

CONTENTS

Part I

INTRODUCTION I

Chapter 1

The Investment Environment 1

- 1.1 Real Assets versus Financial Assets 2
 - 1.2 A Taxonomy of Financial Assets 4
 - 1.3 Financial Markets and the Economy 5
 - The Informational Role of Financial Markets / Consumption Timing / Allocation of Risk / Separation of Ownership and Management / Corporate Governance and Corporate Ethics*
 - 1.4 The Investment Process 9
 - Saving, Investing, and Safe Investing*
 - 1.5 Markets Are Competitive 10
 - The Risk–Return Trade-Off / Efficient Markets*
 - 1.6 The Players 11
 - Financial Intermediaries / Investment Bankers*
 - 1.7 Recent Trends 15
 - Globalization / Securitization / Financial Engineering / Computer Networks*
 - 1.8 Outline of the Text 18
- End of Chapter Material 19–22

Chapter 2

Asset Classes and Financial Instruments 23

- 2.1 The Money Market 24
 - Treasury Bills / Certificates of Deposit / Commercial Paper / Bankers' Acceptances / Eurodollars / Repos and Reverses / Federal Funds / Brokers' Calls / The LIBOR Market / Yields on Money Market Instruments*
- 2.2 The Bond Market 28
 - Treasury Notes and Bonds / Inflation-Protected Treasury Bonds / Federal Agency Debt / International Bonds /*

Municipal Bonds / Corporate Bonds / Mortgages and Mortgage-Backed Securities

2.3 Equity Securities 35

Common Stock as Ownership Shares / Characteristics of Common Stock / Stock Market Listings / Preferred Stock / Depository Receipts

2.4 Stock and Bond Market Indexes 38

Stock Market Indexes / Dow Jones Averages / Standard & Poor's Indexes / Other U.S. Market-Value Indexes / Equally Weighted Indexes / Foreign and International Stock Market Indexes / Bond Market Indicators

2.5 Derivative Markets 46

Options / Futures Contracts

End of Chapter Material 49–53

Chapter 3

How Securities Are Traded 54

3.1 How Firms Issue Securities 54

Investment Banking / Shelf Registration / Private Placements / Initial Public Offerings

3.2 How Securities Are Traded 58

Types of Markets

Direct Search Markets / Brokered Markets / Dealer Markets / Auction Markets

Types of Orders

Market Orders / Price-Contingent Orders

Trading Mechanisms

Dealer Markets / Electronic Communication Networks (ECNs) / Specialist Markets

3.3 U.S. Securities Markets 63

NASDAQ / The New York Stock Exchange

Block Sales / SuperDot and Electronic Trading on the NYSE / Settlement

Electronic Communication Networks / The National Market System / Bond Trading

CONTENTS

3.4 Market Structure in Other Countries 68

*London / Euronext / Tokyo / Globalization
and Consolidation of Stock Markets*

3.5 Trading Costs 70

3.6 Buying on Margin 71

3.7 Short Sales 74

3.8 Regulation of Securities Markets 77

*Self-Regulation / Regulatory Responses to Recent
Scandals / Circuit Breakers / Insider Trading*

End of Chapter Material 82–87

Chapter 4

Mutual Funds and Other Investment Companies 88

4.1 Investment Companies 88

4.2 Types of Investment Companies 89

*Unit Investment Trusts / Managed Investment
Companies / Other Investment Organizations
Commingled Funds / Real Estate Investment
Trusts (REITS) / Hedge Funds*

4.3 Mutual Funds 92

Investment Policies

*Money Market Funds / Equity Funds / Sector Funds /
Bond Funds / International Funds / Balanced Funds /
Asset Allocation and Flexible Funds / Index Funds*

How Funds Are Sold

4.4 Costs of Investing in Mutual Funds 95

Fee Structure

*Operating Expenses / Front-End Load / Back-End
Load / 12b-1 Charges*

*Fees and Mutual Fund Returns / Late Trading and
Market Timing*

4.5 Taxation of Mutual Fund Income 100

4.6 Exchange-Traded Funds 100

4.7 Mutual Fund Investment Performance: A First Look 102

4.8 Information on Mutual Funds 105

End of Chapter Material 108–112

Part II

PORTFOLIO THEORY AND PRACTICE 113

Chapter 5

Learning about Return and Risk from the Historical Record 113

5.1 Determinants of the Level of Interest Rates 114

*Real and Nominal Rates of Interest / The Equilibrium
Real Rate of Interest / The Equilibrium Nominal Rate
of Interest / Taxes and the Real Rate of Interest*

