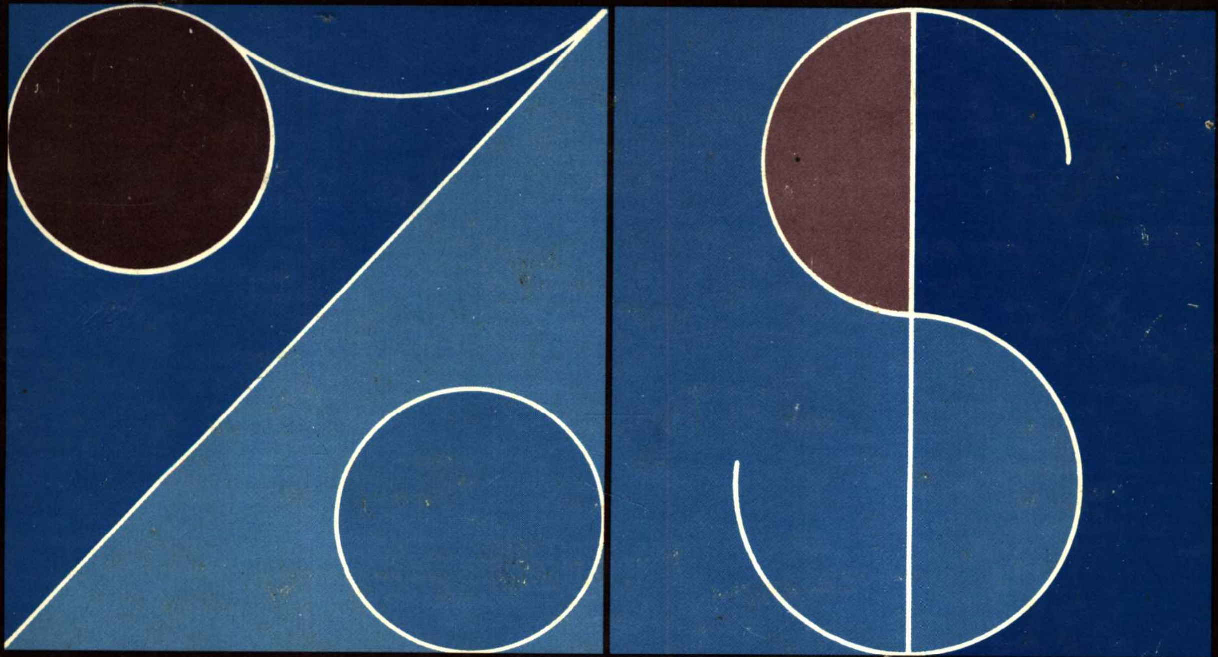
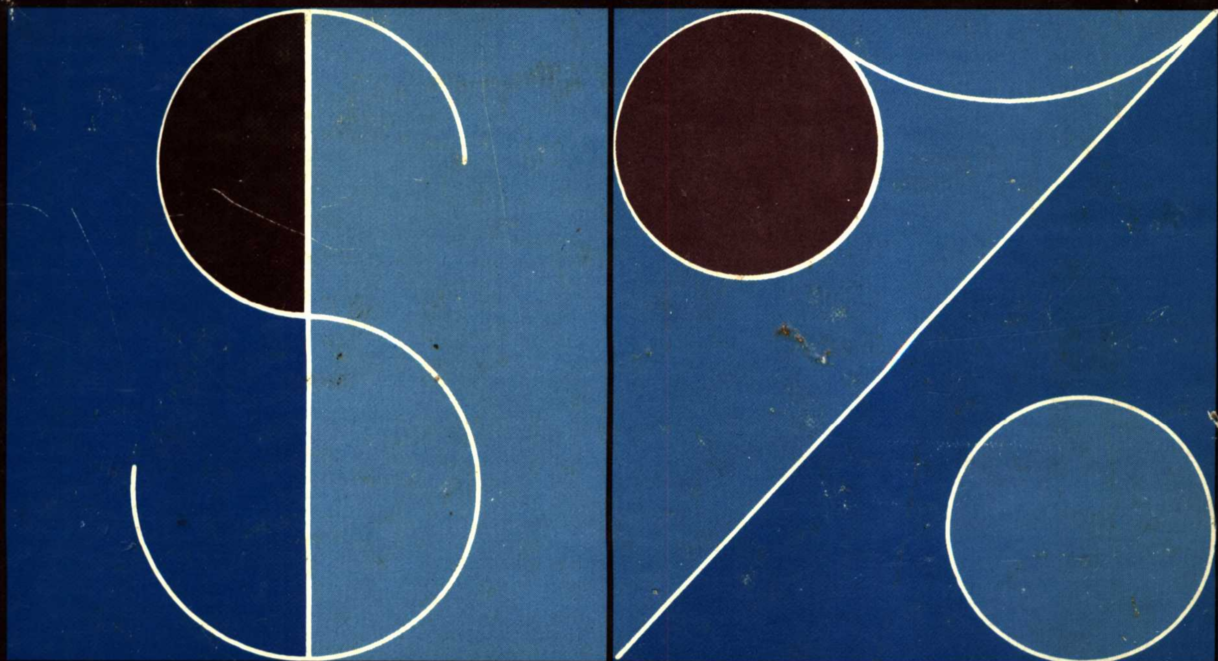
GEORGE H. HEMPEL ALAN B. COLEMAN DONALD G. SIMONSON



