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PETER S. ROSE MILTON H. MARQUIS

# Money and Capital Markets

## Financial Institutions and Instruments in a Global Marketplace

Ninth Edition

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#### To our families

#### PETER S. ROSE

#### MILTON H. MARQUIS



#### MONEY AND CAPITAL MARKETS:

Financial Institutions and Instruments in a Global Marketplace

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#### **Preface**

The twenty-first century is still very young. The first decade of this new century hasn't yet reached its end, but already we can sense the unfolding of a new millennium and a new world. The war on terror rages around us on nearly every continent. And, despite the end of the Cold War more than a decade ago, the nuclear threat remains, this time in a new form and in new and more fanatical hands. Freedom and liberty and our most cherished institutions appear to be facing their greatest challenge since World War II, more than half a century ago. We have begun to wonder if anything really can be considered "safe" anymore.

Nowhere are these concerns for safety, freedom, and liberty more evident today than in the functioning of the global financial marketplace and its fabled institutions—the money and capital markets and the thousands of banks, insurance companies, security brokers and dealers, investment bankers, and investment companies that provide us with essential financial services. Collectively, these critical components of our financial system:

- Provide us with supplies of *credit* when we need borrowed funds to supplement our income and maintain our standard of living.
- Encourage saving for the future on the part of millions of businesses and households (individuals and families) so that we will have financial resources available when they may be most needed down the road (such as for retirement).
- Convert those savings into *investments* in the building and refurbishing of plant
  and equipment and the stocking of inventories of goods to sell so that economic
  activity continues to grow, provide more jobs, and enhance our standard of
  living.
- Provide a channel through which trillions of currency units (dollars, euros, pounds, yen, etc.) pass daily to effect payments for purchases of goods and services so that spendable funds flow rapidly and safely from buyers to sellers.
- Supply a vibrant marketplace through which we can *liquidate assets* in order to raise cash (liquidity) quickly to meet our spending needs.
- Offer risk protection in the form of insurance policies, derivatives, and other financial products to safeguard our well-being and protect what we own and value most highly.
- Serve as a channel for public policy through which governments work to regulate their economies and achieve critical economic goals, such as maximum employment for their citizens, stable prices and the avoidance of inflation, and sustainable economic growth into the future.

What an incredible array of jobs for one of society's great institutions—the money and capital markets and the financial system that surrounds them! How lucky we are to have such a vital set of markets and institutions to meet our needs for credit, savings, investment, making payments, providing liquidity and risk protection, and promoting a healthy, growing economy that generates jobs and avoids severe inflation.

Moreover, as recent global events have illustrated, how different our lives can become when the financial system of markets and institutions is significantly damaged or Preface v

can no longer perform as efficiently or as assuredly as we have come to expect. For example, when the terrible tragedy of September 11, 2001, unfolded and the World Trade Center collapsed in New York City, not only were thousands of lives lost, but essential facilities for trading financial instruments and making payments suddenly were put out of commission. Frightened investors in stocks and bonds suddenly lost contact with professionals in the financial-service community and feared for the safety and security of their savings and investments. Payments that needed to be made to security traders and from those repaying old loans or seeking new loans were suddenly shut down or delayed. The New York Stock Exchange and other key financial markets around the globe temporarily closed or drastically slowed, contributing to a global recession and loss of jobs.

What is truly remarkable, however, is the *speed* with which the financial system of money and capital markets quickly righted itself and moved forward after the tragedy of 9/11. Financial-service businesses, including major banks and securities houses, that suffered huge losses of talented people, equipment, and funds, still fought their way back to full service to the public within a matter of days. Our money and capital markets proved to be far more resilient than most of us had imagined. Equally important, we learned anew that what happens in those markets impacts *all of us*—every individual and family, every business and governmental institution around the globe. More than ever before we recognize now how much we rely upon the vital services—credit, savings, investments, payments, liquidity, risk protection, and supporting the proper functioning of the economy—that emerge every day from the workings of our financial system.