5.2 Comparing Rates of Return for Different Holding Periods 118

Annual Percentage Rates / Continuous Compounding

5.3 Bills and Inflation, 1926–2005 121

5.4 Risk and Risk Premiums 124

*Holding-Period Returns / Expected Return and
Standard Deviation / Excess Returns and Risk
Premiums*

5.5 Time Series Analysis of Past Rates of Return 126

*Time Series versus Scenario Analysis / Expected
Returns and the Arithmetic Average / The Geometric
(Time-Weighted) Average Return / Variance and
Standard Deviation / The Reward-to-Volatility
(Sharpe) Ratio*

5.6 The Normal Distribution 130

5.7 Deviations from Normality 132

5.8 The Historical Record of Returns on Equities and Long-Term Bonds 134

*Average Returns and Standard Deviations / Other
Statistics of the Risky Portfolios / Sharpe Ratios /
Serial Correlation / Skewness and Kurtosis / Estimates
of Historical Risk Premiums / A Global View of the
Historical Record*

5.9 Long-Term Investments 141

*Risk in the Long Run and the Lognormal Distribution /
The Sharpe Ratio Revisited / Simulation of Long-Term
Future Rates of Return / Forecasts for the Long Haul*

5.10 Measurement of Risk with Non-Normal Distributions 148

*Value at Risk (VaR) / Conditional Tail Expectation
(CTE) / Lower Partial Standard Deviation (LPSD)*

End of Chapter Material 150–155

Chapter 6

Risk Aversion and Capital Allocation to Risky Assets 156

6.1 Risk and Risk Aversion 157

*Risk, Speculation, and Gambling / Risk Aversion
and Utility Values / Estimating Risk Aversion*

6.2 Capital Allocation across Risky and Risk-Free Portfolios 165

6.3 The Risk-Free Asset 167

6.4 Portfolios of One Risky Asset and a Risk-Free Asset 168

6.5 Risk Tolerance and Asset Allocation 171

6.6 Passive Strategies: The Capital Market Line 176

End of Chapter Material 180–193

**Appendix A: Risk Aversion, Expected Utility, and the
St. Petersburg Paradox 188**

**Appendix B: Utility Functions and Equilibrium
Prices of Insurance Contracts 192**

CONTENTS

Chapter 7

Optimal Risky Portfolios 194

- 7.1 Diversification and Portfolio Risk 195
- 7.2 Portfolios of Two Risky Assets 197
- 7.3 Asset Allocation with Stocks, Bonds, and Bills 204
The Optimal Risky Portfolio with Two Risky Assets and a Risk-Free Asset
- 7.4 The Markowitz Portfolio Selection Model 209
Security Selection / Capital Allocation and the Separation Property / The Power of Diversification / Asset Allocation and Security Selection
- 7.5 Risk Pooling, Risk Sharing, and Risk in the Long Run 218
Risk Pooling and the Insurance Principle / Risk Sharing
- End of Chapter Material 221–243
- Appendix A: A Spreadsheet Model for Efficient Diversification 231
- Appendix B: Review of Portfolio Statistics 236

Chapter 8

Index Models 244

- 8.1 A Single-Factor Security Market 245
The Input List of the Markowitz Model / Normality of Returns and Systematic Risk
- 8.2 The Single-Index Model 247
The Regression Equation of the Single-Index Model / The Expected Return–Beta Relationship / Risk and Covariance in the Single-Index Model / The Set of Estimates Needed for the Single-Index Model / The Index Model and Diversification
- 8.3 Estimating the Single-Index Model 252
The Security Characteristic Line for Hewlett-Packard / The Explanatory Power of the SCL for HP / Analysis of Variance / The Estimate of Alpha / The Estimate of Beta / Firm-Specific Risk / Correlation and Covariance Matrix
- 8.4 Portfolio Construction and the Single-Index Model 259
Alpha and Security Analysis / The Index Portfolio as an Investment Asset / The Single-Index-Model Input List / The Optimal Risky Portfolio of the Single-Index Model / The Information Ratio / Summary of Optimization Procedure / An Example
Risk Premium Forecasts / The Optimal Risky Portfolio
- 8.5 Practical Aspects of Portfolio Management with the Index Model 266
Is the Index Model Inferior to the Full-Covariance Model? / The Industry Version of the Index Model / Predicting Betas / Index Models and Tracking Portfolios
- End of Chapter Material 273–278