BANK MANAGEMENT



TEXT AND CASES

BANK MANAGEMENT
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PREFACE

Managing a commercial bank in the 1980s has been—and promises to continue to be—a challenging task. A difficult economic environment, a changing regulatory environment, a rapid rate of technological development, an increasingly intense level of competition, and some worrisome trends in the banking industry have combined to create a demand for good bank management. The purpose of this book is to present the management concepts and techniques that will help current and potential managers to be successful in this challenging period. We have included twenty-six up-to-date cases in which bankers and students can test their abilities to solve problems in modern banking situations.

This book is divided into five parts. Each of the parts has three or more cases in which readers can apply the concepts and techniques discussed in the part. Part I is an introduction to bank management. In it, we review the dynamic nature of bank management and the banking structures (Chapter 1). Then in Chapter 2 we move to the basic measures of returns and risks in banking and examine how bank management should use such measures to evaluate bank performance.

In Part II we examine how a bank obtains funds. In Chapter 3, we evaluate methods for acquiring deposits and short-term borrowed liabilities, as well as the cost of these funds. We also examine the potential profit on the various types of deposits and short-term liabilities. Chapter 4 covers how a bank determines and obtains the appropriate amount and mix of capital funds.

Part III covers management of a bank's reserves, liquidity, and securities needs. In Chapter 5 of this part we demonstrate how bank reserve requirements are measured and met. We present methods for measuring short-term, seasonal, and long-term liquidity needs and then discuss methods for meeting such liquidity needs. In Chapter 6 we evaluate the ways the securities portfolio affects a bank's profitability and risk. We discuss several techniques for increasing returns without significantly increasing risks.

Part IV (Chapters 7 through 11) covers the lending function of commercial banks. The primary types of bank loans are described and the ways a bank may organize to compete successfully in lending are also discussed. In this part we present details on such topics as credit analysis, loan pricing, and structuring a loan for the primary types of bank loans.

The fifth and final part emphasizes integrative asset/liability management techniques. In Chapter 12 we introduce techniques for managing a bank's overall interest sensitivity position and for increasing the interest margin. Chapter 13 includes a method for determining actual and potential risk-return tradeoffs and a system for long-range planning.

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A separate Instructor's Manual, which includes a summary, teaching objectives, analyses, and suggested questions for each case, is available for professors and bank training directors. Potential bank simulations that may be used with this book are also evaluated.

We are indebted to several professors and bankers. William S. Townsend of Banc-First Corporation helped with the initial formulation of the book and with ideas on how to incorporate cases with the text material. Harry Blythe of Ohio State University provided assistance and helpful comments throughout the book's preparation. In addition, we wish to thank Tim Sidley of InterFirst Bancshares, Dwight Crane of Harvard University, Dick Roberts of Wachovia National Bank, Don Wright of Allied Lakewood Bank, Gene Simonoff of Warren, Gorham, and Lamont, Gerry Czarnecki of Republic Bank, and Frank Schackelford of Indiana National Bank for their helpful comments.

