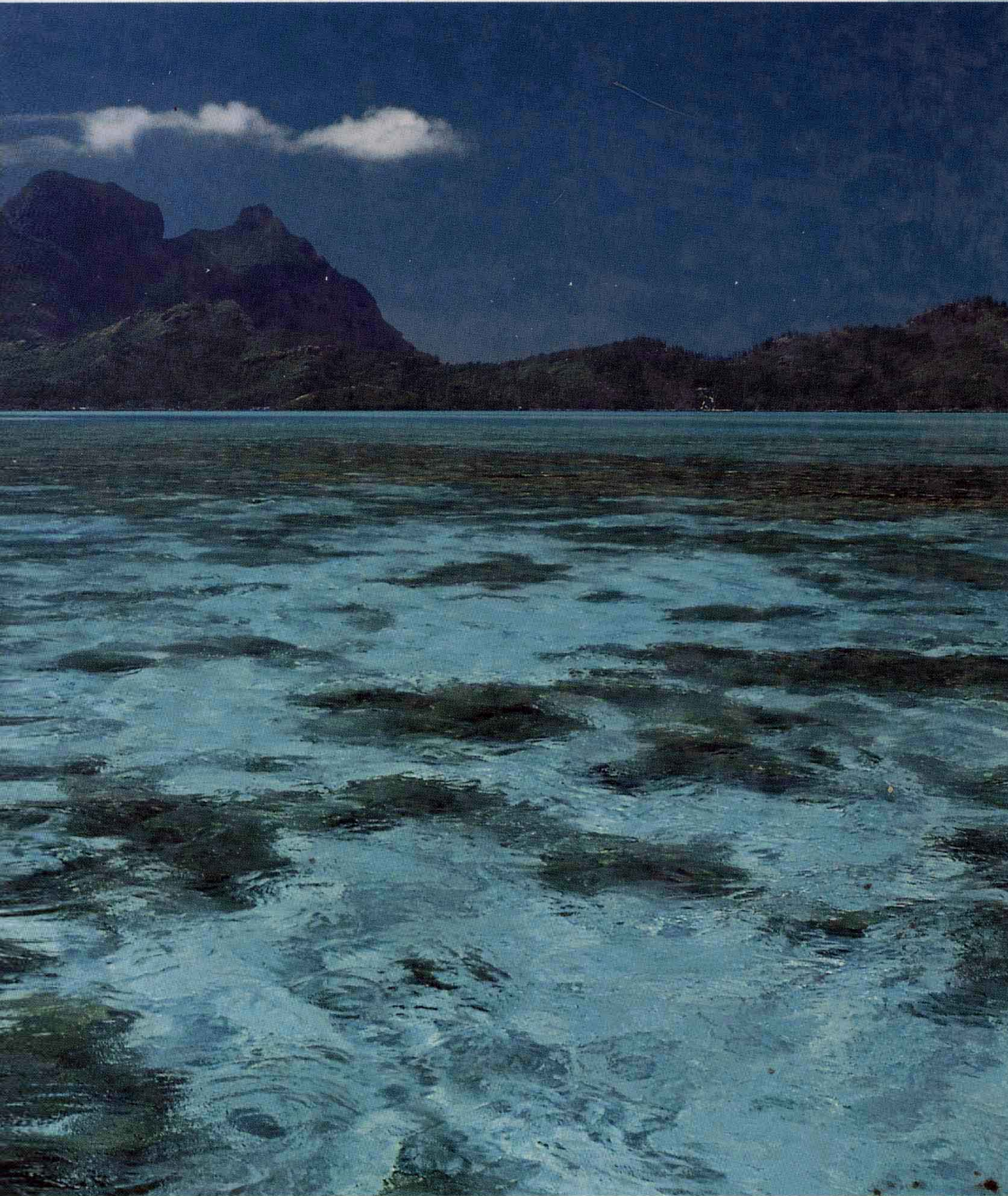


# MONEY, BANKING, AND FINANCIAL MARKETS



MEIR KOHN





# MONEY, BANKING, AND FINANCIAL MARKETS

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# MONEY, BANKING, AND FINANCIAL MARKETS

*To my parents*



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# PREFACE

This text differs from other money and banking textbooks in three important ways. First, it brings financial markets and institutions to life. It does so by describing how financial institutions and financial instruments develop as solutions to problems and as responses to profit opportunities. Instead of being numbed by an avalanche of unconnected facts and figures, the student is stimulated by a coherent and intriguing narrative. The result is a sense of drama and excitement. Understanding *why* institutions and markets are the way they are, students are encouraged to think about the real world in a creative way.