Part III

EQUILIBRIUM IN CAPITAL MARKETS 279

Chapter 9

The Capital Asset Pricing Model 279

- 9.1 The Capital Asset Pricing Model 279
Why Do All Investors Hold the Market Portfolio? / The Passive Strategy Is Efficient / The Risk Premium of the Market Portfolio / Expected Returns on Individual Securities / The Security Market Line
- 9.2 The CAPM and the Index Model 292
Actual Returns versus Expected Returns / The Index Model and Realized Returns / The Index Model and the Expected Return–Beta Relationship
- 9.3 Is the CAPM Practical? 295
Is the CAPM Testable? / The CAPM Fails Empirical Tests / The Economy and the Validity of the CAPM / The Investments Industry and the Validity of the CAPM
- 9.4 Econometrics and the Expected Return–Beta Relationship 299
- 9.5 Extensions of the CAPM 300
The Zero-Beta Model / Labor Income and Nontraded Assets / A Multiperiod Model and Hedge Portfolios / A Consumption-Based CAPM
- 9.6 Liquidity and the CAPM 305
- End of Chapter Material 311–318

Chapter 10

Arbitrage Pricing Theory and Multifactor Models of Risk and Return 319

- 10.1 Multifactor Models: An Overview 320
Factor Models of Security Returns / A Multifactor Security Market Line
- 10.2 Arbitrage Pricing Theory 324
Arbitrage, Risk Arbitrage, and Equilibrium / Well-Diversified Portfolios / Betas and Expected Returns / The One-Factor Security Market Line
- 10.3 Individual Assets and the APT 331
The APT and the CAPM
- 10.4 A Multifactor APT 332
- 10.5 Where Should We Look for Factors? 334
The Fama-French (FF) Three-Factor Model
- 10.6 A Multifactor CAPM and the APT 337
- End of Chapter Material 337–343

Chapter 11

The Efficient Market Hypothesis 344

- 11.1 Random Walks and the Efficient Market Hypothesis 345

CONTENTS

Competition as the Source of Efficiency / Versions of the Efficient Market Hypothesis

11.2 Implications of the EMH 349

Technical Analysis / Fundamental Analysis / Active versus Passive Portfolio Management / The Role of Portfolio Management in an Efficient Market / Resource Allocation

11.3 Event Studies 353

11.4 Are Markets Efficient? 357

The Issues

The Magnitude Issue / The Selection Bias Issue / The Lucky Event Issue

Weak-Form Tests: Patterns in Stock Returns

Returns over Short Horizons / Returns over Long Horizons

Predictors of Broad Market Returns / Semistrong Tests: Market Anomalies

The Small-Firm-in-January Effect / The Neglected-Firm Effect and Liquidity Effects / Book-to-Market Ratios / Post-Earnings-Announcement Price Drift

Strong-Form Tests: Inside Information / Interpreting the Evidence

Risk Premiums or Inefficiencies? / Anomalies or Data Mining?

The “Noisy Market Hypothesis” and Fundamental Indexing

11.5 Mutual Fund and Analyst Performance 369

Stock Market Analysts / Mutual Fund Managers / Survivorship Bias in Mutual Fund Studies / So, Are Markets Efficient?