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Helpful suggestions were also generated from those using this book in manuscript form at Wharton, Southern Methodist University, Texas Tech University, The University of Hawaii, Washington University, Oklahoma University, University of Missouri, The Southwestern Graduate School of Banking, and the Pacific Coast Banking School. In spite of the help received, deficiencies undoubtedly remain. For these, we take full responsibility and urge readers to call them to our attention.

GEORGE H. HEMPEL
ALAN B. COLEMAN
DONALD G. SIMONSON

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I

INTRODUCTION TO BANK MANAGEMENT

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1

THE CHANGING NATURE OF BANK MANAGEMENT

Management of a commercial bank has become an increasingly challenging task. Concepts and techniques gainfully used only a few years ago now seem outdated. Protection from regulation and geographic and product constraints appears to be rapidly disappearing. To some managers the increasing complexity of banking decisions is worrisome, yet to many others this increasing challenge presents the opportunity for rewarding good management. The purpose of this book is to present up-to-date concepts and techniques that can help actual and prospective bank managers in this challenging period.

In this introductory chapter, we briefly discuss the economic role of commercial banks and the current structure of banking and its regulation. We then examine the dynamic and increasingly challenging nature of the banking environment and conclude with an outline of the primary topics of bank management covered in this book.

ROLE OF COMMERCIAL BANKING IN THE U.S. ECONOMY[1]

The primary economic role of commercial banks can be understood by looking at the financial flows in our economy over a time period. Figure 1-1 illustrates the three ways in which the business and household income for a period can be used. First, part of this income is taxed by government units. The remaining "disposable" amount is either spent or not spent by the unit earning the income. What happens to each of these three uses of income? Taxes paid to governments are typically spent by these units and con-

[1] The economic role of financial intermediaries is discussed in greater depth in *Two Faces of Debt* (Federal Reserve Bank of Chicago, 1978) and George H. Hempel and Jess B. Yawitz, *Financial Management of Financial Institutions* (Englewood Cliffs, N.J.: Prentice-Hall, 1977).

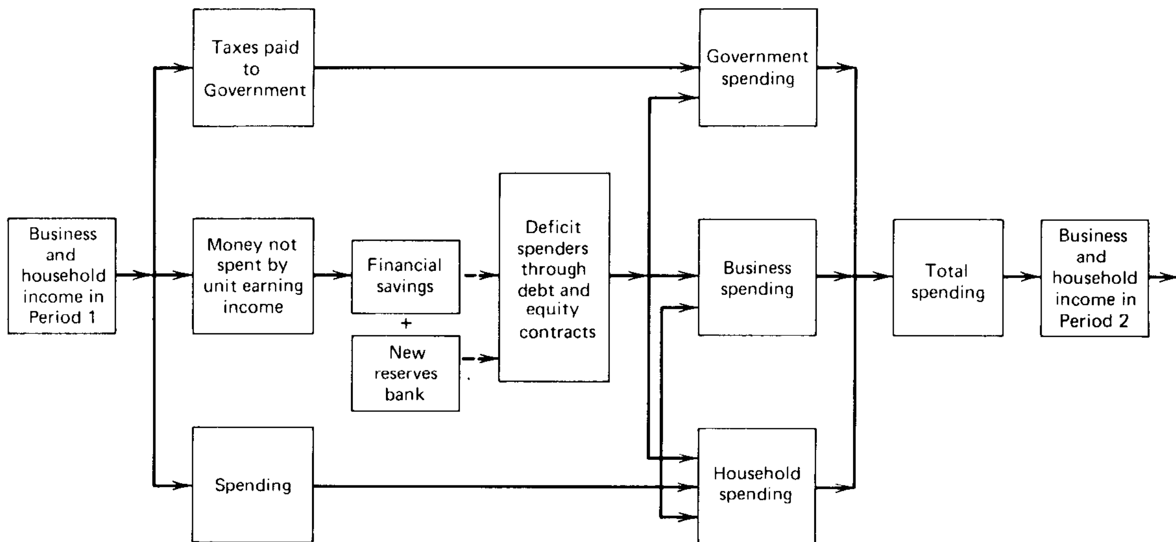

FIGURE 1-1 Simplified Graph of Financial Flows in the United States Economy

stitute a part of total spending and business and household income in the next period. Funds spent by the unit earning them find their way into the spending stream and provide household and business income for the following period. Money not spent by the unit earning the income, plus any new reserves provided from the Federal Reserve, are transferred for varying periods of time to units that want to spend more than they earned in that particular period. These "borrowed" funds are rapidly returned to the spending stream by deficit-spending governments, businesses, and households.

