The Evaluation of Commercial Banking Industry with Special Reference to its Changing Patterns in the United States

Hong K. Sohn
Lecturer in Economics,
University of Queensland,
Brisbane, Australia.

I. Introduction

"Full-service banking"[1] required many innovations in the commercial banking industry not only in its structure and operations but in its basic philosophy as well. This paper reviews some of these developments, concentrating primarily on the experience of the past years. Following a few general remarks regarding this industry, this paper considers various aspects of changing patterns in the structure of commercial banking. The growth of multiple-office and multiple-unit banking included a large number of bank mergers, and this movement and the major factors contributing to it are also reviewed.

The intended contribution of this study will be ultimately to identify some significant points to be reappraised and studied continually in the future commercial banking business. In this aspect, this study will carefully handle the problem of bank liquidity and profitability. Lastly, some trends in the future commercial banking business will be anticipated in the last section of my study.

II. General Romarks

Commercial banks have the capacity for creating money (demand deposits).

1) This term refers to the type of banking which is being so actively publicized by the Foundation for Commercial Banks.

The ability of commercial banks to hold and create deposits which are convertible into other forms of money upon demand imposes upon commercial banks an unquestionable public responsibility.

Because of their capacity to create money, commercial banks are the focal point of the nation's monetary policy. Then the Federal Reserve System engages in monetary action to control the economy, and the initial impact of such action is upon the cost and availability of bank reserves, with the resulting effects upon the banking system's capacity to create deposits. Since most of the banking system's deposit liabilities are derived deposits which have been created to pay for banks' earning assets, the profit opportunities confronting commercial banks are intertwined with the actions of the central monetary authority.

Since commercial banks do have a substantial public responsibility, there are rather clear defined legal and institutional restraints upon their activities. These are more numerous and more rigorously enforced than are those restraints to which most other corporations are subjected.

The relationship of a commercial bank to its customers is not the same type of buyer-seller relationship which characterizes the activities of other types of financial institutions. Its position in the community and its relationship with its customers make possible and desirable a very diversified lending operation. Providing diverse banking services compels commercial banks to compete with other types of institutions, especially the local financial intermediaries. Bank management policies reflect the pressures of this competition.

With these characteristics of the commercial banking system, this paper is considering some significant aspects.

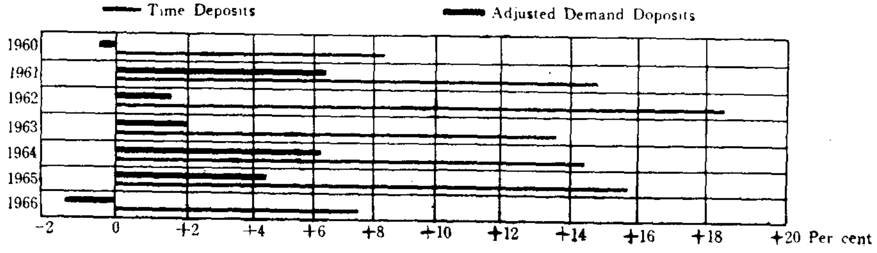
III. Banks as Depositories

Among the major markets in which commercial banks operate, the solicitation of loanable resources from individuals and businesses in the form of demand and time deposits is of first importance. A bank's competitiveness in these separate markets conditions the scope and nature of its subsequent operations, and strongly influences the degree of its exposure to non-bank competition.

In recent years, and particularly since 1960, banks have achieved a robust rate of growth. During the years 1961—1966, the average annual expansion of net bank deposits was 8%. Net demand deposits increased about 3% per year, while savings and other time deposits rose on the average of 15% per year, These per cent changes in demand and time deposits of all commercial banks are shown in the following chart.

Per Cent Changes in Demand and Time Deposits
All Commercial Banks
(1960—1966)

Time Deposits Adjusted Demand Deposits



Source: *Federal Reserve Bulletin* 1960—1966
(Data based on year-end figures)

Here, it is interesting to note the major factors affecting commercial bank deposits for the last ten years, which I derived from the Federal Reserve Bulletins.

	June 1955— June 1960	July 1960— June 1965	July 1965— June 1966
Factors tending to increase deposits;			
Increase in commercial bank loans	39.7	73.8	23.3
Increase in commercial investment	0.2	25.0	3.2
Increase in Federal Reserve Bank investment	2.5	12.6	3.1
Total expansionary factors	42.4	113.3	29.6
Factors tending to increase deposits;			
Decrease in commercial bank investment	6.0	—	—
Decrease in monetary gold stock	2.3	5.4	0.5
Increase in money in circulation	1.7	7.7	2.8
Total contractionary factors	10.0	13.1	3.3

Net increase in commercial bank deposits (excl; interbank)		32.4	100.2	26.3

Note: Source; *Federal Reserve Bulletin*, 1955--1966
End-of-month figures in billions of dollars.