End of Chapter Material 376–383

Chapter 12

Behavioral Finance and Technical Analysis 384

12.1 The Behavioral Critique 385

Information Processing

Forecasting Errors / Overconfidence / Conservatism / Sample Size Neglect and Representativeness

Behavioral Biases

Framing / Mental Accounting / Regret Avoidance / Prospect Theory

Limits to Arbitrage

Fundamental Risk / Implementation Costs / Model Risk

Limits to Arbitrage and the Law of One Price

“Siamese Twin” Companies / Equity Carve-outs / Closed-End Funds

Bubbles and Behavioral Economics / Evaluating the Behavioral Critique

12.2 Technical Analysis and Behavioral Finance 395

Trends and Corrections

Dow Theory / Moving Averages / Breadth

Sentiment Indicators

Trin Statistic / Confidence Index / Put/Call Ratio

A Warning

End of Chapter Material 403–409

Chapter 13

Empirical Evidence on Security Returns 410

13.1 The Index Model and the Single-Factor APT 411

The Expected Return–Beta Relationship

Setting Up the Sample Data / Estimating the SCL / Estimating the SML

Tests of the CAPM / The Market Index / Measurement Error in Beta / The EMH and the CAPM / Accounting for Human Capital and Cyclical Variations in Asset Betas / Accounting for Nontraded Business

13.2 Tests of Multifactor CAPM and APT 422

A Macro Factor Model

13.3 The Fama-French Three-Factor Model 423

Risk-Based Interpretations / Behavioral Explanations

13.4 Liquidity and Asset Pricing 429

13.5 Time-Varying Volatility 433

13.6 Consumption-Based Asset Pricing and the Equity Premium Puzzle 434

Consumption Growth and Market Rates of Return / Expected versus Realized Returns / Survivorship Bias / Extensions to the CAPM May Resolve the Equity Premium Puzzle / Behavioral Explanations of the Equity Premium Puzzle

End of Chapter Material 441–444

Part IV

FIXED-INCOME SECURITIES 445

CHAPTER 14

BOND PRICES AND YIELDS 445

14.1 Bond Characteristics 446

Treasury Bonds and Notes

Accrued Interest and Quoted Bond Prices

Corporate Bonds

Call Provisions on Corporate Bonds /

Convertible Bonds / Puttable Bonds /

Floating-Rate Bonds

Preferred Stock / Other Issuers / International Bonds / Innovation in the Bond Market

Inverse Floaters / Asset-Backed Bonds / Catastrophe Bonds / Indexed Bonds

CONTENTS

14.2 Bond Pricing	452
<i>Bond Pricing between Coupon Dates</i>	
14.3 Bond Yields	456
<i>Yield to Maturity / Yield to Call / Realized Compound Return versus Yield to Maturity</i>	
14.4 Bond Prices over Time	462
<i>Yield to Maturity versus Holding-Period Return / Zero-Coupon Bonds and Treasury Strips / After-Tax Returns</i>	
14.5 Default Risk and Bond Pricing	467
<i>Junk Bonds / Determinants of Bond Safety / Bond Indentures</i>	
<i>Sinking Funds / Subordination of Further Debt / Dividend Restrictions / Collateral</i>	
<i>Yield to Maturity and Default Risk</i>	
<i>Credit Risk and Collateralized Debt Obligations</i>	
End of Chapter Material 477–483	
Chapter 15	
The Term Structure of Interest Rates 484	
15.1 The Yield Curve	484
<i>Bond Pricing</i>	
15.2 The Yield Curve and Future Interest Rates	487
<i>The Yield Curve under Certainty / Holding-Period Returns / Forward Rates</i>	
15.3 Interest Rate Uncertainty and Forward Rates	492
15.4 Theories of the Term Structure	494
<i>The Expectations Hypothesis / Liquidity Preference</i>	
15.5 Interpreting the Term Structure	498
15.6 Forward Rates as Forward Contracts	501
End of Chapter Material 504–511	
Chapter 16	
Managing Bond Portfolios 512	
16.1 Interest Rate Risk	513
<i>Interest Rate Sensitivity / Duration / What Determines Duration?</i>	
<i>Rule 1 for Duration / Rule 2 for Duration / Rule 3 for Duration / Rule 4 for Duration / Rule 5 for Duration</i>	
16.2 Convexity	522
<i>Why Do Investors Like Convexity? / Duration and Convexity of Callable Bonds / Duration and Convexity of Mortgage-Backed Securities</i>	
16.3 Passive Bond Management	530
<i>Bond-Index Funds / Immunization / Cash Flow Matching and Dedication / Other Problems with Conventional Immunization</i>	

16.4 Active Bond Management	539
<i>Sources of Potential Profit / Horizon Analysis / Contingent Immunization</i>	
End of Chapter Material 543–552	

