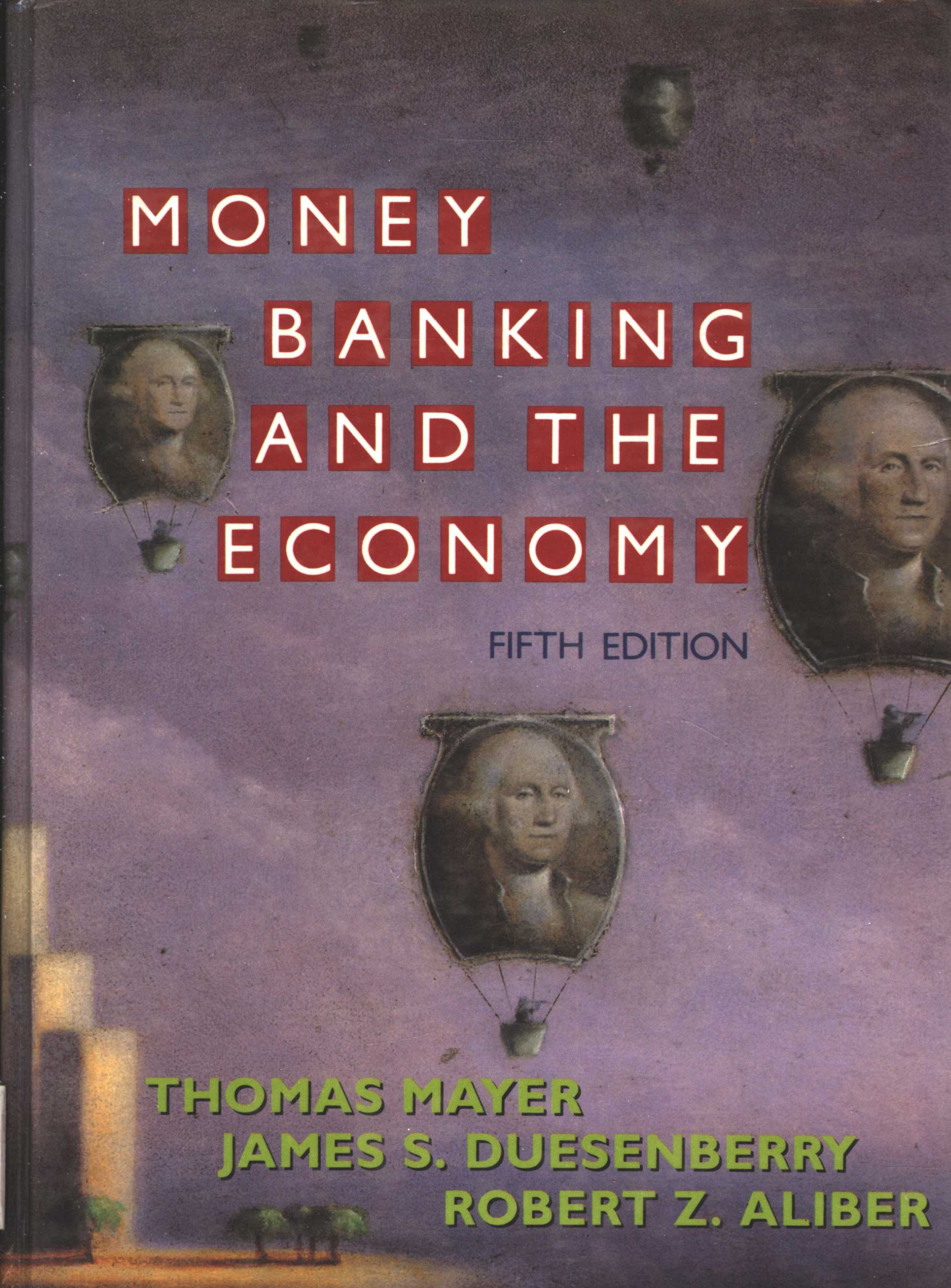

MONEY BANKING AND THE ECONOMY

FIFTH EDITION

THOMAS MAYER
JAMES S. DUESENBERRY
ROBERT Z. ALIBER

MONEY, BANKING, AND THE ECONOMY

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Thomas Mayer, *University of California, Davis*

James S. Duesenberry, *Harvard University*

Robert Z. Aliber, *University of Chicago*

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PREFACE

In preparing this new edition we have undertaken two tasks. One is to update the material by incorporating new developments, such as the bail-out of the savings and loan system, the weakened position of commercial banks, the passage of the 1991 FDIC Improvement Act, and the 1990 downturn and subsequent weak recovery. The other is to improve the coverage of topics discussed previously. Thus, we have expanded the discussion of finance from one to two chapters (Chapters 2 and 3); and there is now a separate chapter (Chapter 9) on the travails of the deposit-insurance system that discusses who is to blame and a chapter (Chapter 10) largely devoted to proposals to improve the deposit-insurance system.

