## CONTENTS

### PART I  THE FINANCIAL SYSTEM  1

Chapter 1  An Overview of Financial Markets and Institutions  3
- Chapter Preview  4
- Learning Objectives  4
- 1.1 The Financial System  4
- 1.2 Financial Markets and Direct Financing  7
- Do You Understand?  10
- 1.3 Types of Financial Markets  12
- 1.4 The Money Markets  14
- 1.5 The Capital Markets  15
- Do You Understand?  17
- 1.6 Financial Intermediaries and Indirect Financing  17
- Do You Understand?  22
- 1.7 Types of Financial Intermediaries  23
- Do You Understand?  27
- 1.8 The Risks Financial Institutions Manage  28
- 1.9 Regulation of the Financial System  29
- PEOPLE & EVENTS: Systemically Risky Banks: What is the Solution?  33
- 1.10 Ethics and the Financial System  33
- Do You Understand?  35
- Summary of Learning Objectives  35
- Key Terms  36
- Questions and Problems  36

Chapter 2  The Federal Reserve and Its Powers  38
- Chapter Preview  39
- Learning Objectives  39
- 2.1 Origins of the Federal Reserve System  39
- PEOPLE & EVENTS: Banking before 1933, Banking from 1933 to 1980, and Banking in the Modern Era  43
- 2.2 The Current Structure of the Fed  44
- 2.3 Monetary Powers of the Board of Governors  47
- 2.4 The Fed’s Regulatory Powers  47
2.5 Independence of the Fed  51
Do You Understand?  53
2.6 The Fed’s Balance Sheet  53
2.7 The Fed’s Role in Check Clearing and the Growth of Electronic Payments  59
Learning by Doing 2.1: Computing a Bank’s Excess Reserve Position  60
2.8 Federal Reserve Tools of Monetary Policy  61
PEOPLE & EVENTS: The Challenges of Fed Chair Janet Yellen  62
Learning by Doing 2.2: Calculating a Bank’s Reserve Position  66
Summary of Learning Objectives  69
Key Terms  69
Questions and Problems  69

Chapter 3  The Fed and Interest Rates  71
Chapter Preview  72
Learning Objectives  72
3.1 Federal Reserve Control of the Money Supply  72
3.2 The Fed’s Influence on Interest Rates  75
3.3 The Treasury Department and Fiscal Policy  79
Do You Understand?  81
3.4 Goals of Monetary Policy  82
PEOPLE & EVENTS: The Fed as Lender of Last Resort
During the Financial Crisis  87
3.5 The Fed and the Economy  88
PEOPLE & EVENTS: Black Monday  91
3.6 Complications of Monetary Policy  91
3.7 Anatomy of a Financial Crisis  93
PEOPLE & EVENTS: Good Work If You Can Get It: Executive Bonuses
During Bailouts?  100
Do You Understand?  101
Summary of Learning Objectives  102
Key Terms  102
Questions and Problems  102

HOW INTEREST RATES ARE DETERMINED  105

Chapter 4  The Level of Interest Rates  107
Chapter Preview  108
Learning Objectives  108
4.1 What are Interest Rates?  108
4.2 The Real Rate of Interest  109
4.3 Loanable Funds Theory of Interest  111
Do You Understand?  114
4.4 Price Expectations and Interest Rates  114
4.5 A Restatement of the Fisher Equation  116
PEOPLE & EVENTS: What Is the Actual Inflation Rate?  117
Do You Understand?  121
PEOPLE & EVENTS: Estimating the Expected Rate of Inflation from TIPS 122
4.6 Forecasting Interest Rates 122
4.7 Interest Rates and Currency Values 124
Summary of Learning Objectives 125
Key Terms 126
Questions and Problems 126

Chapter 5  Bond Prices and Interest Rate Risk 127
Chapter Preview 128
Learning Objectives 128
5.1 The Time Value of Money 128
Do You Understand? 130
5.2 Bond Pricing 131
PEOPLE & EVENTS: Bond Market Liquidity and the Volcker Rule 132
Learning by Doing 5.1: Calculating the Price of a Bond Using a Financial Calculator 135
5.3 Bond Yields 136
Learning by Doing 5.2: Calculating the Yield-to-Maturity on a Bond 137
Do You Understand? 140
5.4 Important Bond Pricing Relationships 140
5.5 Interest Rate Risk and Duration 144
Learning by Doing 5.3: Calculating the Duration of a Bond 146
PEOPLE & EVENTS: Betting the Farm on Interest Rates and Losing 155
Do You Understand? 156
Summary of Learning Objectives 156
Key Terms 157
Questions and Problems 157