Part V

SECURITY ANALYSIS 553

Chapter 17

Macroeconomic and Industry Analysis 553

17.1 The Global Economy	554
17.2 The Domestic Macroeconomy	556
17.3 Demand and Supply Shocks	558
17.4 Federal Government Policy	559
<i>Fiscal Policy / Monetary Policy / Supply-Side Policies</i>	
17.5 Business Cycles	561
<i>The Business Cycle / Economic Indicators / Other Indicators</i>	
17.6 Industry Analysis	566
<i>Defining an Industry / Sensitivity to the Business Cycle / Sector Rotation / Industry Life Cycles</i>	
<i>Start-Up Stage / Consolidation Stage / Maturity Stage / Relative Decline</i>	
<i>Industry Structure and Performance</i>	
<i>Threat of Entry / Rivalry between Existing Competitors / Pressure from Substitute Products / Bargaining Power of Buyers / Bargaining Power of Suppliers</i>	
End of Chapter Material 578–585	

Chapter 18

Equity Valuation Models 586

18.1 Valuation by Comparables	586
<i>Limitations of Book Value</i>	
18.2 Intrinsic Value versus Market Price	589
18.3 Dividend Discount Models	590
<i>The Constant-Growth DDM / Convergence of Price to Intrinsic Value / Stock Prices and Investment Opportunities / Life Cycles and Multistage Growth Models / Multistage Growth Models</i>	
18.4 Price–Earnings Ratio	604
<i>The Price–Earnings Ratio and Growth Opportunities / P/E Ratios and Stock Risk / Pitfalls in P/E Analysis / Combining P/E Analysis and the DDM / Other Comparative Valuation Ratios</i>	
<i>Price-to-Book Ratio / Price-to-Cash-Flow Ratio / Price-to-Sales Ratio</i>	
18.5 Free Cash Flow Valuation Approaches	611
<i>Comparing the Valuation Models</i>	

CONTENTS

- 18.6 The Aggregate Stock Market 616**
Explaining Past Behavior / Forecasting the Stock Market
End of Chapter Material 618–630

Chapter 19

Financial Statement Analysis 631

- 19.1 The Major Financial Statements 631**
*The Income Statement / The Balance Sheet /
The Statement of Cash Flows*
- 19.2 Accounting versus Economic Earnings 636**
- 19.3 Profitability Measures 636**
Past versus Future ROE / Financial Leverage and ROE
- 19.4 Ratio Analysis 639**
*Decomposition of ROE / Turnover and Other Asset
Utilization Ratios / Liquidity Ratios / Market Price
Ratios: Growth versus Value / Choosing a Benchmark*
- 19.5 Economic Value Added 649**
- 19.6 An Illustration of Financial Statement Analysis 650**
- 19.7 Comparability Problems 652**
*Inventory Valuation / Depreciation / Inflation and Interest
Expense / Fair Value Accounting / Quality of Earnings /
International Accounting Conventions*
- 19.8 Value Investing: The Graham Technique 658**
End of Chapter Material 659–670

Part VI

OPTIONS, FUTURES, AND OTHER DERIVATIVES 671

Chapter 20

Options Markets: Introduction 671

- 20.1 The Option Contract 672**
*Options Trading / American and European Options /
Adjustments in Option Contract Terms / The Options
Clearing Corporation / Other Listed Options*
*Index Options / Futures Options / Foreign Currency
Options / Interest Rate Options*
- 20.2 Values of Options at Expiration 678**
*Call Options / Put Options / Option versus Stock
Investments*
- 20.3 Option Strategies 682**
*Protective Put / Covered Calls / Straddle / Spreads /
Collars*
- 20.4 The Put-Call Parity Relationship 690**
- 20.5 Option-like Securities 693**
*Callable Bonds / Convertible Securities /
Warrants / Collateralized Loans / Levered Equity
and Risky Debt*

- 20.6 Financial Engineering 700**

- 20.7 Exotic Options 701**

*Asian Options / Barrier Options / Lookback Options /
Currency-Translated Options / Digital Options*