Apart from such major changes, we have made numerous lesser revisions, some for pedagogic reasons and others to make the material reflect better the prevailing views of the profession. An example of the latter is that we now define money as *M-2.* We have, therefore, changed the discussion of deposit creation so that it relates in a straightforward way to *M-2.* The most conspicuous example of pedagogic changes is the collection of boxed inserts that has been added to spur student interest. There are many other changes; the *Instructor's Manual* provides a detailed list that will be of interest mainly to users of the previous edition.

While much has changed as a result, the book remains faithful to the three major ideas that guided us in preparing the first edition. First, the study of the institutions need not be a boring recital of facts that students forget right after the final. To be sure, learning about institutions does involve memorizing many new terms; students must learn, for example, what a yield curve is and what the FOMC does. But a serious study of financial institutions consists of more than just memorizing a set of definitions. It also means understanding some of the most recalcitrant economic problems that our nation faces and appreciating the strengths and limitations of contending arguments about their solution. We believe that if students are introduced to these problems and their proposed solutions, it enlivens what would otherwise be mere fodder for memorization. Hence, in this (as in every) edition of our book not only do we discuss these problems as we come to them in various chapters but, in addition, we include a whole chapter on institutional reforms.

The second idea is that the major disputes about monetary theory and policy are not such complex technical issues that they can only be understood by specialists. Although students in an introductory money and banking class certainly cannot follow the typical paper in the *Journal of Monetary Economics,* the basic issues of monetary theory and policy can be explained in language that undergraduates can understand. Hence, in this edition (as before) we take care to explain the debate between Keynesians and monetarists.

The third idea, which has by now become commonplace, is that the American economy does not exist in isolation, that a thorough discussion of international finance is a necessary component of a modern money and banking course. This has always been our view, and in this edition it is reflected in two ways. One is by devoting an entire part, Part 5, to international finance. The other is by including in Parts 1 through 4 discussions of international finance wherever they are relevant. Thus, when dealing with financial institutions we devote an entire chapter to international banking. When discussing central banking we talk about the Bank of England, the Bundesbank, and the Bank of Japan and take up the attempt to create a Euro-Fed. In explaining how interest rates are determined we allow an important role for capital inflows and outflows. And in our explanation of how monetary policy affects aggregate expenditures we give a prominent place to the exchange-rate channel.

Perhaps the most difficult problem in writing a money and banking text is to anticipate the many changes that will occur during the life of the edition. Not being prescient, we cannot anticipate everything. But we have given considerable thought to what is likely to happen. In particular we expect that the two chapters, Chapters 11 and 31, on unsettled problems in the domestic and international financial systems respectively will keep the book timely.

This book is organized to permit flexible use in the classroom. In general, we have tried to write chapters so that they will stand independently. For example, some instructors may want to take up the tools of monetary policy along with Part 1 or shift the chapter on Fed organization from Part 1 to Part 3. Some instructors may prefer to skip most of Chapter 26, dealing with the history of Fed policy.

A *Study Guide* by Steven Beckman of the University of Colorado at Denver and Janet L. Wolcutt of Wichita State University contains highlights, exercises, and problems for each chapter. We authors have written an *Instructor's Manual,* which contains brief discussions of the chapters as well as answers to the questions at the back of each chapter and more than 1,000 multiple-choice test questions. The test questions, for which we are indebted to Mary H. Acker of Iona College, are also available on computer diskette.

We are deeply indebted to those whose comments and suggestions have helped shape this book. For this edition R. A. Springer of Rensselaer Polytechnic Institute, Christine Amsler of Michigan State University, Andrew Feltenstein of the University of Kansas, Eleanor Craig of the University of Delaware, and Scot Stradley of the University of North Dakota offered detailed critiques based on their classroom experience.

Earlier editions benefited from the comments of Robert T. Averitt, Smith College; Steve Beckman, University of Colorado at Denver; George Benston, Emory University; William Brainard, Yale University; Philip Brock, Duke University; the late Karl Brunner; Steven A. Cobb, Xavier University (Cincinnati); Tom E. Davis, Cornell University; Jonathon Eaton, Princeton University; Wilfred J. Ethier, University of Pennsylvania; Peter Frevert, University of Kansas; Milton Friedman, Stanford University; Jack Gelfand, State University of New

York at Albany; Beverly Hadaway, University of Texas at Austin; Richard C. Harmstone, Pennsylvania State University at Worthington-Scranton; Thomas Havrilesky, Duke University; Arnold Heggestad, University of Florida at Gainesville; Robert S. Holbrook, University of Michigan; Walter Johnson, University of Missouri at Columbia; David Laidler, University of Western Ontario; Joseph Lo, University of California at Los Angeles; Peter Olsheski, Pennsylvania State University at Worthington-Scranton; Edmund S. Phelps, Columbia University; James L. Pierce, University of California at Berkeley; William Poole, Brown University; Uri M. Possen, Cornell University; John Rutledge, Claremont Men's College; and John F. Scoggins, University of Alabama.

