
Financial Institutions, Markets, and Money

Third Edition



David S. Kidwell

Richard L. Peterson

Financial Institutions, Markets, and Money

Third Edition

David S. Kidwell

*The Keehn Berry Professor of Banking
Tulane University*

Richard L. Peterson

*I. Wylie and Elizabeth Briscoe
Professor of Bank Management and Finance
Texas Tech University*

The Dryden Press

Chicago New York San Francisco Philadelphia
Montreal Toronto London Sydney Tokyo

Acquisitions Editor: Ann Heath
Developmental Editor: Rebecca Ryan
Project Editor: Karen Vertovec
Production Manager: Mary Jarvis
Permissions Editor: Cindy Lombardo
Director of Editing, Design, and Production: Jane Perkins

Text and Cover Designer: Jeanne Calabrese
Copy Editor: Mary Englehart
Indexer: Leoni McVey
Compositor: Waldman Graphics
Text Type: 10/12 ITC Berkeley Oldstyle Book

Library of Congress Cataloging-in-Publication Data

Kidwell, David S.

Financial institutions, markets, and money.

Includes bibliographies and index.

1. Finance—United States. 2. Financial
institutions—United States. 3. Banks and banking—
United States. 4. Monetary policy—United States.

I. Peterson, Richard Lewis, 1939— II. Title.
HG181.K48 1987 332.1'0973 86-16534
ISBN 0-03-007628-5

Printed in the United States of America
789-039-987654

Copyright © 1987, 1984, 1981 by The Dryden Press,
a division of Holt, Rinehart and Winston, Inc.

All rights reserved. No part of this publication may be
reproduced or transmitted in any form or by any
means, electronic or mechanical, including photocopy,
recording, or any information storage and retrieval
system, without permission in writing from the
publisher.

Requests for permission to make copies of any part of
the work should be mailed to: Permissions, Holt,
Rinehart and Winston, Inc., 111 Fifth Avenue, New
York, New York 10003.

Address orders:
111 Fifth Avenue
New York, NY 10003

Address editorial correspondence:
One Salt Creek Lane
Hinsdale, IL 60521

The Dryden Press
Holt, Rinehart and Winston
Saunders College Publishing

Cover photograph copyright Anthony Edgeworth.

The Dryden Press Series in Finance

Brigham

Financial Management: Theory and Practice, Fourth Edition

Brigham

Fundamentals of Financial Management, Fourth Edition

Brigham and Gapenski

Intermediate Financial Management, Second Edition

Campsey and Brigham

Introduction to Financial Management

Clayton and Spivey

The Time Value of Money

Cretien, Ball, and Brigham

Financial Management with Lotus 1-2-3®

Crum and Brigham

Cases in Managerial Finance, Sixth Edition

Fama and Miller

The Theory of Finance

Gitman and Joehnk

Personal Financial Planning, Fourth Edition

Harrington

Case Studies in Financial Decision Making

Johnson

Issues and Readings in Managerial Finance, Third Edition

Johnson and Johnson

Commercial Bank Management

Kidwell and Peterson

Financial Institutions, Markets, and Money, Third Edition

Lorie and Brealey

Modern Developments in Investment Management, Second Edition

Mayo

Finance: An Introduction, Second Edition

Mayo

Investments: An Introduction

Myers

Modern Developments in Financial Management

Pettijohn

PROFIT

Reilly

Investment Analysis and Portfolio Management, Second Edition

Reilly

Investments, Second Edition

Tallman and Neal

Financial Analysis and Planning Package

Weston and Brigham

Essentials of Managerial Finance, Eighth Edition

Weston and Copeland

Managerial Finance, Eighth Edition

Preface

Training in the areas of money and banking and financial institutions has long been recognized as an important part of the curriculum in both business schools and economics departments. Traditionally, these courses have been taught with a macroeconomic emphasis stressing the effects of monetary policy on the U.S. economy, placing a secondary emphasis on the institutions and markets that form its financial system.

Because of the dramatic changes that have occurred in the U.S. financial system in recent years, we believe that a student at the introductory level should receive a balanced view of the system and its major participants. By a balanced view we mean that emphasis should be given to the student's understanding of all financial institutions, financial markets, and financial instruments—not just banks and monetary policy. We feel that such an approach will accommodate the educational and professional needs of a greater number of students. Those who are majoring in finance or economics can take specialized courses, such as monetary theory or management of financial institutions, at a more advanced level. Our book provides the background for students to pursue more advanced training.