Although some of the transfers of funds from surplus units to deficit units are made directly through borrowing or equity contracts, the different desires of surplus and deficit units create the need for financial intermediaries. Such differences might include size, maturity, legal character, marketability, liquidity, divisibility, redeemability, and risk. For example, many surplus units have relatively small amounts and want to be able to convert to cash easily and to have relatively short maturities. On the other hand, deficit units often want large amounts, for long periods of time, and the assurance that they will not be forced to pay except when payments are scheduled. The intermediaries who try to meet the diverse desires of the surplus and deficit units are called financial intermediaries.[2] In facilitating the flow of funds between surplus and deficit units (see Figure 1-2), financial intermediaries create two separate markets. They purchase primary securities from deficit units and emit secondary, indirect liabilities to surplus units. In this way, a financial intermediary is able to tailor its assets and liability structure to satisfy the desires of both the ultimate borrowers and ultimate lenders in the economy. Financial intermediaries simply substitute their own more desirable (to

[2] Brokers or agents are also institutions that serve as go-betweens and receive commissions for their services. Typically, they do not hold financial assets for long periods themselves, and their services help match surplus and deficit units but do not overcome the differences that may exist between surplus and deficit units.

the surplus units) financial liabilities for the financial liabilities of the deficit unit. By holding a diversified portfolio of assets, many intermediaries can reduce risk beyond the reduction available to individual units. They also assist deficit units in finding funds in the desirable amount and form.

In the fully developed U.S. financial system, surplus units are able to choose from a wide variety of alternative financial assets—including primary securities of deficit units and the numerous secondary liabilities offered by financial intermediaries. Deficit units can usually acquire purchasing power in a desirable form, either directly from surplus units or, more commonly, from a financial intermediary. Liquidity and marketability of the securities created in the direct or indirect flows between surplus and deficit units are vastly improved by the existence of a secondary market (the New York Stock Exchange is an example) in which securities may be traded. Such a setting encourages economic efficiency since the allocation of financing is based on a unit's profitability and ability to pay rather than on the form of financing. This greater efficiency should stimulate both capital accumulation and growth in the economy.

Commercial banks are financial intermediaries that supply financial services to surplus and deficit units in the U.S. economy. Most bank assets are financial in nature, consisting primarily of money owed them by nonfinancial economic units such as households, businesses, and governments. Commercial banks issue contractual obligations, primarily in deposit or borrowing form, in order to obtain the funds to purchase these financial assets. A bank's capital results from the sale of stock or the accumulation of retained earnings and generally represents a relatively minor source of funds.

The role of commercial banking can, therefore, be stated very simply—to fill the diverse desires of both the ultimate borrowers and lenders in our economy. A commercial bank must obviously compete with other banks, with other financial intermediaries, with direct market transactions, and with any other organization that wishes to perform the task of filling the diverse desires of surplus and deficit units. A bank will be successful only if it performs its economic role as well as or better than its competition.

The difficulty of performing this role successfully can be understood by considering the problems banks have in balancing the diverse desires of the four groups affected

