Entrepreneurial Finance
Venture Capital, Deal Structure & Valuation, Second Edition

CONTENTS

List of Illustrations xiii
Abbreviations xix
Preface xxiii
Acknowledgments xxix
About the Authors xxxi

PART 1 Getting Started

Chapter 1 Introduction 3
  1.1 What Makes Entrepreneurial Finance Different from Corporate Finance? 3
  1.2 Entrepreneurship and the Entrepreneur 9
  1.3 Hypothesis-Driven Entrepreneurship 17
  1.4 The Stages of New Venture Development 23
  1.5 Financial Performance and Stages of New Venture Development 25
  1.6 The New Venture Business Model 28
  1.7 Summary 30
    Review Questions 31
    Notes 32
    References and Additional Reading 33

Chapter 2 New Venture Financing: Considerations and Choices 36
  2.1 The Sequence of New Venture Financing 37
  2.2 Sources of New Venture Financing 39
  2.3 What’s Different About Financing Not-for-Profit Ventures? 59
  2.4 Organizational Form and Financing Choices 61
  2.5 Regulatory Considerations 62
PART 2 Financing of High-Risk, High Growth Ventures

Chapter 3 Venture Capital and Angel Investing 83

3.1 Development of the Venture Capital Market 84
3.2 The Organization of Venture Capital Firms 94
3.3 Investment Returns and Compensation 103
3.4 Impact of Compensation on Investment Selection 107
3.5 Aspects of the VC Industry Structure 108
3.6 How Venture Capitalists Can Add Value 110
3.7 Luck Versus Skill: What Accounts for Venture Capital Success? 112
3.8 The Role of Reputation in the Venture Capital Market 113
3.9 Angel Investing 114
3.10 Summary 118
    Review Questions 119
    Notes 119
    References and Additional Reading 122

Chapter 4 Venture Deals 126

4.1 The Economic Framework for Financial Contracting 127
4.2 Essentials of Contract Design 132
4.3 Elements of VC Deal Structure 138
4.4 Analysis of Key Term Sheet Provisions 149
4.5 Deal Structures of Angel Investments 156
PART 3 Financial Aspects of Strategic Planning

Chapter 5 New Venture Strategy and Real Options 169

5.1 Product Market, Financial, and Organizational Strategy 169
5.2 The Interdependence of Strategic Choices: An Example 171
5.3 What Makes a Plan or Decision Strategic? 172
5.4 Financial Strategy 172
5.5 Deciding on the Objective 173
5.6 Strategic Planning for New Ventures 175
5.7 Recognizing Real Options 177
5.8 Strategic Planning and Decision Trees 182
5.9 Decision Trees and Contract Negotiation 191
5.10 Rival Reactions and Game Trees 192
5.11 Real Options with Continuous Distributions 197
5.12 Summary 199

Review Questions 199
Notes 200
References and Additional Reading 201

Chapter 6 Developing Venture Strategy Using Simulation 204

6.1 Use of Simulation in Business Planning: An Example 205
6.2 Who Relies on Simulation? 207
6.3 Simulation in New Venture Finance 207
6.4 Simulation: An Illustration 209
6.5 Simulating the Value of a Financial Option 214
6.6 Describing Risk 216
6.7 Using Simulation to Evaluate a Strategy 219
6.8 Valuing Real Options and Comparing Strategic Choices 228
6.9 Summary 239
    Review Questions 239
    Notes 240
    References and Additional Reading 242

PART 4 Financial Forecasting and Assessing Financial Needs

Chapter 7 Revenue Forecasting 245
    7.1 Principles of Financial Forecasting 246
    7.2 Forecasting Revenue 247
    7.3 Estimating Uncertainty 254
    7.4 Building a New Venture Revenue Forecast: An Illustration 256
    7.5 Introducing Uncertainty to the Forecast: Continuing the Illustration 259
    7.6 Calibrating the Development Timing Assumption: An Example 267
    7.7 Summary 268
        Review Questions 269
        Notes 270
        References and Additional Reading 270