Thus the goal of this textbook is to give the student a broad introduction to the operation, mechanics, and structure of the financial system within the United States, emphasizing its institutions, markets, and instruments. The Federal Reserve System and monetary policy are also given special attention. We stress the impact of monetary policy on the economy and on the operation of financial institutions.

This book is intended for use as a primary text in a school of business administration for a first course in financial institutions or the financial system. The book is also appropriate for an introductory money and banking course in a professionally oriented economics department. The text assumes that the student has taken an introductory economics course, preferably one with some coverage of macroeconomics. A knowledge of mathematics, other than high school algebra, is not required. Any college student or informed business person should feel comfortable reading this book.

Features of the Book

Pedagogically, the book attempts to blend a descriptive narrative of the operations of the financial system with a sufficient amount of theory to enable the reader to understand the underlying principles of the financial system. Utilizing the theory and analytical tools

presented in this book, the student should have the background to understand and evaluate events in the financial world and therefore be able to make intelligent, real-world decisions concerning the management of money and the operation of financial institutions and markets.

This book has several unique characteristics that distinguish it from other texts. First, and most significant, it provides a balanced view of the financial institutions and markets that form our nation's financial system. In the past, introductory courses have provided only cursory attention to banking practices and nonbank financial institutions while emphasizing the Federal Reserve System and monetary policy. Our book goes beyond this, devoting four in-depth chapters to commercial banking, five to nonbank financial institutions, and four to financial markets. For balance, six chapters discuss the Federal Reserve System, the money supply, and monetary policy.

Second, this book differs from other texts in that monetary policy is also examined from the perspective of the firm. The model of national income determination is used to discuss the direct and indirect effects of monetary policy on financial institutions and the general level of interest rates. This approach serves to integrate the descriptive materials on financial markets and institutions with the changes in monetary policy that affect the entire economy. From a teaching standpoint, we wish to note that the model of income determination is presented in schematic form, which clarifies the transmission mechanism for monetary policy and increases the student's understanding.

Finally, we have provided numerous tables and diagrams to augment the discussions in the text. Each chapter opens with an overview of the material to be covered and ends with a detailed summary recounting the major concepts and points covered within that chapter. Questions are included at the end of each chapter for discussion and review. For instructors and students who wish to explore a topic in more detail, suggested annotated readings are listed at the end of each chapter. An instructor's manual is also available.

Changes in This Edition

The 1980s have brought about deregulation and rapid change in the structure of the U.S. financial system. The Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA) and the Garn-St. Germain Depository Institutions Act of 1982 made far-reaching changes in the nation's financial system. Commercial banks can now enter lines of business previously closed to them; the distinction between banks and nonbank financial institutions is rapidly becoming blurred. In addition, historical restrictions against interstate banking have been weakened. Financial institutions have adapted to the changed regulatory environment by changing their asset and liability structures, their capital structure, and their corporate status. Some institutions have taken excessive risks, causing an increase in failure rates and jeopardizing their deposit insurance funds. Thus major changes have occurred in both the form of financial institutions and in their regulatory environment. This third edition of *Financial Institutions, Markets and Money* is updated to keep current with developments in rapidly changing financial markets and institutional structures. In addition, numerous items have been added to enhance student interest in financial institutions and markets—both as a topic of study and as a potential career.

While every chapter is updated, some have undergone more extensive changes. In particular, discussion of interstate banking has been moved from the contemporary-issues chapter to the banking chapters. Because interstate banking is developing on many fronts simultaneously (through regional banking compacts, nonbank bank acquisitions, and other means), it is a matter of daily operational concern to many bankers. Also, the chapter on nonbank financial institutions and money market funds has been rewritten to stress the role played by major financial conglomerates in the financial marketplace. This chapter now includes a discussion of the financial operations of many major companies, including Sears, Ford, Prudential-Bache, and American Express, that have substantially expanded their financial services in recent years. More specialized chapters on finance companies, banks, and thrift institutions discuss the role of other major financial conglomerates, such as Household International and Beneficial (both originally consumer finance companies), Citibank (which owns the nation's largest bank and sixth-largest thrift institution), and others.