There is virtual unanimity that interest-bearing deposits will continue to grow considerably faster than demand balances, although not at the high rate of the past several years.[2] Expansion of these deposits may be retarted at times by interest rate regulation, but it is almost universally expected that commercial banks will not be prevented from competing reasonably effectively for savings and other time deposits.

IV. Bank Mergers

Much of the growth of both multiple-office and multiple-unit banking in the past decade has come not only from the general expansion of bank assets and liabilities that has occurred in this period and the establishment of new branches or banks, but through consolidation, merger, or absorption of existing institutions.

Since the end of World War Ⅱ, the number of commercial banks in the U.S. has declined to about 13,800. This 1.5% attrition reflects the fact that the number of banks eliminated through mergers (19%) has exceeded the additions to the bank population through new charters (18%).[3] Over the past several years, however, there has been a net increase in the number of banks due to a spurt in the chartering of new banks, state as well as national.

Although the movement of population and industry and the changing composition of bank assets have contributed substantially to the expansion of bank mergers, there are other factors which cannot be ignored. In the study of bank mergers, David A. Alhadeff found two basic factors: (1) the desire to expand and establish branch systems, and (2) pressures resulting from uneven rates of growth by different banks.[4] In regard to the second

2) This fact was verified by Mr. E. Sherman Adams' survey in 1966, which solicited the view of 60 bankers, economists, and security analysts. He is a senior vice president at First National City Bank, N.Y., U.S.A.

3) These ratios are derived by Mr. Adams based on his survey results.

4) David A. Alhadeff, "A Reconsideration of Restrictions on Bank Entry," *Quarterly Journal of Economics*, May 1962, p. 247, and his study "Recent Bank Mergers",

point, he observed that banks with above average capital-deposit ratios frequently have had a problem achieving adequate growth. Consequently, they acquire other banks to increase their assets and their earnings.

In addition to these factors, there are numerous facilitating factors which may influence the shareholders of the institution being acquired to sell their interest in this bank. These factors would be: (1) management problems, (2) lack of certain specialized services (i.e., mortgage or consumer credit facilities, trust department, etc.), and (3) the opportunity for the shareholders of the absorbed bank to obtain an excellent price for their shares.

In general, mergers today reflect, from the point of view of absorbing banks, attempts to obtain additional branch locations, as illustrated by the fact that 85% of merged banks are retained as branches.[5] It can be expected that almost all merged banks will become branches and the establishment of new branch offices will probably continue apace. The most signficant trend in banking is going to be toward major banks, fewer small banks, more banking groups, further expansion of branch banking.

V. Liquidity and Profitability of the Bank

In the light of recent banking developments, conventional approaches to bank asset management are open to serious and constructive crticism. My analysis in this study will develop a provision required fer a minimum liquidity and a problem of maximizing profitability in bank asset management.

Between August, 1961 and August, 1967, asset growth was dominated by the expansion of loans and other securities as shown in the following table. Despite the growth of demand deposits, the explosion of loans and municipals required massive new time deposits into the liability structure. Further, government securities were drawn down and borrowed funds surged 246 per cent from their small base in 1961.

Still, bank profitability relative to assets declined materially. For the year ending in June, 1966, the largest U.S. banks earned $ 10.06 per $ 1,000 of invested assets, down from $ 12.10 for the year ending in June, 1961.[6] The 8 percent decline in government securities, in the face of increase of 24 per

5) *100th Annual Report of the Comptroller of the Currency*, 1962 (U.S. Government Printing Office, 1963), p. 11.

6) M.A. Schapiro & Company, *Bank Stock Quarterly*, September 1966 and September 1961.

Condensed Statement of Condition of All U.S. Commercial Banks
(in million)

Assets	Aug. 30, 1961	Aug. 30, 1967	Incr. (Decr.)	% Incr.
Cash and Due From Banks	$42,370	$59,090	$16,720	39.2%
U.S. Government Obligations	64,160	59,260	(4,900)	(7.6)
Other Securities	22,510	57,940	35,430	157.3
Loans	118,450	223,770	105,320	88.8
Other Assets	6,090	11,690	5,600	91.9
Total	$253,580	$411,750	$158,170	62.3%
Liabilities and Capital				
Demand Deposits	$141,870	$176,700	$34,830	24.5%
Time Deposits	81,000	179,640	98,640	121.7
Borrowed Funds	1,880	6,520	4,640	246.8
Other Liabilities	6,960	15,600	8,640	124.1
Capital Funds	21,870	33,290	11,420	52.2
Total	$253,580	$411,750	$158,170	62.3%

Source: Developed from *Federal Reserve Bulletins,* Dec. 1961 and Sept. 1967.

cent in gross demand deposits and 122 per cent in time deposits, appears to be a factor of an impairment of bank liquidity.