End of Chapter Material 704–714

Chapter 21

Option Valuation 715

- 21.1 Option Valuation: Introduction 715**
Intrinsic and Time Values / Determinants of Option Values
- 21.2 Restrictions on Option Values 718**
*Restrictions on the Value of a Call Option / Early
Exercise and Dividends / Early Exercise of American Puts*
- 21.3 Binomial Option Pricing 722**
*Two-State Option Pricing / Generalizing the Two-State
Approach*
- 21.4 Black-Scholes Option Valuation 729**
*The Black-Scholes Formula / Dividends and Call Option
Valuation / Put Option Valuation / Dividends and Put
Option Valuation*
- 21.5 Using the Black-Scholes Formula 737**
*Hedge Ratios and the Black-Scholes Formula / Portfolio
Insurance / Hedging Bets on Mispriced Options*
- 21.6 Empirical Evidence on Option Pricing 747**
End of Chapter Material 749–758

Chapter 22

Futures Markets 759

- 22.1 The Futures Contract 760**
The Basics of Futures Contracts / Existing Contracts
- 22.2 Mechanics of Trading in Futures Markets 765**
*The Clearinghouse and Open Interest / The Margin
Account and Marking to Market / Cash versus Actual
Delivery / Regulations / Taxation*
- 22.3 Futures Markets Strategies 770**
Hedging and Speculation / Basis Risk and Hedging
- 22.4 The Determination of Futures Prices 774**
*The Spot-Futures Parity Theorem / Spreads / Forward
versus Futures Pricing*
- 22.5 Futures Prices versus Expected Spot Prices 780**
*Expectation Hypothesis / Normal Backwardation /
Contango / Modern Portfolio Theory*
- End of Chapter Material 782–787**

Chapter 23

Futures, Swaps, and Risk Management 788

- 23.1 Foreign Exchange Futures 788**
*The Markets / Interest Rate Parity / Direct versus Indirect
Quotes / Using Futures to Manage Exchange Rate Risk*

CONTENTS

23.2 Stock-Index Futures 795

The Contracts / Creating Synthetic Stock Positions: An Asset Allocation Tool / Index Arbitrage / Using Index Futures to Hedge Market Risk

23.3 Interest Rate Futures 802

Hedging Interest Rate Risk

23.4 Swaps 804

Swaps and Balance Sheet Restructuring / The Swap Dealer / Other Interest Rate Contracts / Swap Pricing / Credit Risk in the Swap Market / Credit Default Swaps

23.5 Commodity Futures Pricing 811

Pricing with Storage Costs / Discounted Cash Flow Analysis for Commodity Futures

End of Chapter Material 814–822

Part VII

APPLIED PORTFOLIO MANAGEMENT 823

Chapter 24

Portfolio Performance Evaluation 823

24.1 The Conventional Theory of Performance Evaluation 823

Average Rates of Return / Time-Weighted Returns versus Dollar-Weighted Returns / Adjusting Returns for Risk / The M² Measure of Performance / Sharpe's Measure as the Criterion for Overall Portfolios / Appropriate Performance Measures in Two Scenarios

Jane's Portfolio Represents Her Entire Risky Investment Fund / Jane's Choice Portfolio Is One of Many Portfolios Combined into a Large Investment Fund

The Role of Alpha in Performance Measures / Actual Performance Measurement: An Example / Realized Returns versus Expected Returns

24.2 Performance Measurement for Hedge Funds 834

24.3 Performance Measurement with Changing Portfolio Composition 836

24.4 Market Timing 837

The Potential Value of Market Timing / Valuing Market Timing as a Call Option / The Value of Imperfect Forecasting

24.5 Style Analysis 844

Style Analysis and Multifactor Benchmarks/Style Analysis in Excel

24.6 Morningstar's Risk-Adjusted Rating 848

24.7 Evaluating Performance Evaluation 849

24.8 Performance Attribution Procedures 850

Asset Allocation Decisions / Sector and Security Selection Decisions / Summing Up Component Contributions

End of Chapter Material 856–866

Chapter 25

International Diversification 867

25.1 Global Markets for Equities 868

Developed Countries / Emerging Markets / Market Capitalization and GDP / Home-Country Bias

25.2 Risk Factors in International Investing 872

Exchange Rate Risk / Country-Specific Risk

25.3 International Investing: Risk, Return, and Benefits from Diversification 878

Risk and Return: Summary Statistics / Are Investments in Emerging Markets Riskier? / Are Average Returns in Emerging Markets Greater? / Benefits from International Diversification / Misleading Representation of Diversification Benefits / Realistic Benefits from International Diversification / Are Benefits from International Diversification Preserved in Bear Markets?