Recent tragedies impacting the money and capital markets and the institutions that surround them have provided us with a key reason for this book and for other sources of information on the financial system. We have learned that we can illafford to lose the critical services that the money and capital markets provide. Neither can we afford to be ignorant or misinformed about the many roles that the financial system plays in our daily lives. If ever we needed an incentive to explore this book and other sources of information about our financial system, that need has been awakened. It is an adventure we need to undertake and there is no better time to begin than now!

#### Ways This Book Can Be Used

As *Money and Capital Markets* enters its ninth edition, we have incorporated many changes in our telling of the story of the financial system. The book is somewhat shorter—24 chapters now instead of 26 in the previous edition. Still, this text continues to be one of the most comprehensive overviews of the global financial system to be found anywhere in the field. The ninth edition continues to offer its readers and those who teach in this field several alternative routes through the vast panorama represented by the money and capital markets and the financial system. Every reader and every teacher can self-select the course of study they would like to pursue in order to learn about the financial system and the markets that drive that system. For example:

A Security Markets-Oriented Course. Users of this text who would like to focus
upon the security markets and the trading of financial instruments would be
more likely to make use of Part One (especially Chapters 2–4 on financial
assets, financial information, and trends in the financial marketplace), Part Two
(Chapters 5–9 on interest rates and asset pricing), Part Three (Chapters 10–13
on the money market and its key institutions and traders), Part Four (especially
Chapter 16 on mutual funds and investment banks), Part Five (including

- Chapters 18–20 on government and corporate securities), Part Six (especially Chapter 22 on the mortgage market), and Part Seven (particularly Chapter 23 on the currency markets).
- A Financial Institutions-Related Course. In contrast, those who wish to know as much as possible about financial-service providers, including the great financial institutions represented by commercial banks, investment banks, insurance companies, mutual funds, pension funds, finance companies, and security brokers and dealers, would find it most helpful to center their attention around Part One (particularly Chapters 1, 2, and 4 on financial intermediation and trends in marketing financial services), Part Three (Chapters 10–13 dealing with key financial firms in the money market and central banking), Part Four (which, in Chapters 14–16, reviews the characteristics of all major financial institutions and, in Chapter 17, presents a detailed look at the regulation of financial institutions), Part Five (which examines the financial side of governments and businesses in the marketplace), Part Six (including Chapters 21 and 22 on consumer lending and borrowing and mortgage lending institutions), and Chapter 24, which explores the field of international banking.
- A Policy and Regulations-Oriented Course. For those who have the greatest interest in public policy and government regulation within the financial system, key portions of the book would include Part One (especially Chapters 3 and 4 on information sources and trends in financial institutions' regulation), Part Two (particularly Chapter 7 on yield curves and inflation and Chapter 8 on tax laws), Part Three (including Chapters 10–13 on central banking and the rules that surround the money market), Part Four (especially Chapter 17 on the regulation of financial institutions), Part Six (particularly Chapter 21 on households in the financial markets and new disclosure and privacy rules and Chapter 22 on federal government involvement in developing the home mortgage market), and Part Seven (including Chapter 23 on changing government policy regarding exchange rates and Chapter 24 on the important topic of regulating international banking firms).
- An Internationally Focused Course. The increasing globalization of our financial system has aroused great interest in a global view of the money and capital markets and of financial-service firms. While internationally focused material appears throughout this edition, certain sections and chapters do have a heavier emphasis on the international financial markets field. An internationally focused course would want to emphasize such portions of the text as Part One (Chapters 1–4, especially Chapters 3 and 4), Chapters 5, 7, and 9 from Part Two, Part Three on the money market and central banking around the globe, Chapters 14 and 17 on banking and regulations, and Chapters 23 and 24 on international transactions, currency values, and international banking.
- A Financial Theory-Oriented Course. For users most interested in the basic theoretical concepts of finance and the results of recent research in the finance field, several parts of the new edition deserve further examination. These include Part One (especially Chapters 1, 2, and 3), Part Two (particularly Chapters 5, 7, 8, and 9), Part Three (especially Chapters 10, 12, and 13), Part Five (particularly Chapters 18 and 20 on the effects of government borrowing and stock market efficiency), and Chapter 23 (which tracks the theory of currency exchange rates and international currency standards).