At this stage, stress should be put on asset priorities suggested by Roland Robinson:[7] First, Primary Reserves, second, Secondary Reserves, third, Customer Credit Demands, and fourth, Investment for Income.

The logic of the scheme is as follows;

1. Primary reserves include the accounts of "Cash and Due From Banks" on the bank balance sheet.

2. Secondary reserves are government securities or other prime short-term investments required for liquidity. Only when this priority has been met is a bank in a position to go about its principal function.

3. Customer credit demands are met in the bank's loan portfolio. Ideally, a bank should "make all the sound local loans it can."[8] Ordinarily, the loan portfolio earns a higher rate of return than secondary reserves.

7) Roland I. Robinson, *The Management of Bank Funds* (McGraw-Hill Book Campany, 1962), pp. 13—17.
8) Howard Crosse, *Management Policies for Commercial Banks* (Prentice-Hall, Inc., 1962), p. 194.

4. Investment for income is treated as a residual after the above priorities have been satisfied. This category today is practically the same as tax-exempt munigipal obligations.

This framework is a reasonable starting point for small banks making allocations among their assets. However, there are some conceptual difficulties in it. One is that this logic assumes that the sources of funds in an individual bank are fixed given. The other is that this tends to regard secondary reserves as the only source of liquidity—liquidity is assumed as a static balance sheet item on the asset side. Additionally, this logic does not consider the economic expansion occurring during the 1961—1967 bank balance sheets. As stated on the bank statement in page 8, banks added $ 105 billion to their loan accounts in 1967. However, they did not draw down residual municipal obligations, but rather augmented them by $35 billions. Instead of treating municipals as a residual, banks rather attracted $98 billion in time deposits. As a result, they increased loans and municipal obligations.

Banks must maintain liquidity for two main purposes: to meet deposit withdrawals and to accommodate increased loan demand. However, the requirements for liquidity vary widely from bank and to bank. To the individual banks, trend analyses of the historical volatility in their assets and liabilities are important for their liquidity requirement. At the same time, it must be realized that the need for liquidity will vary from week-to-week and from month-to-month.

Like all profit-making enterprises, banks are faced with the dual objective of maintaining adequate liquidity and maximizing profitability, which usually conflict. Banks are limited in the profit potential on most asset opportunities available to them. They are constrained by the environment of banking business, since they face a very limited range of rates of return on the acquisition of financial assets. At present, not much can be done to better a 10% gross yield on consumer loans. Also they cannot do much worse than a 4% return on short term, high quality money market obligation. The compression of available rates of return into a narrow range is intensified by supervisory and statutory restrictions on asset quality in commercial banks.[9)]

The commercial banking business thus faces the problem of optimizing returns on assets under certain restrictions, general economic conditions, legal

9) It is true that rates higher (or lower) than the 4—10% range are being earned on some fixed assets and fee services, but these represent a small proportion of total revenues and earnings. The major part of a bank's profit performance still depends on returns from financial assets, i.e., loans and investments.

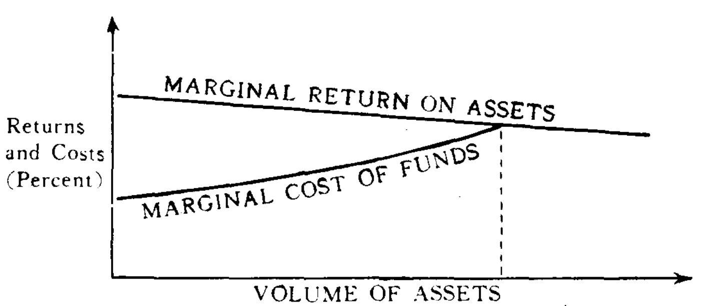
constraints, bank policy, safety and community service. A linear programming model appears to be a scientific and systematic approach for a bank's management.