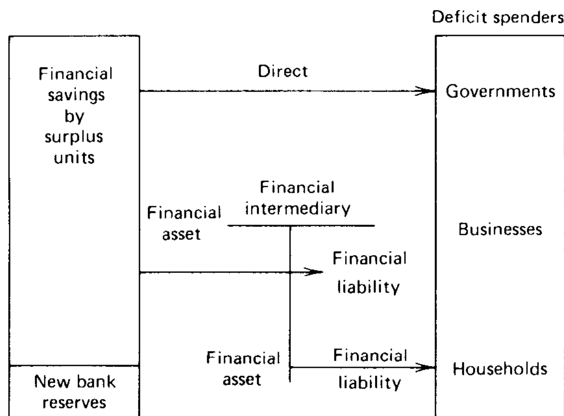

FIGURE 1-2 Financial Intermediaries in the Flow Between Surplus and Deficit Units

by their actions: surplus units, deficit units, bank owners, and bank regulators. Banks must not only issue liabilities in a form acceptable to surplus units, they must also pay a high enough return to outbid competitors. Virtually every surplus unit (be it a household, business, or government) will choose the highest return available in an acceptable form. A higher return to the surplus unit, of course, means a higher cost to the bank acquiring that unit's funds. Deficit units, on the other hand, want the bank to lend them money at the lowest cost available for the desirable form. What borrower would pay 15 percent for a loan when the same loan is available at 14 percent? Corporate and government treasurers tend to be even more sensitive to differences in interest costs. The problem is that the lower the cost to the borrower, the lower the return to the bank.

In addition to pleasing the surplus and deficit units, bank management must be concerned about a third group, the bank's owners. There must be an adequate difference between what the bank earns from the deficit units and what it pays surplus units for the funds (plus people and overhead costs) if it is to keep its owners satisfied. The owners would prefer to earn more for themselves by paying less to surplus units and charging more to deficit units, but competition limits both of these actions.

As if keeping surplus units, deficit units, and owners satisfied is not enough, bank management must also be concerned with a fourth group, bank regulators. In broad, general terms, these regulators are interested in limiting the risk a bank takes in obtaining and employing funds. Limiting risks, however, tends to limit the ability to pay a high return to surplus units, to lend to deficit units at low costs, and to earn an adequate difference between these costs (revenues for the bank) and the returns (expenses for the bank) for the shareholders. In a competitive environment, bank management that can keep these four economic groups satisfied has done a remarkable job.

CURRENT BANKING STRUCTURE AND REGULATION

The current banking structure and regulation of commercial banks in the United States defies logical explanation and is primarily the result of our historical development.[3] The purpose, here, is to briefly describe the current (as of early 1983) banking structure and bank regulation. Nearly all commercial banks in the United States are privately owned. Most banks can choose whether to be national or state banks and whether to be members of the Federal Reserve or not. Depending on the laws of the state in which they are located, banks can choose if they wish to be unit banks or part of a branch system, to be members of a holding company, and to seek correspondent relationships with other commercial banks. Available data on the banking structure as of mid-1982 are summarized in Table 1-1.

Since the passage of the National Banking Act in 1863, a bank has been able to choose between seeking a national charter from the Comptroller of the Currency or a

[3] The historical development of banks and bank regulation is covered in depth in D. R. Dewey, *Financial History of the United States* (New York: Longman Greens, 1934); Raymond W. Goldsmith, *Financial Intermediaries in the American Economy Since 1900* (Princeton, N.J.: Princeton University Press, 1958); Paul B. Trescott, *Financing American Enterprise* (New York: Harper & Row, 1963); and H. R. Kroos and M. R. Blyn, *A History of Financial Institutions* (New York: Random House, 1971).

TABLE 1-1
Data on Current Banking Structure, June 30, 1982[a]

Structure			*Number of banks*
National banks (examined by Comptroller of the Currency)			4,511
Federal member bank—national banks plan (examined by Federal Reserve)			1,032
Bank covered by FDIC—all federal members plan (examined by state and FDIC)			8,879
State non-FDIC banks (examined by state banking authority)			392
Total banks			14,814
Branch offices (of 6,418 banks)			41,450
Total banking offices			56,264
	Number	*Banks controlled*	*Assets (billions of dollars)*
One-bank holding companies	3,093	3,082[b]	$ 756
Multibank holding companies	407	2,607	$ 886
Total holding company banks	3,500	5,689	$1,642 (70.8%)

[a]Fifty states and District of Columbia
[b]A few banks are partially owned by two one-bank holding companies.
Source: Federal Reserve System

state charter under the supervision of its state's banking regulatory body. Since the formation of the Federal Reserve in 1913, national banks have had to become members of the Federal Reserve while state banks can choose whether to become members or not.

