Tax Complications* 267
 - Discussion Questions* 270
 - Exercises* 272
 - Tax-Planning Problems* 274
 - References and Additional Readings* 276

CHAPTER 9 Pension and Retirement Planning 278

- 9.1 Types of Pension Plans 279
- 9.2 A Comparison of Salary and Pension Compensation 282
 - Rates of Return on Investments In and Out of Pension Accounts 283
 - Antidiscrimination Rules 283

- 9.3 Deferred Compensation versus Pension 284
- 9.4 The Stocks-versus-Bonds Puzzle 285
- 9.5 Does It Pay to Maintain an Overfunded Pension Plan? 288
 - Advantages and Disadvantages 288
 - Empirical Evidence on Determinants of Defined Benefit Plan Pension Funding 291
- 9.6 Funding Post-Employment Health Care Benefits 292
 - The Sweetened Pension Benefit Approach 293
 - The Pay-as-You-Go Approach 294
 - Other Factors Relevant to the Funding Decision 295
- 9.7 Employee Stock-Ownership Programs 295
 - Summary of Key Points* 297
 - Appendix 9.1 Excise Tax Complications* 299
 - Discussion Questions* 299
 - Exercises* 300
 - Tax-Planning Problems* 301
 - References and Additional Readings* 303

CHAPTER 10 Multinational Tax Planning: Introduction and Investment Decisions 305

- 10.1 Overview of Multinational Taxation 306
 - Avoiding Worldwide Taxation 307
 - Operating as a Branch, Partnership, or a Foreign Subsidiary 309
 - Foreign Tax Credits 311
 - Subpart F Income and Controlled Foreign Corporations (CFCs) 314
 - Inversion Transactions 315
- 10.2 How Taxes Affect the Location and Structure of Investments 317
 - Large Implicit Taxes and Foreign Investment Incentives 320
- 10.3 The Decision to Repatriate or Reinvest 322
 - Subpart F Income and Controlled Foreign Corporations 324
 - A Tax Holiday for Repatriations 325
 - Investment and Repatriation Policy When the Foreign Tax Rate Exceeds the Domestic Tax Rate 326
 - Summary of Key Points* 326
 - Discussion Questions* 327
 - Exercises* 327
 - Tax-Planning Problems* 328
 - References and Additional Readings* 330

CHAPTER 11 Multinational Tax Planning: Foreign Tax Credit Limitations and Income Shifting 331

- 11.1 Foreign Tax Credit Limitations and Incentives 331
 - Example of Excess FTC Limitation 332
 - Example of Excess FTC Credit 333
 - Example of FTC with Multiple Subsidiaries 336
 - Country-by-Country FTC Limitations 337
 - Separate Basket Limitations 337
 - FTC Limitations and the Capital Structure of Foreign Subsidiaries 338
- 11.2 Shifting Income Across Jurisdictions 338

- Transfer Pricing 338
- Example of Shifting Income via Transfer Pricing 339
- Rules to Mitigate Income Shifting via Transfer Pricing 340
- Source-of-Income Rules 341

11.3 Attempts to Encourage Exports and/or Domestic Production 341

11.4 U.S. Tax Treatment of Foreign Investors 341

Summary of Key Points 342

Discussion Questions 343

Exercises 344

Tax-Planning Problems 344

References and Additional Readings 346

CHAPTER 12 Corporations: Formation, Operation, Capital Structure, and Liquidation 348