The coverage is very up-to-date. The book takes topics straight out of today's financial pages and makes them comprehensible to the student. Examples include the movement toward interstate banking; the rise of the money market and of the Eurodollar market; the LDC debt crisis; the savings and loan debacle and the crisis in deposit insurance; the rise and fall of the junk bond market; the appearance of new financial instruments—financial futures, options, and swaps and mortgage-backed securities. In each case, the book makes clear what is happening, why it is happening, and why it matters.

The second important way this text differs is in the extra help it provides in the teaching of monetary theory. Because instructors find it difficult to teach ISLM in the limited time available, they often rely exclusively on the AS/AD model. However, AS/AD does not link up well with the part of the course that deals with the financial system. It is also of little help in explaining the mechanics of monetary policy and how monetary changes affect the economy—especially their effect on interest rates and exchange rates. I address this problem by supplementing the AS/AD and ISLM models with a simple and intuitive new framework, the circular flow/loanable funds model. This model is used to explain the immediate impact of monetary and other changes, providing “the missing link” between AS/AD and the financial system. It also provides an intuitive bridge to the ISLM model for those instructors who wish to teach it.

The circular flow/loanable funds model is very easy to use. It relies on the same easy-to-understand behavior used earlier in the book to explain the working of the banking system and of financial markets—bank creation of money through lending, the borrowing and saving behavior of firms and households, and the circular flow of payments. As a result, the monetary-theory part of the course integrates well with the earlier discussion of the financial system. And because of its clear connection with individual behavior, the model lends itself readily to real-world applications.

The circular flow/loanable funds model is particularly good in illuminating a number of key topics: The connection between money demand and velocity; the “liquidity effect” on interest rates of a monetary injection; the effect of inflation on the real rate of interest; the differential liquidity effect on long and short rates; the connection between interest rates and exchange rates; and interest-rate versus money-growth targeting of monetary policy.

The third way in which this text differs from others is in its treatment of international material. Instead of being segregated in a separate section at the end, international material is fully integrated throughout the book. Some examples: The banking structure of the United States is studied in relation to that of other countries; the Eurodollar market is explained as part of the overall development of the money market; foreign exchange and international lending are discussed as part of the normal business of money center banks; connections and parallels are drawn between exchange rates and interest rates throughout; and the macro models are developed for an open economy.

Finally, a number of topics are covered more extensively in this text than is customary. Each of the following receives chapter-length treatment: The causes and consequences of inflation; the Quantity Theory as a theory of the long-run effects of monetary change; the government securities market and its significance for the economy; and the mortgage market and securitization.

## ORGANIZATION AND CONTENTS

### INTRODUCTION

This short chapter is designed to give the student a feeling for the excitement and drama of financial markets and for their importance to everyday life. What happens when financial markets go wrong? What is it like to be a banker or a bond trader?

### PART ONE: THE FINANCIAL SYSTEM: SOME BASIC IDEAS

Chapter 2 explains the role of financial markets in the economy. Chapter 3 develops carefully the reasons for lending and borrowing, the informational problems involved, and the ways that indirect and direct lending address them. It



also considers the economic efficiency of the financial system, including cost efficiency, integration of markets, and competition. Money and the payments system are explained in Chapter 4 in terms of the same sort of informational problems. Chapter 5 establishes the principles of bank profit maximization that will serve as the basis for later discussions of actual bank behavior. Chapter 6 is devoted to interest-rate algebra, interest rates and asset prices, and interest-rate risk.

## **PART TWO: BANKING AND THE MONEY MARKET**

The government securities market is described thoroughly in Chapter 7, as a paradigm for other financial markets, and as the pivot of the money market. The peculiar structure of U.S. banking is explained in Chapter 8 in terms of its historical origins and of the attempts of banks to capture economies of scale. The story of the growth of the money market and of the banks' response is told in Chapters 9 and 10, stressing the role of restrictive regulations and of creative attempts to get around them. Chapter 11, on international banking, explains Eurocurrency banking and the international functions of banks. This section culminates in Chapter 12 with an examination of how banks maximize profits while managing liquidity and risk in the environment of the 1990s (the differences between large and small banks are highlighted).

## **PART THREE: MORE ABOUT FINANCIAL MARKETS**

This part addresses some more advanced topics in financial markets and institutions. Chapter 13 describes how futures, options, and swaps are traded and how they are used, with an emphasis on the underlying economics. Chapter 14 offers a comprehensive treatment of the capital market, stressing parallels with the short-term market, explaining the rise and fall of the junk bond market, and considering the implications of increasing corporate leverage. Chapter 15 is devoted to the development of the mortgage market and to securitization.