Unit Versus Branch Banking

Most banks in the United States have traditionally been unit banks—single-office institutions primarily serving their local communities. In mid-1982 there were 14,425 insured commercial banks in the United States. Of these, 8,399 were unit banks, down from 9,375 at the end of 1971. While still in the majority, especially in those few states that do not permit branch banking, the unit bank might well be placed on the "endangered species list." The tide toward multiple-office banking is running strong. The number of branch banking offices increased from 4,613 in 1948, to 10,605 in 1960, 23,362 at the end of 1971, and 41,450 in mid-1982.[4] This increase has resulted from both the establishment of new branches in growing communities and the absorption of previously independent banks through mergers. The pros and cons of multiple-office banking and bank mergers are still in the forefront of bank policy considerations today.

Branch banking has been a controversial subject since the earliest days of the

[4] *Annual Report of the Federal Deposit Insurance Corporation, 1981* (Washington, D.C.: Federal Deposit Insurance Corporation, 1982), pp. 176, 180.

United States. As early as 1790, Secretary of the Treasury Alexander Hamilton had grave doubts about it.[5] Nevertheless, both the First and Second Bank of the United States were branch-banking institutions.[6] In many instances, the early state banks also had branches. The 406 state banks existing in 1834 operated 100 branches. On the eve of the Civil War, there were 170 state bank branches in 11 states. However, the existence of over 1,500 banks by that time indicated a clear trend toward unit banking.

Opposition to branch banking arose from two directions. First, the remoteness of some branches (as well as of some unit banks) tended to facilitate some of the worst abuses of the note-issue privilege in the days of wildcat banking, so that banking reform and early attempts at bank supervision often led to the abolition of the branch-banking privilege.[7] Second, the Jacksonian campaign against the Second Bank of the United States and the subsequent Populist campaigns for cheap money were in a real sense directed against the concentration of monetary power in large Eastern banks, some of which were branch institutions. The resultant political furor helped to establish the emotional tone that is still evident in much of the popular and political opposition to branch banking.[8]

When the National Bank Act was passed in 1863, the question of branches was not even discussed. The Federal Reserve Act of 1913 extended the privilege of membership to state banks without prohibiting them from operating existing branches but did not accord the right to establish new branches to national banks, for whom membership was compulsory. Limited branch powers were gradually granted to national banks and subsequently extended until 1952, when all national banks were empowered to establish branches as freely as banks chartered by the respective states.

The history of banking in the United States, therefore, starts with branch banking, veers in the direction of unit banking, and is now quite rapidly swinging back again. Opposition to branch banking is still strong in some areas, however, and state laws concerning the establishment of branches vary from one part of the country to another. Statewide branching is permitted in 21 states (all of the Western states and a few Eastern states). Branching is prohibited or permitted in an extensively limited manner in 14 states (mainly the Middle states). The remaining 15 states allow limited branching.[9]

Against this background of diversity in law and tradition, those who are responsible for managing banks must attempt a logical assessment of the virtues and deficiencies of unit banking. The issues are obviously not clear-cut or they would have been resolved long ago. Nor is the available evidence entirely conclusive, even when weighed objectively. It is, nevertheless, incumbent on bank management and legislative bodies

[5] "Report on a National Bank" (December 13, 1790), in *Papers on Public Credit, Commerce and Finance*, ed. Samuel McKee, Jr. (New York: Columbia University Press, 1934).

[6] The Second Bank, organized in 1816, had established 19 offices in 14 states by October 1817.

[7] By the early 1840s, Massachusetts, New York, and Rhode Island had passed legislation providing that no one should conduct the business of banking except at his or her place of residence.

[8] In a court case, *Old Kent Bank and Trust Company* v. *William McC. Martin et al.*, Judge Washington, dissenting, said, "There has long been public hostility to the extension, by means of branches, of a bank's geographic area of operation. At one time branch banking was almost uniformly forbidden in the United States. Many persons feared, and still fear that, among other things, unrestrained bank operations would enable a few wealthy urban banks to extend their operations to a point where the independence and prosperity of the poorer banks . . . would be seriously jeopardized."

[9] *Annual Report of the Federal Deposit Insurance Corporation, 1981.*

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