In this edition the effects of interest rate volatility and deregulation on financial institutions have been discussed more fully. In particular, the problem of financial institution failures and the adverse effects those failures have had on thrift insurance funds and deposit insurance policies are discussed in detail in both Chapters 12 and 17. Also, Chapters 21 and 24 give more attention than before to ways that financial institutions can reduce their interest rate risk. Chapter 21 discusses the plethora of new financial futures and options instruments that have developed in recent years and explains how they can be used to reduce interest rate risk in different circumstances. Chapter 24 has been revised to stress the ways financial institutions can adapt to interest rate risk created by a volatile monetary policy or by other causes. It provides further elaboration on the maturity-GAP analysis introduced in Chapter 9, introduces duration-GAP analysis, and discusses how interest rate swaps and other procedures can be used to reduce interest rate risk.

For those interested in monetary policy, Chapter 6 gives more stress to issues related to the independence of the Fed, while Chapters 22 and 23 have been updated and reorganized to provide more information both on supply-side policies and their effects and on the classical economic thought that provides the theoretical underpinnings for many supply-side policy prescriptions. The effects of federal deficits on the financial system are also more explicitly considered in Chapters 22 and 23. In addition, Chapter 17 considers the effect that credit cards, new technologies, new financial instruments, and "value transfer" systems have on the velocity of money, the definition of money, and the control of the money supply.

Pedagogy

From a student viewpoint, a number of changes have been made to make the text more educational and interesting. Each chapter opens with a practical application of chapter concepts. Legends have been added to explain each figure and chart in the text. Two types of boxed items—"People and Events" and "Did You Know?"—pique student interest and provide interesting background or current events material for each chapter. Furthermore, for each section of the book we have added "Profiles in Finance." These profiles

reveal the history behind successful young executives of various financial institutions and regulatory bodies. They show the dynamic world of finance as a potential arena for future careers and offer practical advice on achieving success in the financial world.

Finally, this edition has been printed in two colors, making headings, key concepts, box items, and graphic presentations easier to read.

Ancillary Package

For this edition of the book, we have added complementary materials that should help both the students and the instructors who use the book. These include:

Instructor's Manual and Test Bank

This volume contains a wealth of useful teaching aids, including chapter-by-chapter objectives, key points, answers to end-of-chapter questions, and an outline of changes from the previous edition. Also, the *Instructor's Manual* offers 50 transparency masters for instructors to use in illustrating their lectures. Finally, the *Test Bank* has been updated and expanded to include over 1,000 questions.

Computerized Test Bank

The *Test Bank* is also available on disc for IBM-PC and compatible computers. The program allows instructors to create and print their own tests from a pool of multiple-choice and true/false questions.

Study Guide

Written by David Durst of the University of Akron, students will find this an invaluable tool. For each chapter the *Study Guide* provides a chapter summary, topic outline and key terms review, true/false and multiple-choice questions, problems, and solutions. In addition, each chapter has a special "supplementary material" section that expands and applies chapter concepts by considering real-world situations. The *Study Guide* helps students solidify chapter concepts and prepare for class exams.

Organization of the Book

The organization of this book reflects the way we would teach an introductory course in the financial system. The book is designed so that, after Parts 1 and 2, some chapters can be omitted or sections assigned in alternative sequence without adversely affecting the flow of discussion. The book is organized around seven major sections.

Part 1 (Chapters 1–4) introduces the basic concepts and vocabulary necessary to understand the operation of the financial system. The first chapter introduces the student

to the course and discusses the fundamentals of money, prices, and inflation. The basic elements of the financial system are presented in Chapter 2. These elements, when integrated, form a conceptual model of the financial system. Chapters 3 and 4 discuss how financial claims are priced, how the general level of interest rates is determined, and how interest rates on financial instruments are influenced by their default risk, term to maturity, marketability, and tax treatment, as well as by the expected rate of inflation.

Part 2 (Chapters 5–7) focuses on the development of the U.S. financial system and the Federal Reserve System. Chapter 5 explains the economic, political, and regulatory forces that have shaped our current financial system; Chapters 6 and 7 explain the Federal Reserve System, how it manages the money supply, and the deposit expansion process of money for all financial institutions holding checkable deposits.

Part 3 (Chapters 8–11) presents the operation, regulation, and structure of the commercial banking system. Banks have been selected for particular study because of the diversity of their business activity and because they are the primary transmitters of monetary policy. Once bank operations are understood, it is easier to understand the operations of other specialized, nonbank financial institutions. Chapter 8 describes bank operations by examining balance sheets. Chapter 9 then looks at how banks resolve the conflict between bank profitability and bank safety through the careful management of their assets and liabilities. Chapter 10 explains bank regulation, emphasizing the regulatory dilemma of whether too much bank regulation impairs competition. Finally, Chapter 11 discusses important issues in bank structure, such as economies of scale, bank holding companies, bank branching, and interstate banking.