Chapter 8 Financial Modeling 271
    8.1 An Overview of Financial Statements 272
    8.2 Working Capital, Growth, and Financial Needs 277
    8.3 Developing Assumptions for the Financial Model 283
    8.4 Building a Financial Model of the Venture 291
    8.5 Adding Uncertainty to the Financial Model 303
    8.6 NewCo: Building an Integrated Financial Model 308
    8.7 Summary 318
        Review Questions 319
        Notes 320
Chapter 9 Assessing Cash Needs 321
  9.1 Cash Flow Breakeven Analysis 322
  9.2 Sustainable Growth 327
  9.3 Planning for Financial Needs When the Desired Growth Rate Exceeds the Sustainable Rate 332
  9.4 Planning for Product-Market Uncertainty 334
  9.5 Assessing Financial Needs with Sensitivity/Scenario Analysis 337
  9.6 Assessing Financial Needs with Simulation 341
  9.7 Summary 348

Review Questions 348
Notes 349
References and Additional Reading 350

PART 5 Valuation

Chapter 10 Foundations of New Venture Validation 353
  10.1 Perspectives on the Valuation of New Ventures 354
  10.2 Myths About New Venture Valuation 355
  10.3 An Overview of Valuation Methods 359
  10.4 Discounted Cash Flow Valuation 363
  10.5 The Relative Value Method 374
  10.6 Valuation by the Venture Capital Method 378
  10.7 Valuation by the First Chicago Method 380
  10.8 Reconciliation with the Pricing of Options 381
  10.9 Required Rates of Return for Investing in New Ventures 384
  10.10 The Entrepreneur’s Opportunity Cost of Capital 386
  10.11 Matching Cash Flows and Discount Rates 392
  10.12 Summary 396

Review Questions 398
Chapter 11 New Venture Valuation in Practice 405

11.1 Criteria for Selecting a New Venture Valuation Method 405
11.2 Implementing the Continuing Value Concept 407
11.3 Implementing DCF Valuation Methods 413
11.4 New Venture Valuation: An Illustration 428
11.5 The Cost of Capital for Non-U.S. Investors 442
11.6 Some Practical Caveats on Implementation 443
11.7 Summary 444

Review Questions 445
Notes 445
References and Additional Reading 446

Chapter 11 Appendix The Entrepreneur’s Perspective on Value 448

11A.1 Estimating the Entrepreneur’s Commitment to a Venture 448
11A.2 Valuing Partial-Commitment Investments 453
11A.3 Implementation: Partial Commitment 455
11A.4 Shortcuts and Extensions 459
11A.5 Summary 464

References and Additional Reading 465

Chapter 12 Designing and Valuing Staged Investment with Real Options 467

12.1 Staged Investment: The Venture Capital Method 467
12.2 Staged Investment: CAPM Valuation with Discrete Scenarios 474
12.3 Using Simulation to Design Financial Contracts 482
12.4 Valuing Different Types of Financial Claims 493
12.5 Summary 494

Review Questions 495
Notes 495
References and Additional Reading 496
PART 6 Harvesting and Beyond

Chapter 13 Harvesting 501

13.1 Going Public 502
13.2 Acquisition 519
13.3 Valuing Private Transactions 522
13.4 Management Buyout 526
13.5 Employee Stock Ownership Plans 527
13.6 Roll-Up IPO 531
13.7 The Choice of Harvesting Method 532
13.8 Harvesting Choices of VC-Backed Firms 536
13.9 Summary 538

Review Questions 538
Notes 539
References and Additional Reading 545

Chapter 14 The Future of Entrepreneurial Finance 551

14.1 Completing the Circle 552
14.2 Public Policy and Entrepreneurial Activity: An International Comparison 557
14.3 Breaking New Ground 569

Notes 574
References and Additional Reading 576