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#### Key Features of the Ninth Edition

This edition of *Money and Capital Markets* provides a variety of helpful learning aids for the reader. For example:

- Each chapter begins with a statement of *learning objectives*—what the reader can expect to learn from the material covered in the chapter.
- Beside each list of learning objectives is a *key topics outline* of the most important concepts and issues to be explored in each chapter.
- In this new edition for the first time each chapter is divided into numbered sections so readers and teachers can more easily designate which sections they wish to assign and use for each class session and which sections they may wish to omit.
- *Key terms* are marked in bold where they are defined in the text and each key term is printed in the margin in bold near the spot where it is discussed, insuring that the reader does not miss them. As in the previous edition, all key terms are listed at the end of each chapter, along with the page numbers where they are discussed.
- At the back of the text, a *Money and Capital Markets Dictionary* lists all of the key terms, defines them, and indicates the chapter or chapters where they appear.
- Numerous graphs, tables, and examples appear in the text's pages in order to make key points more vivid and memorable.
- Several boxes reporting special events, pertinent issues, and key research studies bearing on the topics presented are positioned in each chapter. This box material falls into three general topic areas—Financial Developments, Ethics in the Money and Capital Markets, and E-Commerce in the Financial Marketplace. The e-commerce boxes reflect the ever-growing role of electronic equipment and computer networks in storing information and in providing vital services that the financial system must produce and deliver each day.
- Web sites are given a much more prominent place in this new edition. Throughout each chapter, URLs appear in the page margins and are printed in bold nearest the point in the text where they most apply. Toward the end of each chapter, a box labeled Markets on the Net: The Most Important Web Sites for This Chapter provides a listing of key Web sites and URLs.
- Questions to Help You Study appear at strategic points within each chapter to
  give the reader a pause for review to make sure he or she understands the key
  points and ideas just discussed.
- An expanded Summary of the Chapter's Main Points, arrayed by bullet points
  for the convenience of readers and teachers, appears near each chapter's
  conclusion, emphasizing the highlights and most important ideas and
  observations that were presented. This summary, along with the key terms and
  study questions mentioned earlier, helps the reader do a quick check to
  determine if any important items might have been missed along the way. The
  summary also provides a useful review before exams and can be used by
  teachers to guide classroom discussion.
- One of the greatest innovations in the ninth edition is the significantly expanded *problem section* that appears near the end of each chapter. In the section labeled *Problems and Issues*, many of the best of the problems from previous editions have been carried over into the new edition. Most chapters

- also provide a multi-part problem, involving both discussion and calculations, based on the extensive database supplied by *Standard & Poor's Market Insight*, *Educational Version* and covering hundreds of leading corporations (including top financial-service firms). In this same section, labeled *Standard & Poor's Market Insight and Web-Based Problems*, numerous new Web site–oriented problems appear, most of them having multiple parts and asking that the user not only explore the Web sites mentioned but also supply answers to key questions and make calculations from data gathered at the designated Web sites.
- Another significant innovation, completely new, is the creation of a semester project, devoted to a study of one of the most important financial markets today—the federal funds market. This semester-long project starts at the conclusion of Chapter 1 and proceeds through the first 14 chapters of the new edition. Each end-of-chapter segment requires those pursuing this semester-long project to gather data and information, answer questions, and solve numerical problems, enriching their understanding about how this important interbank market functions and why it is so important to all participants in today's financial marketplace. Readers are frequently reminded that the federal funds market has become a key barometer today for forecasting changes in money and credit policy and for predicting future changes in market interest rates.
- Finally, the Selected References to Explore section that concludes each chapter
  includes many of the most recent articles available to the public from a wide
  variety of government agencies and private journal sources. These selected
  references often deal with the hottest and most critical issues addressed in each
  chapter.