Part 4 (Chapters 12–17) is devoted to a description of important nonbank financial intermediaries in the nation's economy. The institutions discussed are savings and loan associations and mutual savings banks (Chapter 12), credit unions (Chapter 13), finance companies (Chapter 14), insurance companies and pension funds (Chapter 15), investment companies, money market mutual funds, real estate investment trusts, and financial conglomerates owned by broker-dealers, retailers, insurance companies, auto manufacturers, and other financial entities (Chapter 16). Chapter 17 presents current policy issues affecting commercial banks and nonbank financial institutions, integrating material presented earlier in the book.

Part 5 (Chapters 18–21) describes the major financial markets in which commercial banks and other financial intermediaries participate, presenting discussions of money markets in Chapter 18, capital markets in Chapter 19, mortgage markets in Chapter 20, and futures markets in Chapter 21. Chapter 21 also stresses financial institutions' use of the futures markets to reduce interest or exchange rate use.

Part 6 (Chapters 22–24) explains the effect of monetary policy on the financial system. Chapter 22 presents various theories of how monetary policy works. Chapter 23 discusses the impact of monetary policy on the financial markets and the economy and political influences on policy. Chapter 24 considers the impact of monetary policy on financial institutions and shows how they can monitor and control their exposure to interest rate risk.

Part 7 (Chapters 25–26) covers the international financial system. Chapter 25 discusses international banking both from the perspective of U.S. banks operating abroad and foreign banks operating in the United States; this chapter also analyzes the International Bank Act of 1978. Chapter 26 discusses international flows of funds, the Eurodollar market, exchange rates, and other financial services that banks provide to firms conducting international trade and business operations.

Possible Course Outlines

As we have mentioned previously, we have organized this book with a financial institutions and markets approach, which is the way we would suggest teaching an introductory financial systems course. However, depending on individual preference and course emphasis, there are many alternative ways to organize the course. We have therefore written this book to allow a different ordering of the chapters. The only constraint in our flexible design is that Parts 1 and 2 should be assigned first, since these sections provide the conceptual foundation and vocabulary of the financial system regardless of subsequent topic emphasis. Below are some possible organizational sequences we feel could be successfully employed in utilizing this book. Exhibit 1 shows a flow chart outlining possible alternative sequences.

Financial Institutions Emphasis

This organization follows the current sequence of the text except that Part 6, *Monetary Policy*, is not covered. However, Chapter 24 from that part, "Financial Institutions' Response to Monetary Policy Changes," should be moved up to follow Chapter 9 or to accompany Chapter 12. In this edition, Chapter 24 elaborates on the asset/liability management concepts presented in Chapter 9 and introduces material on swap agreements and portfolio immunization that provides useful insight into the management of nonbank institutions (particularly the thrift institutions problems discussed in Chapter 12).

Financial Markets Emphasis

After Parts 1 and 2 are completed, financial markets can be introduced by turning directly to Part 5. The instructor may want to use some of the readings listed as references at the end of these chapters to supplement the discussions of financial markets. Following the completion of Parts 1, 2, and 5, Part 3, *Commercial Banking*, and Part 7, *The International Financial System*, are to be covered; then Part 4, *Nonbank Financial Institutions*, and Part 6, *Monetary Policy*. Some instructors may choose to cover Chapter 24 with Part 3 or Part 4 if they wish to emphasize ways institutions can adjust to interest rate risk. However, for a markets emphasis per se, this chapter should remain with the monetary policy section.