Chapter 6  The Structure of Interest Rates 159
Chapter Preview 160
Learning Objectives 160
6.1 The Term Structure of Interest Rates 160
Learning by Doing 6.1: Using the Term Structure Formula to Calculate Implied Forward Rates 165
Do You Understand? 171
PEOPLE & EVENTS: More on Forecasting Future Interest Rates 172
6.2 Default Risk 172
6.3 Tax Treatment 176
PEOPLE & EVENTS: The Credit-Rating Club 177
Do You Understand? 180
6.4 Marketability 180
6.5 Options on Debt Securities 180
6.6 Behavior of Interest Rates over the Business Cycle 183
Do You Understand? 185
Summary of Learning Objectives 185
Key Terms 186
Questions and Problems 186
Chapter 7  Money Markets  191
  Chapter Preview  192
  Learning Objectives  192
  7.1 How the Money Markets Work  192
  7.2 Economic Role of the Money Markets  193
  7.3 Features of Money Market Instruments  194
  7.4 Treasury Bills  194
  Learning by Doing 7.1: Calculating the Discount Yield  199
  Learning by Doing 7.2: Calculating the Bond Equivalent Yield  199
  Do You Understand?  200
  7.5 Federal Agency Securities  201
  7.6 Federal Funds  203
  7.7 Other Major Money Market Instruments  205
  PEOPLE & EVENTS: Lehman Brothers’ “Creative” Accounting: Repos 105 and 108  207
  7.8 Money Market Participants  211
  7.9 The Impact of the 2007–2008 Financial Crisis on the Money Markets  213
  PEOPLE & EVENTS: How Breaking the Buck (Almost) Broke the Commercial Paper Market  216
  Do You Understand?  217
  Summary of Learning Objectives  218
  Key Terms  219
  Questions and Problems  219

Chapter 8  Bond Markets  220
  Chapter Preview  221
  Learning Objectives  221
  8.1 Functions of the Capital Markets  221
  8.2 The U.S. Government and Agency Securities  223
  PEOPLE & EVENTS: What Do Negative Yields on TIPS Tell Us?  226
  Do You Understand?  227
  8.3 State and Local Government Bonds  227
  PEOPLE & EVENTS: Build America Bonds Keep Municipal Finance Going During the Crisis  232
  8.4 Corporate Bonds  232
  Do You Understand?  237
  8.5 Financial Guarantees  237
  8.6 Securitized Credit Instruments  238
  8.7 Capital Market Regulators  240
  8.8 Bond Markets Around the World are Increasingly Linked  241
  8.9 The Impact of the 2007–2008 Financial Crisis on the Bond Markets  242
  Do You Understand?  244
  Summary of Learning Objectives  244
  Key Terms  245
  Questions and Problems  245
Chapter 9  Mortgage Markets and Mortgage-Backed Securities  247
Chapter Preview  248
Learning Objectives  248
9.1 The Unique Nature of Mortgage Markets  249
9.2 Types of Mortgages  249
9.3 Mortgage Qualifying  257
Learning by Doing 9.1: Determining How Much Home You Can Buy  259
Do You Understand?  260
9.4 Mortgage-Backed Securities  261
9.5 Mortgage Prepayment Risk and Other MBS  265
Do You Understand?  270
9.6 Participants in the Mortgage Markets  271
PEOPLE & EVENTS: The Rise and Fall of Fannie and Freddie  273
Do You Understand?  274
9.7 Relationship Between Mortgage Markets and the Capital Markets  275
Summary of Learning Objectives  276
Key Terms  277
Questions and Problems  278

Chapter 10 Equity Markets  279
Chapter Preview  280
Learning Objectives  280
10.1 What are Equity Securities?  280
10.2 Equity Markets  282
PEOPLE & EVENTS: The Retail Brokerage Industry  287
10.3 Equity Trading  287
10.4 Global Stock Markets  291
10.5 Large-Scale and High Frequency Trading  292
PEOPLE & EVENTS: High Speed Trading and the Demise of Knight Capital Group in 45 Minutes  293
10.6 Regulation of Equity Markets  294
Do You Understand?  294
10.7 Stock Market Indexes  295
PEOPLE & EVENTS: Circuit Breakers, Black Monday, and the Flash Crash  296
Summary of Learning Objectives  297
Key Terms  298
Questions and Problems  299

Chapter 11 Derivatives Markets  300
Chapter Preview  301
Learning Objectives  301
11.1 The Nature of Derivative Securities  301
11.2 Forward Markets  302
11.3 Futures Markets  304
Do You Understand?  311
11.4 Uses of the Financial Futures Markets  311
Learning by Doing 11.1: Hedging Risk in a Stock Portfolio  313
Chapter 12 International Markets 332
Chapter Preview 333
Learning Objectives 333
12.1 The Difficulties of International Trade 333
12.2 Exchange Rates 334
12.3 Balance of Payments 337
12.4 Foreign Exchange Markets 341
12.5 Spot and Forward Transactions 343
Learning by Doing 12.1: Using Forward Contracts to Hedge Exchange Rate Risks 343
PEOPLE & EVENTS: The Big Mac Test of Purchasing Power Parity 345
12.6 Capital Flows and Exchange Rates 346
Do You Understand? 349
PEOPLE & EVENTS: The Greek Crisis and Lessons for the U.S. 350
12.7 Government Intervention in Foreign Exchange Markets 351
Learning by Doing 12.2: Using Purchasing Power Parity to Determine the Expected Exchange Rate 353
12.8 Financing International Trade 354
Do You Understand? 355
12.9 International Money and Capital Markets 355
12.10 The Globalization of Financial Markets 358
Summary of Learning Objectives 360
Key Terms 360
Questions and Problems 361

