

CONTENTS

PREFACE, vii

P A R T

1

FOUNDATIONS OF FINANCE

1

GOALS AND FUNCTIONS OF FINANCE, 2

Evolution of finance, 2 Objective of the firm, 6 Development of the book, 8
Questions, 11 Selected references, 12

2

CONCEPTS IN VALUATION, 13

Compound interest and the time value of money, 14
Measuring the return from a stock investment, 25
Measuring risk—the standard deviation, 29 Investor utility preferences, 31
Summary, 36 Appendix A: Mathematics of bond yields, 36
Appendix B: Use of electronic calculators, 39 Problems, 41 Selected references, 44 **xi**

3

VALUATION OF A FIRM'S STOCK, 45

Measurement of portfolio risk, 46 Portfolio analysis and selection, 50
Capital-asset pricing model, 54 Expected return for individual security, 60
Additional factors affecting returns, 64 Summary, 71 Problems, 72
Selected references, 76

4

VALUATION FROM A RELATIVE STANDPOINT, 79

Expiration date value of an option, 80
Valuation with one period to expiration: a general consideration, 81
The use of a hedged position and market equilibrium, 85
The Black-Scholes option model, 89 Effect of changes in assumptions, 94
Summary, 96 Problems, 97 Selected references, 99

P A R T



INVESTMENT IN ASSETS AND REQUIRED RETURNS

5

PRINCIPLES OF CAPITAL INVESTMENT, 102

Capital formation, 102 The administrative framework, 103
Methods for evaluating expected profitability, 108
Present-value method versus internal-rate-of-return method, 113
Some refinements in cash-flow information, 117 Capital rationing, 124
Inflation and capital budgeting, 126 Summary, 130
Appendix A: Multiple internal rates of return, 131
Appendix B: Mathematical programming of capital budgeting, 134 Problems, 137
Selected references, 140

6

RISK ANALYSIS IN CAPITAL BUDGETING, 142

Introduction, 142 Operating leverage and risk, 144
Measuring risk: correlation of cash flows over time, 147
Dependence of cash flows over time, 153 A simulation approach, 156
Measuring risk: multiple investment projects, 158
Information needed to analyze an acquisition, 162 Summary, 164
Appendix A: Decision-tree approach for sequential decisions, 165
Appendix B: Abandonment value and capital budgeting, 169 Problems, 173
Selected references, 180

7

EVALUATION OF RISKY INVESTMENTS: REQUIRED RETURNS FOR PROJECTS, 182

Evaluating projects in a capital-asset pricing model context, 183
Modification for leverage, 194
Evaluating projects in terms of the total risk of the firm, 198
Reconciliation of the two approaches, 200
Evaluating the single risky project, 202
Summary, 205 Problems, 206 Selected references, 210

8

REQUIRED RATES OF RETURN FOR COMPANIES, DIVISIONS, AND ACQUISITIONS, 212

Cost of capital of the firm, 213 Divisional required returns, 227
Evaluation of acquisitions, 231 Summary, 236 Problems, 237
Selected references, 240

P A R T



FINANCING AND DIVIDEND POLICIES

9

THEORY OF CAPITAL STRUCTURE, 243

Introduction to the theory, 244 Modigliani-Miller position, 249
Taxes and capital structure, 254 Effect of bankruptcy costs, 260
Other imperfections, 263
Debt versus equity in an option pricing model framework, 266
The presence of agency costs, 271 Summary, 273 Problems, 274
Selected references, 278

10

MAKING CAPITAL STRUCTURE DECISIONS, 281

EBIT-EPS analysis, 281 Cash flow ability to service debt, 285
Other methods of analysis, 290 Timing and flexibility, 292
Summary, 294 Problems, 294
Selected references, 297

11

DIVIDEND PAYOUT AND VALUATION. 298

Dividend payout as a residual decision, 299 Irrelevance of dividends, 300
Taxes and dividends, 302 Influence of other factors on dividends, 306
Managerial considerations in determining a dividend payout, 310
Summary, 313 Appendix: Double taxation of dividends, 314 Problems, 316
Selected references, 319

12

OTHER ASPECTS OF DIVIDEND POLICY. 321

Stability of dividends, 321 Stock dividends and stock splits, 325
Repurchase of stock, 329 Procedural and legal aspects, 333
Summary, 335 Problems, 336 Selected references, 338

P A R T



MANAGEMENT OF LIQUIDITY AND CURRENT ASSETS

13

WORKING-CAPITAL MANAGEMENT AND EFFICIENT MARKET CONSIDERATIONS. 341

Introduction, 341 Liquidity and its role, 342 Receivables and inventories, 346
Current liabilities, 349 Implications for working capital, 351
Summary, 351 Problems, 352 Selected references, 354