A linear programming model has several advantages, other than profit maximization, for banking business:

1. Construction of the model gives the bank additional insight into its everyday operations.
2. The model gives the bank management a way of testing and quantifying the effects of policy decisions.
3. The portfolio designed by the model gives the bank a way to set goals and a way to evaluate performance.
4. The model suggests an effective technique for planning future investments under uncertainty.[10)]

As mentioned before, most of the asset opportunities at present are externally dictated by prevailing rates of interest in the money and capital markets and by supervisory restrictions. Commercial banks therefore face a schedule of potential returns from assets, which may tilt downward slightly. Then asset investment should be pursed up to the point at which a rising cost of funds required to support assets intercepts the rate of return on assets as shown in the below figure.

By following this general idea, it can be stated that banks start on the



asset side of the balance sheet and increase its size until it is no longer profitable to do so. This actually suggests new problem of liabilities management, i.e., attracting required or desired funds at the least cost. It is notable that more banks are actually doing this as Paul Nadler stated; "For even in today's tight-money period banking is continuing to look first at what op-

10) Robert H. Waterman, Jr., and Robert E. Gee, "A New Tool for Bank Management: A Mathematical Model in Banking," *Analytical Methods in Banking*, (ed.) by Cohen and Hammer, (Richard D. Irwin, Inc., 1966), p. 55.

portnnities for lending and investment are available, and only then is ……the bank's posture in seeking deposits and other funds established."[11]

In a word ,establishing and maintaining liquidity standards based on reasoned analysis becomes even more imperative in a tight loan market. The need for liquidity can be established only by careful study of balance sheet volatility; the provision for liquidity often should include flows of loan repayments and security maturities as well as unused borrowing capacity.

VI. Some Prospects

The bulk of the new banks has been established in areas where branching is either prohibited or closely restricted. As these restrictions are relaxed in the future, the pattern of starting new banks will diminish and some of the new banks will be merged.

It is also expected that the problems of smaller banks will be compounded by automation, rising costs, and the difficulty of introducing competent management.

The profitability of banks with deposits under $10,000,000 has declined sharply in recent years and there is no indication that this trend will be reversed.[12] This situation is particularly serious for the hundreds of banks located in communities whose population is static or declining.

In legislative prospects, other legislative changes will be generally con structive for banking, if these changes are not made for political purposes. In any way, the future of banking may be importantly affected by legislation dealing with the powers of commercial banks and of other financial institutions.

Competition from other types of financial institutions is also likely to intensify. Insurance companies may seek to expand in such directions as personal trust business, financial planning, equity funds, and personal finance. They may refrain from going too far in some of these fields lest commercial banks react by attempting to enter the insurance business.

Finally, the prospects for U.S. bank expansion in foreign countries, particularly in Europe, are considered.

11) Paul Nadler, "Liability Management Replacing Asset Allocation as Bank's Goal," *American Banker* (March 29, 1966), p. 4.

12) This part was commented on by Mr. E. Sherman Adams, a senior vice president at the First National City Bank, N.Y. based on his survey result, *op. cit.*

Banking occupies a very sensitive sector with regard to foreign investment. Banking is by nature a regulated industry in any case. Therefore, the bank which contemplates establishing an overseas operation must be prepared to deal with the authorities in the country concerned.

Especially, the U.S. banks must expect a much closer surveillance of its activities in Europe than at home, because of the fact that the Euro-dollar market is flourishing which provides American banks with a special advantage abroad. Any U.S. bank which contemplates expansion abroad is expected to participate in this important and growing international money market. In addition to providing profitable investment opportunities abroad, this market may be used as an additional source of funds by the parent bank which is temporarily short of reserves at home.

REFERENCES

100*th Annual Report of the Comptroller of the Currency*, (U.S. Government Printing Office, 1963)

David A. Alhadeff, "A Reconstruction of Restrictions on Bank Entry," *Quarterly Journal of Economics* (May, 1962)

Federal Reserve Bulletins 1955—1967

Howard Grosse, *Management Policies for Commercial Banks* (Prentice-Hall, Inc., 1962)

M.A. Schapiro & Company, *Bank Stock Quarterly* (Sept. 1966 and Sept. 1961)

Paul Nadler, "Liability Management Replacing Asset Allocation as Bank's Goal," *American Banker* (March 1966)

Roland I. Robinson, *The Management of Bank Funds* (McGraw-Hill Book Co., 1962)

Robert H. Waterman, Jr., and Robert E. Gee, "A New Tool for Bank Management: A Mathematical Model in Banking," *Analytical Methods in Banking* (ed.) by Cohen and Harmer (Richard D. Irwin, Inc., 1966)

Survey Study by E. Sherman Adams, A Senior Vice-President at the First National City Bank in New York.