25.4 Assessing the Potential of International Diversification 888

The Home Bias / The Pursuit of Efficient Diversification / Diversification Benefits over Time / Active Investors

25.5 International Investing and Performance Attribution 892

Constructing a Benchmark Portfolio of Foreign Assets / Performance Attribution

End of Chapter Material 896–901

Chapter 26

Hedge Funds 902

26.1 Hedge Funds versus Mutual Funds 903

26.2 Hedge Fund Strategies 904

Directional and Nondirectional Strategies / Statistical Arbitrage

26.3 Portable Alpha 907

An Example of a Pure Play

26.4 Style Analysis for Hedge Funds 910

26.5 Performance Measurement for Hedge Funds 912

Liquidity and Hedge Fund Performance / Hedge Fund Performance and Survivorship Bias / Hedge Fund Performance and Changing Factor Loadings / Tail Risk and Hedge Fund Performance

26.6 Fee Structure in Hedge Funds 919

End of Chapter Material 920–923

CONTENTS

Chapter 27

The Theory of Active Portfolio Management 924

- 27.1 Optimal Portfolios and Alpha Values 924**
*Forecasts of Alpha Values and Extreme Portfolio Weights /
Restriction of Benchmark Risk*
- 27.2 The Treynor-Black Model and Forecast Precision 931**
*Adjusting Forecasts for the Precision of Alpha /
Distribution of Alpha Values / Organizational Structure
and Performance*
- 27.3 The Black-Litterman Model 935**
*A Simple Asset Allocation Decision / Step 1: The
Covariance Matrix from Historical Data / Step 2:
Determination of a Baseline Forecast / Step 3: Integrating
the Manager's Private Views / Step 4: Revised (Posterior)
Expectations / Step 5: Portfolio Optimization*
- 27.4 Treynor-Black versus Black-Litterman:
Complements, Not Substitutes 941**
*The BL Model as Icing on the TB Cake / Why Not
Replace the Entire TB Cake with the BL Icing?*
- 27.5 The Value of Active Management 943**
*A Model for the Estimation of Potential Fees / Results
from the Distribution of Actual Information Ratios /
Results from Distribution of Actual Forecasts / Results
with Reasonable Forecasting Records*
- 27.6 Concluding Remarks 946**
End of Chapter Material 947–949
**Appendix A: Forecasts and Realizations
of Alpha 948**
**Appendix B: The General Black-Litterman
Model 948**

Chapter 28

Investment Policy and the Framework of the CFA Institute 950

- 28.1 The Investment Management Process 951**
*Objectives / Individual Investors / Personal Trusts /
Mutual Funds / Pension Funds / Endowment Funds /*

*Life Insurance Companies / Non-Life Insurance
Companies / Banks*

- 28.2 Constraints 955**
*Liquidity / Investment Horizon / Regulations / Tax
Considerations / Unique Needs*
- 28.3 Asset Allocation 957**
Policy Statements / Taxes and Asset Allocation
- 28.4 Managing Portfolios of Individual Investors 960**
*Human Capital and Insurance / Investment in Residence /
Saving for Retirement and the Assumption of Risk /
Retirement Planning Models / Manage Your Own
Portfolio or Rely on Others? / Tax Sheltering
*The Tax-Deferral Option / Tax-Deferred Retirement
Plans / Deferred Annuities / Variable and Universal
Life Insurance**
- 28.5 Pension Funds 965**
*Defined Contribution Plans / Defined Benefit Plans /
Alternative Perspectives on Defined Benefit Pension
Obligations / Pension Investment Strategies
*Investing in Equities / Wrong Reasons to Invest
in Equities**
- 28.6 Investments for the Long Run 970**
*Advice from the Mutual Fund Industry / Target Investing
and the Term Structure of Bonds / Making Simple
Investment Choices / Inflation Risk and Long-Term
Investors*
- End of Chapter Material 972–988**
**Appendix: A Spreadsheet Model for Long-Term
Investing 982**
- REFERENCES TO CFA PROBLEMS 989**
GLOSSARY G-1
NAME INDEX IND-1
SUBJECT INDEX IND-4