#### New Topics in the Ninth Edition

Many new issues and concepts appear in the ninth edition, including, to name a few:

- The *mutual fund scandal* that has resulted in billions of dollars in losses to fund investors, traceable to the effects of after-hours trading and other violations of trading rules and marked by recent huge cash settlements levied by regulators and law-enforcement authorities. (See especially Chapters 1 and 16.)
- The sharp expansion of asset-backed securities (ABS) issued in the corporate debt market, including both the advantages and the problems that ABS growth has created for leading corporations around the globe. (See Chapters 8, 19, and 22.)
- The increasingly sharp controversy over the effectiveness and possible threats to civil liberties represented by *recent terrorist legislation in the United States and Europe*, including the Bank Secrecy and USA Patriot Acts. (See, in particular, Chapter 17.)
- The impact on publicly traded corporations (including publicly owned financial-service providers) of the *Sarbanes-Oxley Accounting Standards Act*, which imposes tough new auditing rules and requires CEO and CFO certification of the accuracy and honesty of corporate financial reports. (See especially Chapter 17.)
- The rapid rise of *E-money* (including the use of credit and debit cards, computer networks, Web sites, etc.), supplanting checks as the number one route for making payments for purchases of goods and services in the United States and Europe. (See Chapters 1, 3, 14, 15, 18, and 22.)

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• The development of the new *Basel II Agreement* on bank capital standards in leading nations around the globe and what this implies for the future of bank regulation and for bank risk-taking. (See, in particular, Chapter 17.)

- An expanded discussion of *credit derivatives*, which have recently experienced explosive growth as a key device to reduce potential losses from defaulted loans. (See especially Chapter 8.)
- The expanding controversy over the extent and impact of *outsourcing* and the *accounting treatment of stock options* by major corporations around the globe. (See, in particular, Chapters 20 and 23.)
- The development of *new interest-rate futures and option contracts*, including the popular federal funds contracts that provide a basis for gauging future changes in monetary policy and for anticipating trends in market interest rates. (See, in particular, Chapters 9 and 11.)
- The growing use of *transparency* and *inflation targeting* by major central banks around the world (including the Bank of Japan, the Bank of England, and the Bank of New Zealand) in an effort to reduce public confusion and uncertainty regarding central bank money and credit policies and their objectives. (See Chapters 12 and 13.)
- The development and implementation of *new discount window policies at the Federal Reserve banks*, including "no hassle" loans and conversion of the Fed's discount rate to a penalty rate at a fixed spread above the key federal funds interest rate. (See, in particular, Chapter 13.)
- An exploration of the widespread use today of credit scoring techniques to
   evaluate borrowers' requests for loans—their design, advantages for lenders
   and borrowers, and their possible limitations and weaknesses. (See especially
   Chapter 21.)
- The passage of *Check 21* into law, which allows the transmission of check images, and its potential consequences for the expansion and changing makeup of the payments mechanism inside the United States. (See, in particular, Chapter 4.)
- An expanded discussion of *GSEs* (government-sponsored enterprises)— especially the Federal Home Loan Bank (FHLB) System, the Federal National Mortgage Association (Fannie Mae), and the Federal Home Loan Mortgage Corporation (Freddie Mac)—their incredible growth in both assets and debt, and the current concern over the devastating effects that may unfold should any of these agencies move to the brink of failure. (See, for example, Chapters 11 and 22.)
- The rise of *financial holding companies (FHCs)* in the United States and around the world and the transformation of the banking community and financial-service conglomerates that this recently developed organizational form has made possible. (See especially Chapters 4, 14, and 17.)
- The alarming explosion of *identity theft*—the fastest growing crime of this new century—and the efforts of legislatures, regulators, private financial institutions, and consumers to slow the spread of this serious crime and preserve the confidence of the public in the markets for credit and payments services. (See, in particular, Chapter 21.)
- The changing role of *investment bankers* within the financial system and the shifting structure of their industry. (See, for example, Chapters 16, 19, and 20.)