14

MANAGEMENT OF CASH AND MARKETABLE SECURITIES. 355

Introduction, 355 Managing collections, 357 Control of disbursements, 361
Balancing cash and marketable securities, 366 Investment in marketable securities, 373
Summary, 381 Problems, 382 Selected references, 384

15

MANAGEMENT OF ACCOUNTS RECEIVABLE. 386

Credit and collection policies, 386 Evaluating the credit applicant, 397
Other considerations, 402 Summary, 405
Appendix: Application of discriminant analysis to the selection of accounts, 405
Problems, 410 Selected references, 413

16

INVENTORY MANAGEMENT, 415

Inventory control, 416 Uncertainty and safety stocks, 420 Other considerations, 424
Inventory and the financial manager, 425 Summary, 426 Problems, 427
Selected references, 428

P A R T



SHORT- AND INTERMEDIATE-TERM FINANCING

17

UNSECURED SHORT-TERM FINANCING, 430

Conceptual considerations for the type of financing, 430 Trade credit financing, 435
Accrual accounts as spontaneous financing, 440 Money-market credit, 441
Short-term loans, 443 Summary, 450 Problems, 451 Selected references, 452

18

SECURED LOANS AND TERM FINANCING, 454

Secured lending arrangements, 454 Intermediate-term debt, 462
Protective covenants and loan agreements, 467 Summary, 472 Problems, 473
Selected references, 475

19

LEASE FINANCING, 477

Forms of lease financing, 478 Accounting treatment of leases, 481
To lease or to borrow, 484 The economics of leasing, 494
Summary, 497 Problems, 498 Selected references, 500

P A R T



LONG-TERM FINANCING

20

INFLATION AND FINANCIAL MARKET RETURNS, 503

Role of financial markets, 503 Nominal and real rates of return, 504
Anticipated and unanticipated inflation, 507 Factors affecting firm value, 511
Inflation-prompted changes in financial markets, 513
Summary, 515 Problems, 516 Selected references, 517

21

FINANCING EXTERNALLY AND COMMON STOCK, 519

Investment banking, 519 Institutional aspects of common stock, 528
Selling common stock through a privileged subscription, 534
Summary, 541 Problems, 541 Selected references, 544

22

LONG-TERM DEBT AND PREFERRED STOCK, 546

Features of debt, 546 Types of debt financing, 549 Call provision and refunding, 554
Private placements, 563 Preferred stock, 565 Summary, 569
Appendix: Frequency of debt financing, 570 Problems, 573 Selected references, 576

23

FINANCING WITH OPTIONS: THE WARRANT AND THE CONVERTIBLE SECURITY, 578

Introduction, 578 The use of warrants, 579 Convertible securities, 582
Financing with convertibles, 584 Value of convertible securities, 589 Summary, 593
Appendix: Valuing convertible bonds in the face of firm volatility, default risk, and fluctuating
interest rates, 593 Problems, 597 Selected references, 600

P A R T



EXPANSION AND CONTRACTION

24

MERGERS AND ACQUISITIONS, 603

Combining two companies, 604 Reasons for combination, 610
Financial terms of exchange, 613 Empirical evidence, 619 Tender offers, 621
Summary, 623 Problems, 624 Selected references, 627

25

INTERNATIONAL FINANCIAL MANAGEMENT, 629

Investing abroad, 630 Currency exposure management, 634
Multinational financing, 641 Financing international trade, 644
Summary, 648 Problems, 649 Selected references, 651

26

BUSINESS FAILURE AND REORGANIZATION, 652

Prediction of financial distress, 653 Voluntary settlements, 655
Settlements involving litigation, 657 Liquidation, 657 Reorganization, 659
Summary, 662 Problems, 663 Selected references, 666

P A R T



TOOLS OF FINANCIAL ANALYSIS AND CONTROL

27

FINANCIAL RATIO ANALYSIS, 669

Introduction to financial analysis, 669 Liquidity ratios, 673 Debt ratios, 670
Coverage ratios, 681 Profitability ratios, 682
Predictive power of financial ratios, 685 Inflation and financial analysis, 686
Summary, 691 Problems, 691 Selected references, 697

28

FUNDS ANALYSIS, PROPORTIONAL ANALYSIS, AND FINANCIAL FORECASTING, 699

Financial planning, 699 Source and use of funds, 700
Common size and index analyses, 706 Cash budgeting, 710 *Pro forma* statements, 717
Summary, 720 Problems, 721 Selected references, 727

PRESENT-VALUE TABLES, 728

NORMAL PROBABILITY DISTRIBUTION TABLE, 736

INDEX, 737