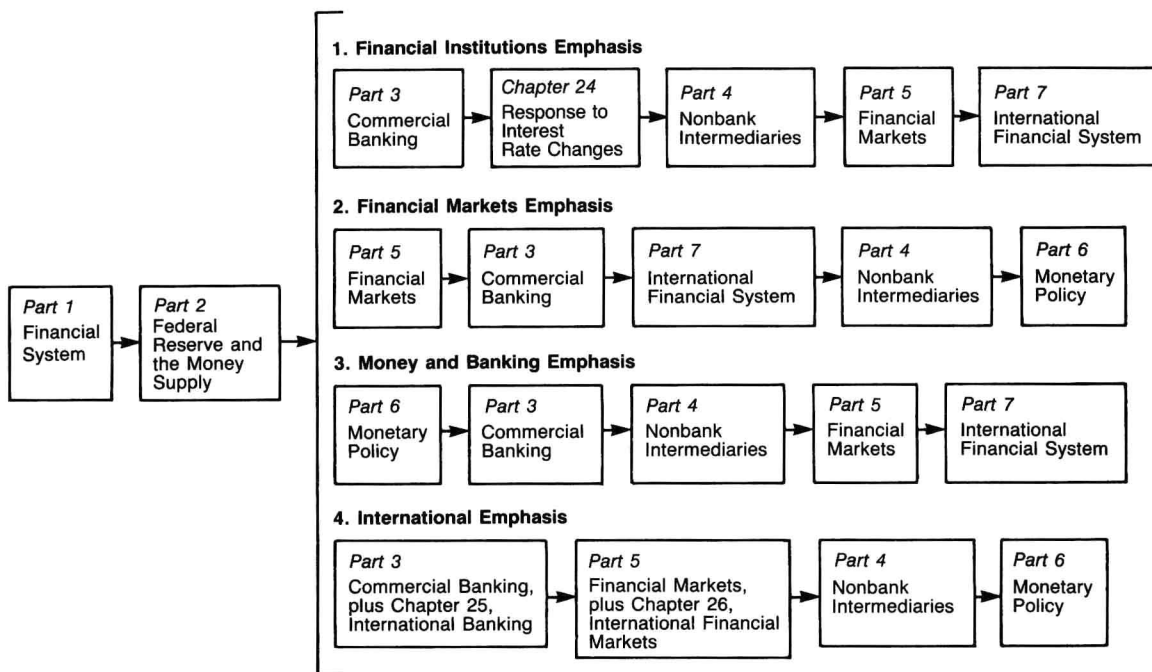
Money and Banking Emphasis

After Parts 1 and 2, the instructor may emphasize monetary policy by going directly to Part 6, *Monetary Policy*; Chapters 22 and 23 can follow Chapter 7. The text can then be followed in order with the exception that Chapter 24 should follow either Chapter 9 or Chapter 12. As an option, some instructors may also wish to include Chapter 18, "Money Markets," before Chapters 22 and 23 in the sequence described above.

International Emphasis

After covering Parts 1 and 2, the instructor choosing this sequence will stress Part 3, *Commercial Banking*, and Chapter 25, then proceed to Part 5, *Financial Markets*, and Chapter 26, and, finally, cover the balance of the book in order.

Exhibit 1



Note of Appreciation

As with any textbook, the authors owe an enormous debt of gratitude to many people. First, we would like to thank those who have taught, trained, and encouraged us throughout our academic careers: John B. Harbell, California State University at San Francisco; Michael H. Hopewell, University of Oregon; George G. Kaufman, Loyola University, Chicago; Dudley G. Luckett, Iowa State University; Jonas E. Mittelman, California State University at San Francisco; the late Warren L. Smith, University of Michigan; Wolfgang Stolper, University of Michigan; Erik Thorbecke, Cornell University; and Richard B. West, Dartmouth College. Special gratitude goes to Robert W. Johnson, Director of the Credit Research Center, Krannert Graduate School of Management, Purdue University, who provided valuable encouragement and advice to both of us during the inception of the book. We would also like to extend special thanks to I. Wylie Briscoe, who funded the I. Wylie and Elizabeth Briscoe Chair of Bank Management at Texas Tech University, and to King Milling and Whitney National Bank of New Orleans for funding the Keehn Berry Chair of Banking at Tulane University. In addition, we would like to thank our friends at Chemical Bank who provided valuable assistance in preparing the manuscript: Edward A. O'Neal, Jr., Mary Deloache, Barbara Capsalis, Tom Jacobs, John Lewis, Rhoda D. Cutler, and Gene Philippi. Also, we would like to thank Marianne Pritchard and Vicki Peden of Touche Ross, who provided helpful information on thrift industry accounting and failures. A note of special thanks goes to the individuals from the financial community who kindly

made time in their busy schedules to be interviewed for our career profiles. They include Harold Black, M. Genien Carlson, Constance R. Dunham, Jeremy G. Fair, Raleigh Horstenstine III, David Resler, and John R. Talbott.

We are also grateful to those who painstakingly reviewed both the first and second drafts of the manuscript and provided many helpful suggestions that have substantially improved our final product. For their work on the first edition of the book, we thank Theodore A. Andersen, University of California, Los Angeles; Vincent P. Apilado, University of Texas at Arlington; James C. Baker, Kent State University; Philip Friedman, Boston University; James A. Halloran, University of Notre Dame; James B. Kehr, Miami University, Ohio; Ronald W. Masulis, Security and Exchange Commission; Dexter R. Rowell, Old Dominion University; David Schauer, University of Texas at El Paso; and Peter Van Den Dool, University of Santa Clara.