12.1 Corporate Formation 349

12.2 Taxation of Corporate Operations 351

Book-Tax Differences: Taxable Income versus GAAP Income 351

Net Operating Losses 352

Gains and Losses and Tax Basis 352

Capital Gains and Losses 353

Section 1231 Assets 353

Dividends Received Deduction 353

Consolidated Tax Returns 354

12.3 Possible Tax Benefits of Leverage in Firms' Capital Structures 354

Theory of the Tax Benefits of Leverage 354

Empirical Work on the Tax Benefits of Leverage 356

12.4 Debt-Equity Hybrids 357

Traditional Preferred Stock 357

Trust Preferred Stock 358

Zero-Coupon Bonds 360

12.5 Taxation of Distributions and Share Repurchases 362

The Concept of Earnings and Profits 363

Special Kinds of Distributions 365

Taxation of Share Repurchases 366

12.6 Tax Planning Using the Tax Rules for Distributions and Share Repurchases 367

12.7 Taxation of Liquidations 368

Parent-Subsidiary Liquidations 368

Summary of Key Points 368

Discussion Questions 369

Exercises 370

References and Additional Readings 370

CHAPTER 13 Introduction to Mergers, Acquisitions, and Divestitures 372

13.1 Overview of Issues 373

Reasons for Mergers, Acquisitions, and Divestitures 373

Types of Mergers, Acquisitions, and Divestitures 373

13.2 Major Tax Issues Associated with Mergers, Acquisitions, and Divestitures	374
Shareholder Tax Liabilities	374
Effect on Tax Attributes	375
Target Corporate-Level Tax Effect of The Merger, Acquisition, or Divestiture	376
Change in the Tax Basis of the Target or Divested Subsidiary Assets	376
Effect of Leverage on Mergers and Acquisitions	376
13.3 Nontax Issues in Mergers, Acquisitions, and Divestitures	377
13.4 Five Basic Methods to Acquire a Freestanding C Corporation	377
13.5 Four Methods to Divest a Subsidiary or Line of Business	379
13.6 Tax Deductibility of Goodwill and Other Intangible Assets Under Section 197	380
<i>Summary of Key Points</i>	380
<i>Discussion Questions</i>	381
<i>References and Additional Readings</i>	381

CHAPTER 14 Taxable Acquisitions of Freestanding C Corporations 383

14.1 Tax Consequences of Alternative Forms of Corporate Acquisitions	384
Case 1: Taxable Asset Acquisition Without a Complete Liquidation of the Target	385
Case 2: Sale of the Target Firm's Assets Followed by a Liquidation	387
Case 3: Purchase of the Target's Stock Followed by a Section 338 Election	388
Case 4: Purchase of the Target's Stock Without a Section 338 Election	390
14.2 Comparison of Taxable Acquisition Structures	392
Analysis of Acquiring Firm Indifference Price	396
14.3 Practical Issues Associated with Structuring and Pricing an Acquisition	398
Estimating the Net Tax Basis of a Target's Assets	398
<i>Summary of Key Points</i>	401
<i>Discussion Questions</i>	402
<i>Tax-Planning Problems</i>	402
<i>References and Additional Readings</i>	403

CHAPTER 15 Taxable Acquisitions of S Corporations 404

15.1 Tax Consequences of Taxable S Corporation Acquisition Structures	405
Case 1: Taxable Asset Acquisition	406
Case 2: Taxable Stock Acquisition with a Section 338(h)(10) Election	410
Case 3: Taxable Stock Acquisition without a Section 338(h)(10) Election	411
Which Structure Is Optimal in the Sale of an S Corporation?	412
Advanced Analysis: S Corporation Acquisition	414
15.2 Comparison of the Sale of Similar S and C Corporations	417
Tax Consequences for T1 and T2 Shareholders in a Taxable Stock Sale	419
Valuation Consequences and Issues	423
<i>Summary of Key Points</i>	424
<i>Discussion Questions</i>	424
<i>Tax-Planning Problems</i>	425
<i>References and Additional Readings</i>	427

