



MANAGING FINANCIAL INSTITUTIONS

An Asset / Liability Approach

FOURTH EDITION

MONA J. GARDNER

DIXIE L. MILLS

ELIZABETH S. COOPERMAN

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Dedication:

To our students—past, present, and future.

Gardner and Mills

To Bob, my muse.

Cooperman

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PREFACE

Previous editions of this book appearing in 1988, 1991, and 1994 were written during periods of dramatic change for the financial system in the U.S. Prior to the deregulatory period of the 1980s, regulatory policy and management practice for financial institutions for decades had been influenced by the Great Depression and World War II, events that most baby boomers, generation Xers, echo-boomers, and beyond never knew. With the deregulation of interest rates and volatility of financial markets during the 1980s, banks, as the dominant financial institution in the United States, faced a great challenge in managing interest rate risk. Hence, the previous editions' subtitle, "An Asset/Liability Management Approach," reflected the dependence of banks and other depository institutions on net interest income (interest revenues less interest expenses) for profits.

Over the later 1980s and 1990s, tremendous changes and challenges occurred for banks and other financial institutions. With increased competition from nonbank institutions and increased expenditures for new technology, larger banks realized that they could no longer depend solely on net interest income to cover rising operating expenses. Sources of noninterest revenue or fee income became increasingly important. Reflecting the reality of a very competitive marketplace, regulators began offering more liberal interpretations to product restrictions previously imposed under the Glass Stegall Act of 1933. Today approved, well-capitalized banks can engage in new types of nonbanking activities including operating their own mutual funds, selling annuities and some other insurance products, and engaging in security trading and underwriting activities through subsidiaries. Securitization—packaging and selling loans as securities to investors—has also become an important source of noninterest income, as well as many other off-balance sheet types of activities.

Other types of financial institutions have challenged banks' preeminence as the largest financial institution in the U.S. in the 1990s. Mutual funds have grown at an extremely fast rate, reflecting both the bull market of the 1990s and demographics favoring investing for retirement. As of January 1999, mutual funds achieved an asset size close to the more than \$5.3 trillion held by U.S. commercial banks. Other formidable competitors to banks include federal and federally sponsored credit agencies, such as the Government National Mortgage Association and Federal National Mortgage Association; large finance companies, such as General Electric Capital Corporation; large securities firms, such as Merrill Lynch; mega-insurance companies, such as Prudential; large credit unions; and new online firms. This new edition reflects the rapid growth of these institutions. It also reflects the growing importance of noninterest revenue sources for banks, resulting in joint ventures between major banks and securities firms, mutual funds and, recently, insurance and other types of financial institutions as well.

The new edition also covers dramatic changes that are occurring. These include mega-mergers between giant financial institutions, such as the 1998 mergers between Travelers Group and Citicorp, Banc One and First Chicago, and Wells Fargo and U.S. Bancorp, which, as a 1998 *Business Week* article suggested, bring the prospect of the first trillion dollar bank in sight. This edition also discusses proposals for the Financial Modernization Act, which would allow mergers between securities firms, banks, and insurance companies for the first time in the U.S. since 1933. Important events that seriously affected financial markets and institutions in the 1990s are also discussed.

These include the international financial crises in East Asia and Brazil of the late 1990s, the growth of interstate branching following the Riegle Neal Act of 1994, and the emergence of the Euro in 1999. The new edition also covers other recent major events including the entrance of internet financial institutions and digital money, or e-cash. In addition, newer concepts including value at risk, economic value added, risk-adjusted return on capital, and M-square risk-adjusted performance measure are discussed, as well as recent financial innovations including credit derivatives, and catastrophic insurance futures.

We attempt to capture the major forces that are changing the financial landscape for financial institutions. However, with constant changes in financial markets and institutions, we continue to believe in our opening comment in the preface to the first edition, “Perhaps the only task more challenging than managing financial institutions today is writing for students who will manage them tomorrow.”

Although much new information has been added, the new edition has been streamlined from 27 chapters to 22. Despite this streamlining, the text still strives to provide the depth that students need to have a comparative advantage as potential financial institution and nonfinancial institution managers. All chapters have been carefully updated to incorporate new research and political and economic events, as well as technological and financial innovations.