For their thoughtful reviews and comments on the second edition, we wish to express our gratitude to James C. Baker, Kent State University; Sheldon D. Balbirer, University of North Carolina, Greensboro; Paul Handorf, George Washington University; James M. Kelly, LaSalle College; John Olienyk, Colorado State University; Robert Rogowski, Washington State University; and Dr. Robert Schweitzer, University of Delaware.

For this third edition we received many helpful comments from Nasser Arshadi, University of Missouri; Richard Downen, Northern Illinois University; Gunter Dufey, University of Michigan at Ann Arbor; Edward Gill, Boise State University; Robert C. McLeod, University of Alabama; H. C. Li, Bryant College; Theodore Muzio, St. John's University of Virginia; James Ludke, University of Massachusetts; and Richard B. Voss, Western Illinois University. Their incisive comments were extremely valuable to us as we revised and perfected the manuscript.

Our special thanks go to Ellen Thrower, Director of the Insurance Center, Drake University, who revised Chapter 15 on insurance companies and pension funds, to Roy L. Crum, University of Florida, who revised Chapters 25 and 26 on the international financial system, and to Penelope Merrick and Mary Mahan for typing and carefully proofreading the manuscript. Also, our thanks go to Regina Reed, Cynthia Nusbaum, Jeff Phelps, David Cox, and John Mahan, who prepared the statistical tables and supplied valuable research assistance.

At The Dryden Press, our former editor, Elizabeth Widdicombe, our new editor, Ann Heath, and Ann's assistant, Betsy Webster, helped us plan and refine the third edition. Our developmental editor, Becky Ryan, diligently and graciously organized our revision and helped us to get our work done in a timely fashion. In addition, our copy editor, Mary Englehart, did an excellent job of perfecting the manuscript, and our project editor, Karen Vertovec, cheerfully and effectively coordinated the production schedules.

Finally, we would like to thank our families for the encouragement and for putting up with our many hours at the writing table. To all, thank you for your support and help.

David S. Kidwell
New Orleans, Louisiana

Richard L. Peterson
Lubbock, Texas

September 1986

About the Authors

David S. Kidwell is the Keehn Berry Professor of Banking at Tulane University. He holds an undergraduate degree in mechanical engineering from California State University at San Diego, an MBA from California State University at San Francisco, and a Ph.D. in finance from the University of Oregon. Prior to joining Tulane University, Dr. Kidwell was the Blount National Bank Professor of Finance at the University of Tennessee, held the Briscoe Chair of Bank Management at Texas Tech University, and was on the faculty and associated with the Credit Research Center at the Krannert Graduate School of Management, Purdue University. While at Purdue University, he was twice voted the outstanding teacher of the year award in the School of Business. Dr. Kidwell has been a management consultant for Coopers and Lybrand in their San Francisco office and a sales engineer for Bethlehem Steel Corporation.

Professor Kidwell has also participated in a number of research projects funded by the National Science Foundation to study the efficiency of U.S. capital markets and the impact of government regulations on the delivery of consumer financial services. Finally, he has conducted seminars around the country on the U.S. financial system, commercial banking, and money and capital markets. His clients include several major New York City banks, Wall Street firms, and multinational corporations.