CHAPTER 16 Tax-Free Acquisitions of Freestanding C Corporations 428

- 16.1 Basic Types of Tax-Free Reorganizations 429
 - General Requirements for Tax-Free Treatment under Section 368 429
- 16.2 Section 368 "A" Reorganization: Statutory Merger 431
 - Requirements to Qualify for Tax-Free Treatment under Section 368(a)(1)(A) 432
 - Tax Consequences of a Section 368 "A" 432
 - Nontax Issues Associated with the Section 368 "A" Structure 434
 - Triangular Mergers 434
- 16.3 Section 368 "B" Reorganization: Stock-for-Stock Acquisition 434
 - Requirements to Qualify for Tax-Free Treatment under Section 368(a)(1)(B) 435
 - Tax Consequences of a Section 368 "B" 436
 - Nontax Issues Associated with the Section 368 "B" Structure 437
- 16.4 Section 368 "C" Reorganization: Stock-for-Assets Acquisition 437
 - Requirements to Qualify for Tax-Free Treatment Under Section 368(a)(1)(C) 437
 - Tax Consequences of a Section 368 "C" 438
- 16.5 Tax-Free Reorganizations Under Section 351 439
 - Requirements for Tax-Free Treatment under Section 351 439
 - Tax Consequences of a Section 351 Merger 439
 - Comparison of Tax-Free Acquisition Structures 441
- 16.6 Limitations on Target Firm Tax Attributes 442
 - How Much Are the Target Firm's NOLs worth? 445
 - General Limitations on a Firm's NOLs and NOL Poison Pills 446
- 16.7 Quantifying Pricing Differences Between Taxable and Tax-Free Acquisitions of Freestanding C Corporations 446
 - Additional Complexities 451
- 16.8 Comparison of Taxable and Tax-Free Acquisitions of Freestanding C Corporations 452
 - Advanced Techniques to Provide Diversification and Tax-Free Treatment 454
- Summary of Key Points 455*
- Discussion Questions 455*
- Tax-Planning Problems 456*
- References and Additional Readings 459*

CHAPTER 17 Tax Planning for Divestitures 460

- 17.1 Subsidiary Sales 461
 - Tax-Free Subsidiary Sales 461
 - Taxable Subsidiary Sales 461
 - Comparison of Taxable Acquisition Structures 468
 - Additional Complexities: Subsidiary Sale 472
 - Difference between Subsidiary Sales and Sales of Freestanding C Corporations 474
 - Valuation Effects 475
- 17.2 Tax-Free Divestiture Methods 476
 - Equity Carve-Outs 476
 - Tax-Free Spin-Offs 479
 - Factors That Influence Divestiture Method Choice 480

Summary of Key Points 481
Discussion Questions 482
Tax-Planning Problems 482
References and Additional Readings 484

CHAPTER 18 Estate and Gift Tax Planning 485

18.1 Fundamentals of Estate and Gift Taxation 487
 Specifics of the Gift Tax 488
 Specifics of the Estate Tax 489
 Income Tax Consequences of Gifts and Bequests 491
 Generation-Skipping Transfer Tax 491

18.2 Estate- and Gift-Planning Strategies 492
 Making Full Use of the Annual Gift Tax Exclusion 492
 Paying for the Kids' and Grandkids' Educational and Medical Expenses 492
 Gifting in Excess of the Annual Exclusion 493
 Keeping Life Insurance Out of the Gross Estate 493
 Using Each Spouse's Lifetime Exclusion: Credit-Shelter or Bypass Trusts 494
 Using the Marriage Deduction to Defer Estate Taxation: QTIPs 494
 Family Limited Partnerships 495
 Transfers of Knowledge, Information, and Services 495
 Charitable Remainder Trusts and Grantor Retained Trusts 496

18.3 Monetizing Appreciated Assets without Triggering Taxation: A Case Study 496
 Taxation of Short Sales 497
 The Strategy 497
 Congress Takes Action 498
 Avoiding the Constructive Sale Rules 498

18.4 The Tax Subsidy to Charitable Giving 499

18.5 A Model of the Trade-offs Between Gifting now Versus by Bequest 500
 The Trade-offs between Gifting and Losing the Step-Up in Basis on Bequests 501

Summary of Key Points 502
Discussion Questions 503
Exercises 504
Tax-Planning Problems 504
References and Additional Readings 505

Glossary 506

Index 517

PREFACE



This 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.pearsonglobaleditions.com/scholes.

