

# Contents

Preface xi

## 1 Overview 1

- Investment and Financing Decisions 1
- The Financial Manager as an Intermediary 2
- What is Capital Budgeting? 3
- Why is Investment Important? 3
- Goal of the Firm 4
- Application of Financial Theory 5
- Development of the Book 6

## SECTION A: INVESTMENT EVALUATION AND DECISION MAKING

## 2 The Measurement of Wealth 11

- Measurement of Wealth 11
- Time-Value of Money 12
- Compounding and Discounting 13
- Net Present Value 15
- Present Value Formulae and Tables 17
- Summary 20

- 3 The Investment–Consumption Decision 25**
  - Graphical Approach 27
  - Investor Attitude 28
  - Borrowing and Lending Opportunities 29
  - Separating Ownership from Management 30
  - Capital Market Imperfections 34
  - Summary 34
  
- 4 Techniques of Capital Investment Appraisal 39**
  - Application of Capital Budgeting Techniques 47
  - Use NPV and Payback 51
  - Ranking Problems and Mutually-Exclusive Projects 51
  - The Reinvestment Assumption 56
  
- 5 Capital Budgeting Applications 61**
  - The Replacement Decision (1) 61
  - The Replacement Decision (2) 63
  - The Importance of Taxation 65
  - The Tax Factor 66
  - Recent Tax Changes 68
  - A Few Additional Comments 71
  
- 6 The Cost of Capital 79**
  - Calculating the Cost of Capital 79
  - The Cost of Individual Sources of Capital 82
  - Conditional Sources of Capital 87
  - Gearing and the Cost of Capital 87
  - Cost of Equity 89
  - Cost of Loan Stock 89
  - Cost of Capital and Inflation 91
  - Removing Inflation Allowance from Cost of Capital 92
  - Estimating Expected Inflation over a Future Period 93
  - The ‘Net of Inflation’ Approach 93
  - The ‘Gross of Inflation’ Approach 94
  - Some Qualifications 94
  
- 7 Risk and Investment Evaluation 103**
  - What is Risk? 104
  - Measurement of Risk 108
  - Interpreting Results 115
  - Risk Analysis Methods 116
  - Simulation Approach 119
  - Adjusting for Risk 122

Relationship between Certainty Equivalent  
and Risk-Adjusted Rate Approaches 124  
Summary 127

## 8 Risk-Return Measurement and Modern Portfolio Theory 135

Introduction 135  
The Capital Asset Pricing Model 135  
 Return 139  
 Risk 139  
 Diversification 145  
 The Efficient Market Hypothesis 148  
Implications for Capital Budgeting 150  
 Risk Independence 152  
 Assessing Individual Project Risk 153  
 Calculating Project Betas 155  
 Reservations 157  
 Summary 159

## 9 Investment Evaluation and Capital Rationing 165

The Nature of Constraints on Investment 165  
 Hard and Soft Rationing 166  
 Soft Rationing 167  
 One-Period Capital Rationing 167  
 Multi-Period Capital Rationing 169  
 LP Assumptions 173  
 Summary 174

## 10 The Merger Investment Decision 179

Acquisitions to Increase Sales 184  
 Acquisitions to Increase the Quantity of the Firm's Assets 185  
 Acquisitions for Diversification 185  
 Some Notes on Mergers 186

## SECTION B: FINANCIAL DECISIONS AND STRATEGIES

## 11 Financial Strategy (1) The Capital Structure Decision 195

Introduction 196  
 The Firm's Optimal Capital Structure 197  
 The Tax Shield on Interest Payments 207  
 The Costs of Financial Distress 209  
 New Insights from Option Pricing Theory 212  
 Conclusion 214

- 12 Financial Strategy (2) The Dividend Decision 219**  
 Introduction 219  
 'Proof' of Dividend Irrelevance 222  
 Arguments in Favour of Retentions 226  
 Recommended Dividend Policies 228  
 Conclusion 238
- 13 Financial Strategy (3) The Leasing Decision 243**  
 Introduction 243  
 The Leasing Decision 244  
 A Leasing Example 247  
 Residual Values 249  
 Leasing Example II 250  
 The Leasing Decision: Other Factors 253  
 The Leveraged Lease 257  
 Summary 286
- 14 Adjusted Present Value 263**  
 Making Investment and Financing Decisions Simultaneously 263

## **SECTION C: INVESTMENT PRACTICES AND PROCESSES**

- 15 Investment Appraisal in Practice 271**  
 Introduction 271  
 Historical Perspective 271  
 Recent DCF Trends 272  
 Disillusionment with Discounting 275  
 Preference for IRR 278  
 The Role of Traditional Measurement of Investment Worth 280  
 Summary 286
- 16 The Capital Investment Process 293**  
 Investment Opportunities 295  
 Strategic Considerations 297  
 Evaluation 301  
 Authorisation 303  
 Project Control 304  
 Post Audit 305  
 Summary 310
- 17 The Foreign Investment Decision 313**  
 What is Foreign Investment? 313  
 Why Invest Abroad? 314

Evaluation	315
Required Rates of Return	318
Currency Risk	319
Political Risk	323
Managing Political Risk	325
Summary	327

**18 Practical Computer Programs for Capital Budgeting 331**

Program 1: Investment Evaluation	334
Program 2: Probability Analysis	339
Program 3: CAPM and Cost of Capital	345
Program 4: Monte Carlo Simulation Method	353

**Computer Program 1: Investment Evaluation 359**

**Computer Program 2: Probability Analysis 369**

**Computer Program 3: Cost of Capital 379**

**Computer Program 4: Simulation Model 387**

**Appendix A: Present Value Tables 397**

**Appendix B: Annuity Tables 403**

**Index 409**