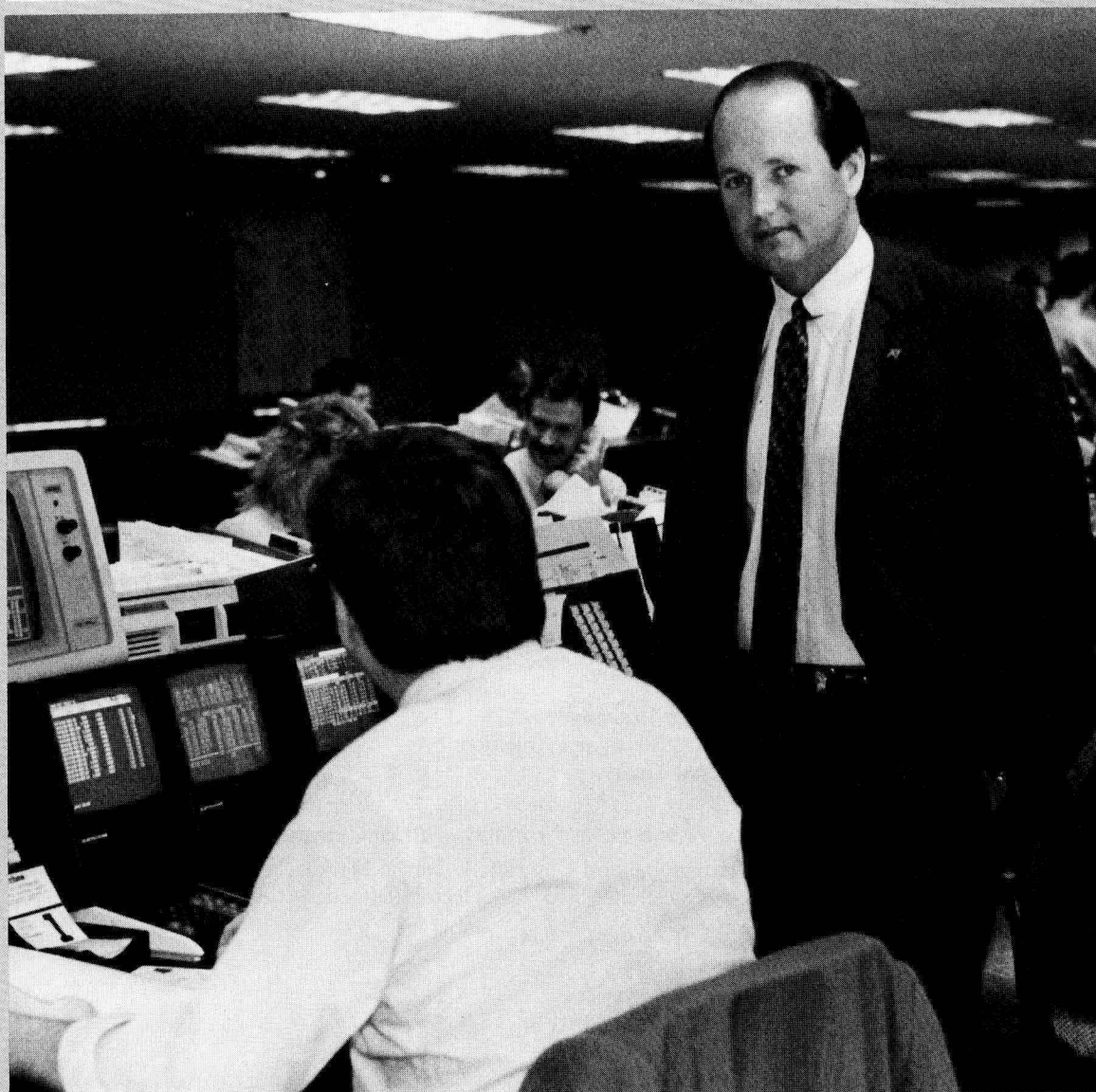
Richard L. Peterson obtained an undergraduate degree in Economics from Iowa State University and an MA and Ph.D. in Economics from the University of Michigan. He is the I. Wiley and Elizabeth Briscoe Professor of Bank Management and Professor of Finance at Texas Tech University. Previously he was Associate Director and Senior Research Scholar at the Credit Research Center of Purdue University and Financial Economist on the staff of the Federal Reserve Board of Governors. In addition, he has taught in schools for commercial bank, finance company, credit union, savings and loan, and international savings bank executives, and he is a consultant on an ongoing basis for the National Second Mortgage Association.

Dr. Peterson has presented invited papers at conferences sponsored by the Federal Reserve Bank of Boston, Federal Reserve Bank of Chicago, and Federal Home Loan Bank of San Francisco. He also prepared one of the nine background papers the American Assembly commissioned as part of its comprehensive 1983 study of the U.S. financial system.

In addition to *Financial Institutions, Markets and Money*, Dr. Kidwell and Dr. Peterson have published over 100 articles in numerous professional and academic publications including the *Journal of Money, Credit and Banking*, *Journal of Finance*, *Journal of Financial and Quantitative Analysis*, *Journal of Law and Economics*, *Journal of Financial Research*, *Bell Journal of Economics*, *Quarterly Journal of Economics*, *Southern Economic Journal*, *Financial Management*, *American Banker*, *Bankers Magazine*, *Journal of Bank Research*, *Journal of Retail Banking*, *Issues in Bank Regulation*, and *Credit Union Executive*.