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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.

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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.

Our 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.

(Commissioner v. Newman, 159 F.2d 848 [CA-2, 1947])

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 r 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.¹ 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 "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 after-tax 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 1991.³ 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 *microeconomic* 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

decisions, the knowledge gained in a rules-oriented course represents little more than accumulated trivia. This is precisely what led to the development of this book. We think that the basic toolkit we provide you is appropriate to deal with virtually any tax regime we are likely to experience in the future. Moreover, we believe you can use these tools just as appropriately to study non-U.S. taxes as to study U.S. taxes.

All changes in tax regimes involve turning two kinds of dials:

1. Levels of tax rates
2. Relative tax rates:
 - Across different taxpaying units,
 - Across different tax periods for the same taxpayer, and
 - Across different economic activities for the same taxpayers and same time period.

Our framework is designed to deal with just such differences; our intent is to make you leaders rather than followers in understanding how business activities inevitably become reorganized as the rules of the game evolve.

Table 1.1 presents the top income tax rates faced by individuals and corporations over the last 30 years. This table illustrates the incentives faced by individual taxpayers to have income taxed at more favorable capital gains tax rates, to shift income across periods, and to organize their investment activities in corporate form. The table also illustrates how these incentives change over time as both the level and relative tax rates change.

Although this is not a rules-oriented book, you will still learn a good deal about current income tax rules. This is necessary for three reasons: (1) to breathe life into the basic framework through illustrations, (2) to test the basic framework's ability to explain economic activities that are going on around us, and (3) to help you to apply the basic framework to specific decision contexts that many of you now face or will be facing in short order. For readers with little background in taxes, we present a simple introduction to the calculation of both individual taxpayers' and corporate taxpayers' tax liability in the appendix to this chapter. We also define some common tax terms in this appendix.

Table 1.1 Historical Top Statutory Tax Rates

Time Period	Individual		C Corporation	
	Ordinary Income	Capital Gains	Ordinary Income	Capital Gains
Pre-1981	.70	.28	.46	.28
1982-1986	.50	.20	.46	.28
1987	.39	.28	.40	.28
1988-1990	.28	.28	.34	.34
1991-1992	.31	.28	.34	.34
1993-1996	.396	.28	.35	.35
1997-2000	.396	.20	.35	.35
2001-2002	.386	.20	.35	.35
2003-2012	.35	.15	.35	.35
2013-	.396*	.20*	.35	.35

*Starting in 2013, there is also a .9% additional tax (beyond what we show here) on wage income and an additional 3.8% additional tax on investment income for individuals with modified adjusted gross income greater than \$250,000 (joint filers). These additional taxes were put in place to finance the national health care plan enacted by President Obama—the Patient Protection and Affordable Care Act.

Finally, some of the empirical academic literature we cite to provide evidence on issues raised in the framework refers to results gathered around the 1986 Tax Reform Act. At first, this evidence might seem dated. However, the 1986 Act provided an outstanding laboratory for academics to subject tax predictions to empirical tests. Academics continue to examine data from around the 1986 Act to test their theories. Our justification for including these references to the 1986 Act, and for academics continuing to use these data, is that the evidence collected and cited is timeless. It speaks to the framework's predictive power rather than to the specific tax rules analyzed in a particular study. This quality is consistent with our focus on a framework for analysis rather than on the specifics of sometimes highly technical but constantly changing tax rules.