- The rise and fall of *initial public offerings (IPOs)*—one of the most volatile of all markets—and their implications for corporate financing and business restructuring. (See especially Chapters 16 and 20.)
- The growing use of *mortgage lock-ins* and their advantages and disadvantages for borrowers and lenders in the huge home mortgage market. (See Chapter 22.)
- The continuing expansion of the European Union and the new nations that have
  joined this elite "club"—including their possible contribution toward the
  strengthening of Europe's collective economy and competition for trade with
  the United States. (See especially Chapters 4, 12, 13, 23, and 24.)
- The rise of *China* as a global power in trade and finance and the economic weaknesses China must still overcome (including repairing the troubled Chinese banking sector) if that nation is to continue to expand its economic and political influence in an increasingly competitive international marketplace. (See, in particular, Chapters 23 and 24.)

There are many more fascinating subjects also unique to this new edition, but the above list of topics should give you at least the flavor of the ninth edition.

#### Supplementary Materials to Help You Make Full Use of This Text

Useful supplemental materials serve to strengthen the effectiveness of this new edition in reaching its readers and in making the teacher's experience more rewarding and enjoyable. Among the key supplements are:

- Instructor's Resource CD ROM (ISBN 0072957409), which encompasses the following items:
  - **Instructor's Manual and Test Bank** This useful tool provides an outline of each chapter and lays out hundreds of questions and problems available for preparing tests and exams and for use in class discussions.
  - **Power Point Presentation System** This compilation of clear and concise slides provides both teachers and students with sharply focused ideas and illustrations of key points within each chapter. There are numerous graphs, charts, and examples as well as frequent listings of key points to be retained. The user can easily edit or rearrange each slide to meet his or her unique teaching or learning needs.
- Text Web Site for the New Edition (www.mhhe.com/rose9e), which provides
  questions and problems for use by teachers and readers and contains an
  Updates section that tracks new developments in the money and capital
  markets since publication of the 9th edition.

## Acknowledgment of the Many Professionals Who Have Helped to Make This Book Better Over Time

As this book has progressed through nine editions, it has benefited greatly from the criticisms and suggestions of numerous professionals—teachers, students, and financial market participants—over the years. These are people who care about their discipline and field and care about reaching those who seek to learn more and come to a deeper and richer understanding of the global financial marketplace and the place we occupy within this unique and massive institution. There have been so many contributors and helpers over the years that the authors are hesitant to write down a list for fear of omitting the worthwhile contributions and names of deserving professionals. We ask for your understanding in this regard and, if necessary, will be glad to make amends in future editions.

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With this said, some of the most significant contributors through the various editions have been: James C. Baker of Kent State University; Ivan T. Call of Brigham Young University; Eugene F. Drzycimski of the University of Wisconsin System; Mona J. Gardner of Illinois Wesleyan University; Timothy Koch of the University of South Carolina; David Mills of Illinois State University; John O. Olienyk of Colorado State University; Colleen C. Pantalone of Northeastern University; Richard Rivard of the University of South Florida; Paul Bolster of Northeastern University; Robert M. Crowe, formerly of the American College at Bryn Mawr; Joseph P. Ogden of SUNY-Buffalo; Donald A. Smith of Pierce College; Oliver G. Wood, Jr., of the University of South Carolina; Larry Lang of the University of Wisconsin—Oshkosh; Jeffrey A. Clark of Florida State University; James F. Gatti of the University of Vermont; Gloria P. Bales of Hofstra University; Ahmed Sohrabian of California State Polytechnic University at Pomona; Thomas A. Fetherston of the University of Alabama at Birmingham; Mary Piotrowski of Northern Arizona University; Rick Swasey of Northeastern University; Owen K. Gregory of the University of Illinois at Chicago; Thomas Dziadosz of The American College; Tom Potter of the University of North Dakota; Lester Hadsell of State University of New York, Albany; John Hysom of George Mason University; Frank Ohara of the University of San Francisco; Robert Schweitzer of the University of Delaware; and Donald J. Smith of Boston University.