## **PART FOUR: REGULATION AND POLICY**

The principles of bank safety are developed in Chapter 16—the nature of bank runs, the role of a lender of last resort, and the moral hazard problems of insurance. The current problems of the saving and loan industry and of deposit insurance are then discussed in Chapter 17 in light of these principles. Suggested solutions to the problems are considered and recent legislation—the new capital standards and the S&L bailout—is described in detail. Chapter 18 brings together the discussion of Parts Three and Four on regulation and deregulation and describes the special responsibility of the Fed for the safety of the financial and

payments systems (including a discussion of the problem of daylight overdraft). This leads naturally into the regulation of the quantity of money in Part Five.

## **PART FIVE: REGULATING THE QUANTITY OF MONEY**

The basic principles of multiple deposit expansion are developed carefully in Chapter 19. The Fed's instruments of controls are then discussed in Chapter 20. (Since students already have the basics of multiple expansion, they understand why control matters.) Chapter 21 discusses the reality of multiple expansion from the point of view of a bank's reserve manager and explains the relationships between simple theory and complex practice, and between micro and macro.

## **PART SIX: MONEY AND THE ECONOMY**

Having seen how the quantity of money is controlled, the next step is to see how it affects the economy. First, in Chapter 22 there is a careful treatment of money demand and its connection with velocity. Then Chapter 23 uses the Quantity Theory to explain the long-run effects of monetary change. The circular flow/loanable funds model is developed in Chapter 24 to describe the immediate effects and is expanded to an open economy in Chapter 25. (The open economy model brings out clearly the connections between trade flows and capital flows and between the loanable funds and foreign exchange markets.) Next, Chapter 26 on the ISLM model and Chapter 27 on the AS/AD model are used to connect and integrate the immediate and long-run effects. (Chapter 26 on the ISLM model can be skipped without any loss of continuity; several chapters after 26 have appendixes that use the ISLM model, but these appendixes too can be skipped if desired.) The theory is illustrated extensively with applications.

A thorough discussion of the causes and real effects of inflation in Chapter 28 provides essential motivation for the policy discussion later of attempts to restrain inflation. Chapter 29 covers expectation formation (including rational expectations), the term structure of interest rates, and the international structure of interest rates and exchange rates.

## **PART SEVEN: MONETARY POLICY**

The possible goals of monetary policy are considered in Chapter 30 in the context of different views of the macroeconomic problem (Keynesian, Monetarist, and real business cycles). The mechanics and pros and cons of different targets are discussed (interest rates, exchange rates, and monetary growth rates). This is followed by a discussion of the policy-making process. The evolution of the theory and practice of stabilization policy is described in Chapter 31. Monetarist and Keynesian views on monetary and fiscal policy are explained, including the Phillips curve tradeoff, the Friedman-Phelps critique, the New Classical Economics,

and the Lucas critique. The final chapter, Chapter 32, begins with a comprehensive and balanced discussion of the “Monetarist experiment” of 1979–1982, of its effects, and of the problems in its implementation. It goes on to discuss monetary policy since 1982 and some of the remaining issues in monetary policy for the future.

## HOW THE BOOK CAN BE USED

The book is designed to allow maximum flexibility without sacrificing depth or rigor. It provides both a thorough treatment of the financial system and a complete development of the macro theory. Clearly, all this material cannot be covered in a single term. By judicious selection of chapters, the book lends itself equally well to money and banking courses that stress the microeconomics of the financial system and to those that stress monetary theory and policy. The book has also been used successfully as the basis for a course in financial institutions and markets and for a course in macroeconomics for business students. Detailed recommendations on which chapters to include for each type of course are provided in the *Instructor's Manual*.

## TEACHING PHILOSOPHY AND METHODS

### THE ISLAND ECONOMY

The book frequently uses the device of a fictitious South Sea island economy to bring out essential principles without getting bogged down in historical or institutional detail. This is done, for example, in explaining money and the payments system (Chapter 4), bank safety (Chapter 16), and the multiple expansion multiplier (Chapter 19). In each case, the subject is covered twice—once for the simple fictitious economy, then again for the U.S. economy. On the second pass, because the principles are already clear, the historical and institutional details make sense and are not merely arbitrary facts to be remembered. Of course, the repetition also reinforces understanding. The Island economy is also used as the basis for the theoretical models of Part Six. As a result, these models can be simple without being unrealistic. The theoretical argument can be stated clearly first and then applied to the real world.

