

# Managing Financial Institutions

An Asset/Liability Approach

THIRD EDITION

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## PREFACE

When we began to write the first edition of this book in 1984, it was abundantly clear that following many decades of regulatory policy and management practice influenced by the Great Depression and World War II, the financial system was in the midst of dramatic change. But little did we realize then that the pace of financial and regulatory evolution would continue virtually unabated well into the text's third edition. (Definitely) older and (we hope) somewhat wiser now, we are more willing to predict that recent events we have attempted to incorporate thoroughly and comprehensively into this edition are another important, but by no means definitive, stage in the development of financial institutions management.

As with the second edition, our major task has been to consider the implications of important new financial legislation-in this instance, the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) and subsequent new rules and regulations. At first believed by many observers to bring about relatively minor changes compared to its predecessor, the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), FDICIA has quickly proved to affect virtually every aspect of financial institutions management covered in this text. And, as we complete the third edition, many experts predict yet other major legislation on the horizon, destined once again to change the financial landscape. We continue to believe 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."

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

 recently revised capital adequacy standards for financial institutions

- plans for the introduction of risk-adjusted risk deposit insurance
- new rules for market value accounting
- developments in the European Community, particularly progress toward implementing the Maastricht Treaty
- FDICIA provisions and implications
- international issues affecting financial management
- the growing influence of new technology

Sections on managed futures, swaptions, and optionadjusted spreads reflect our commitment to incorporate ever more-sophisticated risk-management tools where possible and appropriate.

Some chapters have been specifically structured in response to user needs and suggestions.

- Chapter 10 stresses the dynamic nature of the futures markets and gives the student a sense of the amazing range of new products that have appeared.
- Chapter 11, which previously covered interest rate options and stock index futures and options, now also contains introductory material on swaps.
- The detailed examples of swaps as supplements to GAP management continue in Chapter 19.
- Chapter 24, on insurance, has been considerably revised, with the very capable help of Professor Julie Cagle of Xavier University. Previous information has been updated and the analytical content of the chapter has been strengthened.
- Chapter 25 emphasizes the growing importance of pension and mutual funds.

All 27 chapters, including figures and tables, have been carefully updated to incorporate new research and political and economic events, as well as technological and financial innovations. Throughout, we have maintained the relatively large number of end-of-chapter questions and problems and the level of analytical sophistication required to answer some of them, especially those best approached by using spreadsheet analysis. Finally, we believe both students and instructors will benefit from use of two colors in this edition. In particular, tables and figures should be much easier to interpret.

Still, we have continued to preserve the original focus of the first edition: an asset/liability management theme crossing industry lines. Despite the acknowledged importance of commercial banks, we believe there continues to be a need for a focused text covering more than commercial banking. The early parts of the book provide a theoretical framework that transcends the changes in the institutional environment 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 of 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 also useful, although not essential.

## ORGANIZATION AND USE OF THE BOOK

The book is divided into five parts. The first (Chapters 1–5) explores the domestic and international regulatory and market environment in which asset/liability management is conducted. The second (Chapters 6–11) develops theories of interest rate determination, interest rate risk, and interest rate and exchange rate risk management. The third part (Chapters 12–17) investigates separate issues in the management of assets and liabilities at depository institutions. Part IV (Chapters 18–22) looks at integrated asset/liability management strategies in depositories. Finally, Part V (Chapters 23–27) covers asset/liability management in nondepositories. A more detailed discussion of each part of the book is included at the end of Chapter 1.

#### POSSIBLE COURSE OUTLINES

Faculty colleagues using both 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 an introductory course in money and banking or financial markets. Without the money and banking or markets prerequisite, instructors often place more emphasis on Chapters 1–7. Many instructors also supplement the text material with simulations, cases, readings from the professional and academic literature (many are suggested at the end of each chapter), and exercises using Lotus 1-2-3 or a comparable spreadsheet program.