Donald S. Lamm at W. W. Norton did much more for this book than any author has a right to ask of an editor. And Drake McFeely and Jane Carter, editor and manuscript editor, respectively, did a sterling job. Finally, we owe a debt to Marguerite Crown and to Ann Frischia for excellent secretarial services on the first edition and to James Booth for assistance on the current edition.

T. M., Davis, California
J. S. D., Cambridge, Massachusetts
R. Z. A., Chicago, Illinois
January 1993

CONTENTS

PART ONE

THE FINANCIAL STRUCTURE

CHAPTER 1

Money

After you have read this chapter, you will be able to:

—Define money and understand the relationship between money, near-monies, and liquidity.
—Discuss the nature of money and its functions.
—Understand what credit money is and why it has value.

We begin with the monetary and financial systems: why they are important, and how to study them. We quickly encounter the subtle, but essential concept of money, which has tripped up many a student of monetary economics. We'll learn, first, to distinguish between money, on the one hand, and currency, income, and wealth on the other; second, that the value of money depends upon its general acceptability; and third, that there is no sharp line of demarcation between those items that are included in the definition of money and several more or less similar items that are excluded.

IMPORTANCE OF THE MONETARY SYSTEM

Why do we create and use money? Basically, we satisfy our needs by producing goods and services, by planting crops, tightening bolts on automobiles, frying hamburgers, and even lecturing on relativity theory. The printing of pieces of paper called money carries no direct benefit. If we double the output of our farms, factories, and offices we are better off, but doubling the output of money does not make us better off. In this narrow sense, money is utterly unimportant. Yet in another way money and the financial institutions associated with money are of overwhelming importance. Money makes the exchange of goods much simpler by eliminating the trouble and cost of barter. If the monetary system were to break down, so would our exchange mechanism, and since we rely on a division of labor, without an effective exchange mechanism our productive capacity would be crippled. During the Great Depression, for example, massive bank failures caused a sharp reduction in the quantity of money that severely hindered our exchange mechanism. The result was massive unemployment. There was poverty among potential plenty; people lacked basic necessities, while at the same time there were idle workers and idle factories. The means of payment needed to put them to work were lacking. Another example of a monetary system malfunctioning is unexpected inflation. After both world wars some countries experienced massive inflation, with the value of money dropping practically to zero. Conservative investors who had put their trust in government bonds and other securities denominated in fixed amounts of money were wiped out. In our own country we have not experienced any inflation nearly as bad since the Revolutionary War, but even so, if you would have bought a $1,000 government bond in, say, 1965 and redeemed it in 1991 you would have got in terms of purchasing power only $231.

How well the monetary system functions has much to do with our welfare, both national and individual. We study it for its impact on unemployment and the inflation rate, but also because in mastering the inner workings of the monetary system, we learn how banks and other financial institutions operate, why interest rates change, and how international exchange affects domestic policy, among other important concerns. On an individual level, understanding the financial system helps you to decide how to invest. It provides the grounding you need to understand the material you are likely to read on investment. On a more mundane level, the interest you pay when you take out a car loan depends in part on monetary factors, such as the Federal Reserve's current policy and the inflation rate.

OUTLINE OF THE BOOK

This book explains how the monetary and financial systems function. The first part describes the institutions that create and administer money and other financial assets. Part Two discusses the measurement and creation of money and bank reserves. The third part develops monetary and macroeconomic theory and uses it to explain how the quantity of money and other macroeconomic variables affect national income, employment rates, and price levels. Part Four deals with monetary policy. It should help you to understand what is going on when you read in the newspaper that the Federal Reserve has raised the discount rate or used other tools of monetary policy. The final part of the book focuses on how our monetary system interacts with those of other countries. Our trade deficit of recent years has provided dramatic evidence of what should have been an obvious fact all along—our country does not live in isolation. What happens to the relative values of American and foreign money is a major determinant of whether or not unemployment rates rise here in the United States.

WHAT IS MONEY?

Before going any further we have to settle on a definition of money. As we will see in the following paragraphs, the common uses of the word *money* are simply too vague for economists to study.