### THE ROLE OF DETAIL

The reason for the wealth of real-world detail in the book is that students find it much easier to grasp abstract concepts when they can understand the actual mechanics: The detail gives students something closer to their own experience that they can hold on to. For example, the multiple expansion multiplier becomes less mysterious when we discuss in Chapter 21 how a bank actually manages its

reserve desk, and how reserves are traded in the federal funds market (including the use of Fedwire to transfer funds).

### **PUTTING THE STUDENT IN THE SHOES OF THE DECISION MAKER**

A device that is frequently used is to put students in the shoes of the decision maker and then present them with the issues and problems such a decision maker faces. Such scenarios are quite successful in getting students to think actively about the material rather than just memorize facts. They (and their instructors) are constantly motivated to ask, “How does this work?” “Why is this done?” and even “Why not do this?” Some examples include: An entrepreneur seeking finance in Chapter 2; a trader needing means of payment in Chapter 4; a banker maximizing profits in Chapter 5; a securities dealer making a market in Chapter 7; a corporate treasurer managing liquid assets in Chapter 9; a reserve manager minimizing costs in Chapter 21; and a currency trader speculating on exchange rates in Chapter 29.

### **EXTENSIVE USE OF EXTRACTS FROM THE FINANCIAL PRESS**

A large number of items taken from the financial press are used to reinforce, motivate, and illustrate the material.

### **EXTENSIVE USE OF NUMERICAL EXAMPLES**

Numerical examples are used extensively to illustrate complex ideas throughout the book. Financial transactions are carefully described with T-accounts.

### **CHECK STATIONS**

Students are invited to check their understanding of key quantitative concepts by solving simple in-chapter problems as they proceed. Answers are provided at the back of the book.

### **TERMS AND DEFINITIONS**

Important concepts are elucidated with a marginal glossary. Key terms are listed at the end of each chapter.

## GRAPHS

Considerable care has been taken to illustrate concepts visually wherever possible. Graphs are captioned to enhance understanding.

## CHAPTER SUMMARIES

Extensive summaries are provided at the end of each chapter.

## CLASSROOM TESTING

The text is based on lectures developed over a decade at Dartmouth College and used there and at Boston University, Brandeis University, and UCLA by several instructors with considerable success. In particular, both the narrative approach to financial institutions and the loanable funds treatment of the macroeconomic theory work very well in the classroom.

## SUPPLEMENTARY MATERIALS

### INSTRUCTOR'S MANUAL/TEST BANK/TRANSPARENCY MASTERS

The *Instructor's Manual* provides alternative outlines for courses stressing the financial system, monetary theory and policy, financial institutions and markets, or macroeconomics. The manual contains chapter overviews and answers to end-of-chapter discussion questions. The *Test Bank*, written by Suzanne Crosby of Iona College, contains approximately 2,100 multiple-choice and essay questions. A set of 130 transparency masters is also provided, featuring key exhibits from the text.

### STUDY GUIDE

Written by Tom Odegaard of Baylor University, Mark Vaughan of Washington University, and Jan Hansen of University of Wisconsin, the *Study Guide* provides chapter overviews, outlines, review questions, conceptual problems, and excerpts from the financial press to help students master course material. Special sections called Office Hours provide additional discussions of difficult topics.

## SOFTWARE

Developed by William V. Williams of Hamline University, these 12 software simulations give students experience in working with such concepts as the circular flow of payments, bank lending, present value, asset and liability management, open market operations, ISLM, the foreign exchange market, the stock market, monetary and fiscal policy, and the Monetarist/Keynesian debate. Each simulation is tied directly to a chapter in the text. The software is free to instructors upon adoption.

## COMPUTERIZED TEST BANK

Through the use of ExaMaster, a powerful, easy-to-use testing program, instructors can generate tests quickly and easily. Instructors can create tests with just a few keystrokes by following ExaMaster's screen prompts. (Available in IBM and Macintosh versions.)

## NEWSLETTER

A periodic newsletter will keep adopters up to date on current developments in financial markets and institutions and will provide new examples to illustrate concepts in the text.

## ACKNOWLEDGMENTS

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Meir Kohn  
December 1990



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Meir Kohn (Ph.D., M.I.T.) is a Professor of Economics at Dartmouth. He has also taught at the Hebrew University, University of California at Berkeley, Boston University, the University of Western Ontario, and UCLA. His professional work focuses on monetary theory and macroeconomics, and he has published extensively in professional journals.

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