For a book this length, it would be impossible to list all the changes since the last edition. Among the most important, however, are

- ♦ Excellent Internet exercises at the end of each chapter by Ronnie Phillips at Colorado State University for students to gain Internet skills and become familiar with special resources available for financial institutions
- ♦ Recommended cases from the Darden School and Harvard Business School listed at the end of chapters to apply concepts from the text
- ♦ Coverage of the proposed Financial Modernization Act and Financial Conglomerates (Chapter 13)
- ♦ Updated chapters on nondepository institutions, including a detailed discussion of mutual funds and performance analysis for each institution (Chapters 10 to 13)
- ♦ Coverage of the advent of the Euro (Chapters 3A, 4, and 14)
- ♦ A new chapter on noninterest revenue management and associated risks, including a discussion of securitization, value at risk, and economic value added (Chapter 9)
- ♦ A detailed chapter on performance and risk analysis for depository institutions (Chapter 6)
- ♦ An updated chapter on capital regulation and management techniques including new thoughts on bank dividend policies and risk-adjusted return on capital (Chapter 8)
- ♦ A detailed discussion of consolidation trends, moral hazard issues, virtual banks and e-cash (Chapter 4)
- ♦ Coverage of new types of derivatives, including credit derivatives (Chapter 18)
- ♦ Consolidated chapters on different aspects of bank management, including an example of a loan officer report (Chapters 19 to 21)
- ♦ A new special chapter on international issues including international lending risk issues and an analysis of the international financial crises in 1997 to 1999 (Chapter 22)

- ♦ Updated problems for students to apply and improve their analytical skills
- ♦ Detailed performance analysis exercises

The early parts of the book continue to provide a theoretical framework that transcends the changes in the institutional environment that we now routinely expect. At the same time we hope to give students a sense of the dynamic nature of financial markets and institutions and the challenges faced by those who choose a career in institutions management. Also, as in other editions, latter portions of the book cover specific management problems in specific types of institutions. The book continues to be written for upper-level undergraduate and master's students, and all readers will benefit considerably from an introductory course in corporate finance. In many cases, introductory material in typical courses on money and banking or money and capital markets is useful, but not essential.

ORGANIZATION AND USE OF THE BOOK

The book is divided into five parts. The first part (Chapters 1 to 4) explores the domestic and international regulatory and market environment in which financial institutions operate. The second (Chapters 5 to 9) provides background and a performance analysis of depository institutions. Part three (Chapters 10 to 13) covers management and performance analysis for nondepository institutions including insurance companies, securities firms, mutual funds and pension funds, and finance companies and diversified financial firms. The final chapter discusses the proposed financial modernization act which would allow more diversified financial firms. Part four (Chapters 14 to 16) develops theories of interest rate determination, interest-rate risk, and exchange rate risk management. Part five (Chapters 17 to 22) discusses hedging to manage risk including using interest rate and foreign currency futures, index futures, swaps, swaptions, credit, and other derivatives, and investigates particular asset/liability management problems for depository institutions including liquidity and securities portfolio management, liability management, and lending. Chapter 22 is a special chapter on international lending and managing international risk, including a detailed synopsis of the global financial crisis of the late 1990s and what can be learned by financial institutions in reducing their future international risks from that crisis.

POSSIBLE COURSE OUTLINES

Faculty colleagues using previous editions of the book have found many ways to do so. At most schools, students have completed an introductory course in financial management and perhaps a course in money and banking or financial markets. Without the money and banking or markets prerequisite, instructors often place more emphasis on Chapters 1-4 and 14-16. Instructors also often supplement the text with cases or readings from the professional and academic literature (many cases and readings are suggested at the end of each chapter), and/or exercises, such as the Internet exercises provided at the end of each Chapter, or other spreadsheet exercises.

The book has an additional benefit in its proven flexibility, facilitating the use of a variety of alternative syllabi for instructors. A few suggested outlines adapted for the new edition include:

One-semester course for undergraduates

Management of Financial Institutions (comprehensive, all institutions)

- ♦ Chapters 1 to 4, 14, and 15: Financial Markets, Interest Rates, and Exchange Rates review (2 to 3 weeks)
- ♦ Chapters 16 to 18: Interest Rate Risk Management—Duration, Futures, Other Derivatives (2 to 3 weeks)
- ♦ Chapters 5 to 9: Depository Institutions Management, Part I—Performance Analysis, Thrifts and Credit Unions, Capital Regulation, and Non-Interest Revenues (2 to 3 weeks)
- ♦ Chapters 10 to 13: Management and Performance Analysis: Nondepository Institutions (2 to 3 weeks)
- ♦ Chapters 19 to 22: Depository Institutions Management, Part II—Liquidity & Liability Management; Loan Management; International Issues (2 to 3 weeks)

Alternatively, move the discussion of financial markets and hedging (Chapters 14 to 18) to its chronological place in the text; or move this section along with international issues (Chapter 22) to the final three weeks of the course. Cases, Internet Exercises, and Spreadsheet Exercises can also be incorporated.