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In addition to these outstanding contributors are many associations and institutions that have contributed to the content of this text in a wide variety of ways over the years. These include the American Council of Life Insurance, the *Canadian Banker* (official publication of the Canadian Bankers Association), the Chicago Board of Trade, the Credit Union National Association, the Insurance Information Institute, Moody's Investors Service, and Standard & Poor's Corporation.

The authors also gratefully acknowledge the support and patience of family and friends who made the completion of this new edition possible. Any shortcomings that remain belong to the authors, who, nevertheless, strive to make the text a better learning tool with each new edition.

#### A Note to the Student and Other Readers of This Text

The money and capital markets, along with the financial system that supports and surrounds them, are an exciting area for study. What happens daily in these markets and within the financial system as a whole has a powerful impact on our daily lives. Indeed, our ability to function as human beings and as professionals in our chosen careers is shaped, in so many ways, by the functioning of the financial system. Moreover, the money and capital markets and the financial system in which they do their work are constantly in a state of flux. Broad changes are forever remaking the financial marketplace as new institutions, new methods, new problems, and new services continually appear.

The rapidity of change that characterizes the financial system today means that we have no choice but to try to keep up with our unfolding financial world. Indeed, so rapid and sweeping are the changes going on in the money and capital markets that no book, no matter how many times it is revised, can serve as more than an *introduction*—indeed, an invitation—to learn about the often incredible goings-on within the financial marketplace.

Without question, you need to read this book and understand what it is trying to say. But reading this book cannot be the end of the road. You cannot stop here. A great American poet, Robert Frost, once declared that we "cannot stop here" for we have "promises to keep" and "miles to go before we sleep." For the sake of your own future success, personally and professionally, plan to enjoy what you discover in the pages that follow, but view this book as only the *first step* in what must be a lifetime journey of learning about the financial system and its effects on our everyday existence. Truly, each one of us has "promises to keep" to ourselves and others and "miles to go" before we can be satisfied with what we have accomplished.

As you begin each new chapter of this book, set your sights on true *mastery* of the subject. Make the most of the time you spend with this text. Plan for success and hit that target with determination and well-organized study techniques. How can you do that? How can you learn what you need to know in today's complex financial world?

First, begin with the *Learning Objectives* and the *Key Topics Outline* that open each chapter. These are really road signs, alerting you to the key questions and issues each chapter will address. They tell you what you should *expect to learn* in the pages that follow. It is a useful idea to review the list of Learning Objectives and the Key Topics Outline as you sit down to tackle each new chapter and then to revisit them when you are finished reading.

Have you touched base with each learning objective and each key topic as you read the material? If you are not sure of one or more of the learning objectives or key topics, go back and review the relevant portions of the chapter that apply to that particular topic or objective. Ask yourself if the learning objective or key topic you are focusing upon makes sense to you and if you now feel better informed about it than you did before.

Next, examine the list of *Key Terms* at the close of each chapter. There are page numbers telling you where each key term is defined and discussed. Return to the pages where any key terms appear that still seem to be a mystery to you. Let us suggest that you make a list of these key terms in your personal computer or in a notebook and accumulate them as the assigned chapters roll by. This is much more than an act of memorizing terms. Rather, this is reaching out to learn the "language" of the financial marketplace.

You want to make the language of the money and capital markets second nature to you so that, for everything you subsequently read and hear about the financial system, you will understand and be able to make that information work for you. You may even want to write out or type into the computer a definition of each key term and then double-check that definition against the meaning that appears in the *Money and Capital Markets Dictionary* at the end of the book.

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In each chapter, *Questions to Help You Study* appear at various locations. These study questions encourage you to pause after reading several pages and ask yourself: Do I really understand what I just read? Try to answer each of these study questions, either verbally or, better still—if you have the time—by writing out a brief answer and then double-checking its accuracy by referring back to the relevant portion of the chapter you are working on. You may wish to store the answers you develop in your personal computer or in a paper file for future reference, particularly just before exams come along.