Part

I The Financial System



Contents

Part 1	The Financial System	1
	Chapter 1	
	Money and the Financial System	3
	What Is Money?	4
	Definition of Money Today	7
	<i>People and Events Marx and Reagan on Gold</i>	9
	Liquidity of an Asset	9
	The Value of Money	10
	Price Indexes	10
	Widely Used Price Indexes	11
	How to Use Price Indexes	14
	Inflation	15
	The Importance of Money	16
	<i>Did You Know? Losing Your Head over Inflation</i>	17
	Organization of This Book	18
	Summary 19 Questions 19 Selected References 20	
	Chapter 2	
	The Financial Sector: Overview	21
	Surplus and Deficit Spending Units	22
	Transferring Funds from SSUs to DSUs	23
	<i>People and Events Technology and the U.S. Payment System</i>	25
	The Benefits of Financial Intermediation	27
	Types of Financial Intermediaries	29
	Financial Markets	36
	Money Market Instruments	37

Capital Market Instruments	38
Summary 40 Questions 40 Selected References 41	

Chapter 3

Bond Prices and the Level of Interest Rates	43
--	----

What Are Interest Rates?	43
The Mechanics of Bond Pricing	44
<i>People and Events</i> Irving Fisher (1867–1947): Economist and Social Reformer	50
Bond Theorems	51
The Real Rate of Interest	52
Loanable Funds Theory of Interest	54
Price Expectations and Interest Rates	57
<i>Did You Know?</i> Big Macs Replace Vanilla Bonds	58
Interest Rates over the Business Cycle	62
Summary 64 Questions 65 Selected References 65	

Chapter 4

The Structure of Interest Rates	67
--	----

The Term Structure of Interest Rates	67
Default Risk	75
<i>People and Events</i> The Emperor Has No Clothes in the Muni Market	78
<i>Did You Know?</i> The Junk Bond Romance	80
Tax Treatment	80
Marketability	82
The Call Privilege	82
Comovement of Interest Rates	83
Summary 83 Questions 84 Selected References 85	

Part 2

Central Banking	86
------------------------	----

Chapter 5

Historical Development of American Commercial Banking	89
--	----

The Development of Modern Banking	89
The First Banks	91
Early Central Banking	93
Early State Banking	95
State Banking Experiments	97
<i>People and Events</i> Clay versus Jackson, or Widows and Orphans versus a Central Bank	99
The Civil War and National Banking	101
<i>Did You Know?</i> Red Dogs and Wildcat Banks Caused Billy to Lose His Milk Money	103
Summary 106 Questions 107 Selected References 108	

Chapter 6	
The Federal Reserve System	109
The Federal Reserve Act	109
The Fed's Balance Sheet	113
<i>People and Events Is the Fed Truly Independent?</i>	
<i>What Really Happened in 1972?</i>	115
<i>Did You Know? The Fed Pays Interest on Reserve Notes</i>	117
Major Powers of the Federal Reserve System: Monetary Policy	118
Other Powers of the Fed	120
The 1980s Banking Acts	124
Federal Reserve Control of the Money Supply	126
Summary 128 Questions 129 Selected References 129	
 Chapter 7	
Deposit Expansion and the Money Supply	131
Reserve and Deposit Transfers	131
Expansion of Deposits: A Simple Case	134
Federal Reserve Control of Deposit Expansion	137
Deposit Expansion in Our Multi-Institution Financial System	140
<i>People and Events Clearing Profits Dishonestly! The Case of E. F. Hutton</i>	142
Factors Affecting Deposit Expansion	144
Public Preferences and Deposit Expansion	148
<i>Did You Know? The Money Supply Is a Slippery Concept</i>	150
Money, Velocity, and the Economy	151
Summary 154 Questions 154 Selected References 155	

Part 3	Commercial Banking	156
---------------	---------------------------	-----

Chapter 8	
Commercial Bank Operations	159
Banks as Business Firms	159
Balance Sheet for a Commercial Bank	160
The Source of Bank Funds	161
Bank Investments and Cash Assets	167
<i>People and Events Banks Invade Wall Street: A Free-For-All</i>	
<i>for Consumer Savings</i>	171
Bank Loans	172
<i>Did You Know? How to Play the Slots without Cash</i>	175
The Prime Rate	176
Pricing Loans	178
Other Services Provided by Commercial Banks	182
Summary 186 Questions 187 Selected References 187	