Management of Depository Institutions

- ♦ Chapters 1 to 4, 14, and 15: Financial Markets, Interest Rates, and Exchange Rates review (2 to 3 weeks)
- ♦ Chapters 16 to 18: Interest Rate Risk Management—Duration, Futures; Other Derivatives (2 to 3 weeks)
- ♦ Chapters 5 to 9: Depository Institutions Management, Part I—Performance Analysis, Thrifts, Credit Unions, Capital Regulation, and Non-Interest Revenues (2 to 3 weeks)
- ♦ Chapters 19 to 22: Depository Institutions Management, Part II—Liquidity
- ♦ Liability Management; Loan Management; International Issues (2 to 3 weeks)

Incorporate cases on different depository institution issues or performance analysis on an institution of their choice to present to class; external speakers; bank simulation game; and/or spreadsheet exercises.

MBA or MS elective course

- ♦ Chapters 1 to 22 (entire book)
- ♦ Simulation and/or cases, research assignments; external speakers
- ♦ Journal articles and cases (suggested at end of chapters)

Two-Quarter Sequence for Undergraduates

First Quarter: Introduction to Financial Markets & Institutions

- ♦ Chapters 1 to 4, 14, and 15: Financial Markets, Interest Rates, and Exchange Rates
- ♦ Chapters 16 to 18: Interest Rate Risk Management—Duration, Futures, Other Derivatives
- ♦ Chapters 5, 7, 8, 9: Introductory Material on Financial Institutions

Second Quarter: Management of Financial Institutions

- ♦ Chapters 6, 10 to 13, and 19 to 22: Financial Institution Management Techniques
- ♦ Selected references from end of chapters, spreadsheet exercises, cases, or simulations

**One-Quarter Course for Undergraduates:
Introductory Course in Institutions**

- ♦ Chapters 1 to 4, 14, and 15: Financial Markets, Institutions, and Interest Rates
- ♦ Chapters 5 to 9 and 19 to 22: Depository Institutions: Techniques for Asset/Liability Management
- ♦ Chapters 10 to 13: Management of Nondepositories

Omit some complex analytical material; if time permits, could add Chapters 16 and 17, Managing Interest Rate Risk.

SPECIAL FEATURES

We believe the book has several features that continue to distinguish it from others currently available. First, the book has a consistent framework of asset/liability management, emphasizing the necessity for financial institution managers to innovate and to react creatively to a constantly changing regulatory, technological, and global financial environment. Second, the book provides the depth that students need to have a competitive advantage in its historic overview of different types of financial institutions, including a discussion of Kane's regulatory dialectic that has occurred in the United States. The book also covers the history of recent events, including the global financial crisis of the late 1990s. As George Santayana, the Spanish-born American educator, philosopher, and poet, once said, "Those who forget the past are condemned to repeat it." Third, the book is thorough, providing students with the edge they need in a competitive financial environment. The thorough coverage of interest rates and tools for managing interest rate risk, for instance, provides a good foundation for appreciating the specific management problems that financial institutions face.

As in the previous editions, given the dynamic nature of the material, we put special effort into identifying issues for which significant change is possible in the next decade. Our approach is to outline clearly as many facets of these issues as possible, so that students understand the nature and history of current controversies. When change occurs, instructors should have a relatively smooth time incorporating the specific course of action taken by regulators or by Congress.

Users have told us that their students find the book interesting and well-organized. The opening quotations and vignettes, almost all of which have been completely revised with each edition, often inject a humorous or interesting note to catch students' attention. In addition, we have tried throughout to provide useful and interesting examples of the application of many management tools. Students should enjoy the new Internet exercises provided by Ronnie Phillips at the end of each chapter. In addition, case suggestions at the end of most chapters provide instructors with excellent cases to which students have responded favorably in previous financial institution management classes. We have also tried to attain a relatively challenging level for many of the end-of-chapter problems to help students develop analytical skills.

ANCILLARY MATERIALS

The *Instructor's Manual* is available in print and on the Internet with complete answers to end-of-chapter questions and problems. Students will no longer have to trot to the library to get feedback for questions and problems. A completely revised *Test Bank*, written by Ronnie Phillips at Colorado State University, is also available, as well as Lecture Presentation Software in PowerPoint, developed by Edward Waller and Yvette Bendeck at the University of Houston, Clear Lake.

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Mona J. Gardner
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May 1999

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