In each chapter of the ninth edition, several useful *Web sites* appear. In the margins of various pages in a chapter, important and often very interesting URLs appear in bold, giving you an opportunity to explore further the topics and ideas discussed. Near the conclusion of each chapter is a list of *The Most Important Web Sites for This Chapter*. Check out these Web sites and learn as much as possible about the subject matter of the chapter from a different perspective—from the point of view of the authors of these Web sites. Thus, by reading both the text and the material in many of the associated Web sites, you are following one of the most famous ideas about how we learn—the idea that "repetition is the key to learning."

At the end of each chapter there are two sets of problems to solve—one set is entitled *Problems and Issues*, which are relatively short and often require you to find some numerical answers, and a second set labeled *Standard & Poor's Market Insight and Web-Based Problems*, which are generally longer, multi-part problems that typically ask you to go to the World Wide Web, gather information, and come to some conclusions or make calculations. These two problem sets add another important dimension to your studies. Finance is about problem solving and the better you become at solving problems in this field, the greater your chances for success. As you work through each problem save the solutions and conclusions you reach for future reference, either in your computer or in a paper file.

Near the close of a majority of chapters (specifically, Chapters 1–14) there is a long problem set entitled *Semester Project: A Study of the Federal Funds Market*. This series of questions and problems asks you to devote part of your semester to learning about one of the most important markets in the United States' financial system—the market for interbank loans, known today as *federal funds*.

The Fed funds market has taken center stage in recent years because the U.S. central bank, the Federal Reserve, uses the federal funds interest rate on overnight loans between banks as its key operational target for monetary policy. The result is that the federal funds market conveys important clues to market participants about future Fed monetary policies and about the future course of market interest rates. Pursuing this semester project will teach you a great deal about how the financial markets work and about how to gauge the outlook for changing interest rates and credit conditions. Even if your instructor doesn't assign this project for your study this term, consider pursuing the project on your own to learn as much as you can about how the real financial world works.

Finally, on the last page of every chapter is a section entitled *Selected References to Explore*. These lists provide references to up-to-date, publicly accessible articles that discuss some of the key issues raised in each chapter. Many of the articles are printed on the World Wide Web at sites maintained by a publishing house or publishing agency listed with each article. These readings often provide greater depth than is available in this book on a given topic area or present a different point of view on what you have been studying. They are an excellent way to help you achieve mastery over your subject.

Finance in general and the money and capital markets, in particular, are moderately difficult disciplines to master. Yet, finance does have its challenges. Therefore, group

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study sessions are often helpful in tackling its hardest issues and problems. See if you can form a study group that periodically gets together and goes over some of the more difficult concepts and problems. Be a contributor to these sessions, and take the lead in explaining and helping others. *Teaching others* is one of the best ways to learn a new subject for yourself.

Always try to keep in mind that this book has two fundamental purposes: (1) to give you an arsenal of *analytical tools* that you can apply to any financial problem so as to make better financial decisions; and (2) to make you feel comfortable with the *language of the financial marketplace* so you can speak that language with comfort and maximum understanding. A truly successful course of study will develop *both* the tools and the language of the financial system and get you started along the road to mastery and personal success.

This course can be a foundation stone for many promising future careers. Perhaps you have considered becoming the financial manager or CFO of a large corporation, the head of the financial division of an important unit of government, a member of the legislature or of the Congress where financial issues are always among the main topics of discussion, a trader (dealer or broker) in securities or derivative contracts, a consultant or adviser to those who wish to enter the global financial marketplace, or an active investor in your own right, striving to build up your personal wealth and to prepare for a rewarding lifestyle. Wherever your career path leads you, superior knowledge and understanding of the financial marketplace will be an absolutely essential companion on your journey.

However, as you already know from prior experience with other challenging fields of study, mastering the money and capital markets and the financial system will *not* be easy. In the words of the poet, your future success in keeping the "promises" you have made and traveling successfully the many "miles to go" before you reach your goals will depend crucially upon the energy and enthusiasm, the commitment to excellence, and the hard work that you bring to this subject. By any measure, it is a challenge worthy of your best efforts. Good luck on your journey!

Peter S. Rose Milton H. Marquis January 2005

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