Summary of Key Points

1. Tax rules are pervasive in their effect on the investment and financing decisions of businesses.
2. Because it is costly to recontract, investment and financing decisions that have been made in the past influence current and future investment and financing decisions.
3. Tax rules influence investment and financing decisions because they affect the before-tax rates of return on investment and financing alternatives. More highly explicitly taxed investments require higher before-tax rates of return compared with alternatives that bear low explicit taxes. Investment and financing alternatives that face low explicit taxes (due to favored treatment under the tax law) bear high implicit taxes.
4. Taxpayers with low marginal tax rates are encouraged by the tax system to contract with taxpayers facing high marginal tax rates.
5. All tax-planning actions are tempered by the nontax costs of achieving tax savings.
6. Effective tax planning means considering (a) the tax implications of a proposed transaction to all parties of the contract; (b) explicit taxes, implicit taxes, and tax clienteles; and (c) the costs of implementing various tax-planning strategies.
7. Tax planning is a tax-favored activity in that the investment is tax deductible and the pay-offs (reductions in tax payable) are tax exempt. The higher the taxpayer's marginal tax rate, the higher the returns to tax planning.

Appendix 1.1

Overview of Calculation of U.S. Income Tax Liability

Exhibit 1.1 presents the basic tax formula for determining federal income tax liability for corporations and individual taxpayers. We start our description with economic income, which is defined as income from whatever source (wages and salaries, dividend and interest income, sales revenue, appreciation in assets owned, etc.). Economic income includes both realized and unrealized increases in the taxpayer's wealth. Unrealized income is (generally) excluded from taxation until realized via the sale of the underlying asset. Taxation is deferred until realization because at that point the taxpayer

presumably has the cash from the sale to pay the taxes due. This leaves realized income, but not all realized income is taxable. The tax code specifically excludes from taxation some types of income. Major items of income excluded are gifts and inheritances, life insurance proceeds, social welfare payments, certain payments for injury and sickness, certain employer-provided fringe benefits, interest on state and local government (municipal) bonds, and gain from sale of a personal residence (subject to certain restrictions). After these exclusions, we are left with gross income.

EXHIBIT 1.1 Basic Tax Formula

<u>Corporation</u>	<u>Individuals</u>
Economic income	Economic income
- <u>Unrealized income</u>	- <u>Unrealized income</u>
= Realized income (\$61)	= Realized income (\$61)
- <u>Exclusions</u>	- <u>Exclusions</u>
= Gross income	= Gross income
- <u>Deductions</u>	- <u>Deductions for AGI</u>
	= Adjusted Gross Income (AGI)
	- <u>Deductions from AGI</u>
	1. Max (itemized deductions or the standard deduction)*
	2. Exemptions*
= Taxable income	= Taxable income
× <u>Tax rate</u>	× <u>Tax rates**</u>
= Gross tax	= Gross tax
- <u>Credits</u>	- <u>Credits</u>
= Regular tax	= Regular tax
+ Excess (if any) of tentative minimum tax over the regular tax***	+ Excess (if any) of tentative minimum tax over the regular tax***
= Federal income tax liability	= Federal income tax liability

* Phase-outs apply as AGI increases.

** Different tax schedules apply depending on filing status (single, married filing jointly, married filing separately, head of household)

*** The tax code refers to this as the alternative minimum tax.

Taxpayers then deduct allowable items to arrive at taxable income. Note that all income is included in gross income unless specifically identified in the tax code as an allowable exclusion. In contrast, expenditures are not deductible unless specifically identified in the tax code. For corporations, all costs incurred in carrying on a trade or business are allowed as deductions. Examples include wages and salary paid to employees, cost of goods sold, depreciation on plant and equipment, interest on borrowings, and state and local taxes. A percentage of dividends received on investments in other companies is also allowed to be deducted (the so-called corporate-dividends-received

deduction discussed in further detail in later chapters). Note that whereas interest on borrowings is deductible, dividends paid to the firm's shareholders are not tax deductible to the paying corporation.

The calculation of taxable income for individual taxpayers is slightly more complex because deductions are partitioned into two categories: deductions *for* adjusted gross income and deductions *from* adjusted gross income. Deductions for adjusted gross income (AGI) are generally expenses associated with the individual taxpayer carrying on a trade or business. Deductions from AGI are personal expenses that Congress has chosen to allow as deductions.