COMMERCIAL BANKING 363

Chapter 13 Commercial Bank Operations 365
Chapter Preview 366
Learning Objectives 366
13.1 An Overview of the Banking Industry 366
13.2 Balance Sheet for a Commercial Bank 369
13.3 The Source of Bank Funds 370
Do You Understand? 375
13.4 Bank Uses of Funds: Bank Investments and Cash Assets 376
13.5 Bank Uses of Funds: Loans and Leases 378
13.6 Loan Pricing 381
13.7 Analysis of Loan Credit Risk 384
PEOPLE & EVENTS: What’s Your Score? 385
Do You Understand? 386
13.8 Fee-Based Services 386
13.9 Off-Balance-Sheet Banking 387
Do You Understand? 391
13.10 Bank Earnings 392
13.11 Bank Performance 396
Do You Understand? 397
Summary of Learning Objectives 398
Key Terms 398
Questions and Problems 399

Chapter 14 International Banking 400
Chapter Preview 401
Learning Objectives 401
14.1 Development of International Banking 401
14.2 Regulation of Overseas Banking Activities 404
14.3 Delivery of Overseas Banking Services 406
Do You Understand? 409
14.4 International Lending 409
PEOPLE & EVENTS: The LIBOR Scandal 411
Do You Understand? 416
14.5 Foreign Banks in the United States 416
14.6 Future Directions of International Banking 420
Summary of Learning Objectives 420
Key Terms 421
Questions and Problems 421

Chapter 15 Regulation of Financial Institutions 422
Chapter Preview 423
Learning Objectives 423
15.1 Reasons for Regulation 423
15.2 Bank Failures and Regulation 426
PEOPLE & EVENTS: WaMu and the Destructive “Power of Yes” 431
15.3 Safety and Soundness Regulation: Deposit Insurance 432
Do You Understand? 434
15.4 Deposit Insurance Issues 435
Do You Understand? 438
15.5 Safety and Soundness Regulation: Capital Requirements 439
Do You Understand? 447
15.6 Bank Examinations 447
15.7 Structure and Competition Regulations 450
15.8 Consumer Protection Regulations 452
PEOPLE & EVENTS: Excerpts from “What are the FDIC’s primary new responsibilities under the new law?” 454
15.9 Bank Regulators 456
# Chapter 18 Investment Banking 527

**Chapter Preview** 528

**Learning Objectives** 528

18.1 The Relationship Between Commercial and Investment Banking 528

18.2 Primary Services of an Investment Bank 533

PEOPLE & EVENTS: Where, Oh, Where Have All the Investment Banks Gone? 534

Do You Understand? 543

18.3 Private Equity 543

Learning by Doing 18.1: Evaluating a Venture Capital Investment 546

Do You Understand? 548

Summary of Learning Objectives 548

Key Terms 549

Questions and Problems 549

# Chapter 19 Investment Companies 551

**Chapter Preview** 552

**Learning Objectives** 552

19.1 Investment Companies 552

19.2 Open-End Mutual Funds 553

Learning by Doing 19.1: Calculating Net Asset Value 554

PEOPLE & EVENTS: Money Market Mutual Funds Breaking the Buck 563

19.3 Closed-End Mutual Funds 566

19.4 Exchange-Traded Funds 567

Do You Understand? 572

19.5 Hedge Funds 572

PEOPLE & EVENTS: Hedge Funds and the Dodd-Frank Wall Street Reform and Consumer Protection Act 573

Do You Understand? 576

19.6 Real Estate Investment Trusts 576

Summary of Learning Objectives 578

Key Terms 579

Questions and Problems 579

# Chapter 20 Risk Management in Financial Institutions 580

**Chapter Preview** 581

**Learning Objectives** 581

20.1 The Dilemma: Profitability Versus Safety 581

20.2 Liquidity Management 583

Do You Understand? 586

PEOPLE & EVENTS: Operational Risk 587

20.3 Managing Credit Risk 587

PEOPLE & EVENTS: Counterparty Controversy: AIG and Its Risky Risk Management 591

Do You Understand? 593

20.4 Measuring and Assessing Interest Rate Risk 593
20.5 Hedging Interest Rate Risk  602
Learning by Doing 20.1: Measuring Interest Rate Risk  608
Do You Understand?  611
Summary of Learning Objectives  611
Key Terms  612
Questions and Problems  612

Glossary  613

Index  637