The book has an additional benefit in its proven flexibility, facilitating the use of a variety of alternative syllabi for instructors. Faculty users on both quarter and semester systems have suggested the following outlines:

#### 1. Two-quarter sequence for undergraduates:

First quarter—Introduction to Financial Markets and Institutions

Chapters 1-11 Financial markets, interest rates, interest rate risk

Chapters 12, 23-27 Introductory material on financial institutions

Second quarter-Management of Financial Institutions

Chapters 13-22 Financial institution management techniques

Selected reference to other chapters

Spreadsheet exercises, cases or simulations

## 2. One-quarter course for undergraduates:

Introductory Course in Institutions

Chapters 1-8 Financial markets, interest rates

Chapters 12-17 Depository institutions: techniques for asset and liability management

Chapters 23–27 Management of nondepositories Some complex analytical material is omitted.

#### 3. One-semester courses for undergraduates:

A. Management of Financial Institutions:

Chapters 1–7 Financial markets and interest rates—review (2–3 weeks)

Chapters 8-11 Interest rate risk management—duration, futures and options (2-3 weeks)

Chapters 12–22 Depository institutions management (7–8 weeks)

Chapters 23-27 Selected topics in management of nondepositories and diversified financial services firms (2-3 weeks)

Cases and spreadsheet exercises

B. Management of Depository Institutions:

Chapters 1—7 Financial markets and interest rates—review (2–3 weeks)

Chapters 8-11 Interest rate risk management: duration and futures (2-3 weeks)

Chapters 12–22 Depository institution management (10 weeks)

Simulations, cases, and/or spreadsheet exercises

#### 4. MBA or MS elective course:

Chapters 1–27 (entire book)

Simulations and/or cases, research assignments Journal articles (suggested in footnotes and end-of-chapter reference lists)

#### SPECIAL FEATURES

We believe the book has several features that continue to distinguish it from others currently available. First, the consistent framework of asset/liability management encourages students to integrate material throughout the course, rather than to view topics as fragmented pieces of information. Second, combining the treatment of all depositories in Parts III and IV assists students in understanding the massive changes that have occurred in the financial system in the last decades, while at the same time grasping the differences that remain among the most numerous institutions. We believe this approach has taken on added importance, considering the changes in laws and regulations in the last several years.

The thorough coverage of interest rates and tools for managing interest rate risk in the early part of the book provides a good foundation for appreciating the specific management problems discussed later. For example, many users find it most helpful to be able to cover GAP management supplemented by futures and other hedging tools in Chapter 19 without interrupting the discussion with introductory material. We continue to believe that the text's coverage of GAP management, duration, and other strategies for integrated financial management is comprehensive and clear.

As in the first and second editions, given the dynamic nature of the material, we have put special effort into identifying issues for which significant change is possible in the next several years, such as an overhaul of the regulatory structure, and the potential entry of commercial banks into insurance and securities underwriting on a large scale. 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 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 have enjoyed using spreadsheets to solve designated end-of-chapter problems in both of the previous editions. As noted earlier, we have tried to attain a relatively challenging level for many of these problems.

#### ANCILLARY MATERIALS

The text is accompanied by an Instructor's Manual (IM) with complete answers to end-of-chapter questions and problems. The IM also contains additional references, teaching suggestions, and some tables and figures suitable for transparencies. In many chapters, problems requiring complex or repetitive calculations are designated in the margin as "diskette" problems by this symbol: . A solution diskette using Lotus 1-2-3 or compatible spreadsheets is available to adopters of the text. Many of these problems have been classroom-tested. The text also contains cases for which solutions are provided in the IM. The test bank has been completely revised with new multiple choice questions, essays, and problems.

#### **ACKNOWLEDGEMENTS**

This edition has benefited immeasurably from the comments of both users of the first two editions and reviewers of the revised manuscript. Although we know we have not succeeded in completely satisfying them in this edition, we have considered every suggestion seriously and carefully. We extend special appreciation to the following people:

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Mona J. Gardner Dixie L. Mills Bloomington, Illinois

July 1993

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# THE ENVIRONMENT OF ASSET/LIABILITY MANAGEMENT

## Part One



- ASSET/LIABILITY
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- REGULATION,
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  FINANCIAL INNOVATION
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