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SOURCES OF COMMERCIAL BANK FUNDS: AN EXAMPLE OF “CREATIVE RESPONSE”

This article considers the growing importance of newly innovated sources of commercial bank funds. It thus is concerned with the “creative response”¹ of an industry—in this case, commercial banking—to a new environment in which old or traditional ways of conducting business will no longer produce the same results. In other words, the article examines what banks have done to attract funds in a period when traditional ways proved less than adequate.

Innovation, which is doing something new or doing something old in a new way, arises usually out of need. This is true of innovations in managerial structure, in production, in marketing, and in finance—to mention only a few areas of activity closely associated with the economic process. The case of commercial banking conforms to the pattern of doing something new or doing something old in a new way.

¹ The term is borrowed from Joseph A. Schumpeter, “The Creative Response in Economic History,” *Journal of Economic History*, Vol. VII, November 1947.

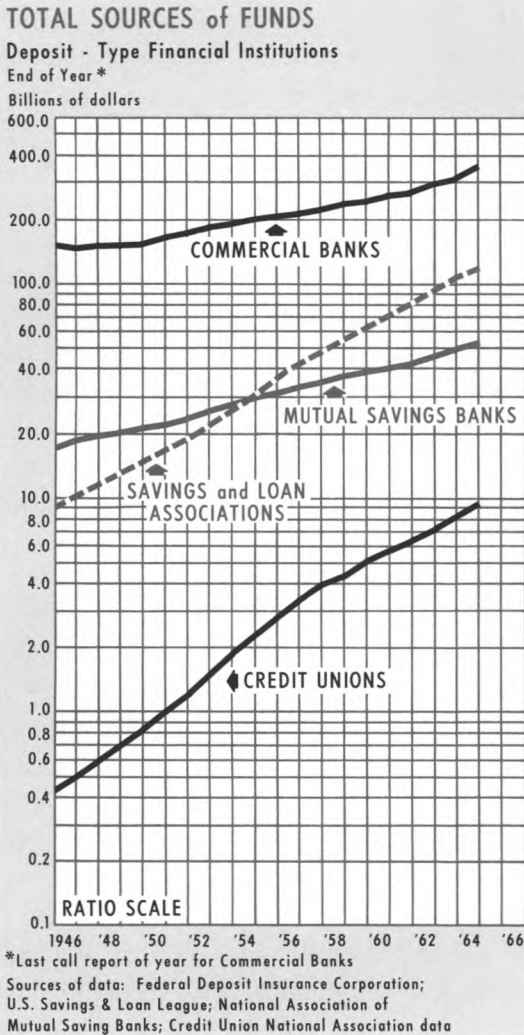
COMMERCIAL BANKING SINCE WORLD WAR II

Since the end of World War II, commercial banks have declined in importance relative to other financial institutions, continuing a trend that originated around the turn of the century.² While commercial banks have grown in size and are still the nation’s leading financial intermediary, their growth has not kept pace with that of other private deposit-type financial institutions.³ This is shown in Chart 1. Whereas over the 20-year period since World War II, total sources of funds of commercial banks rose about 120 percent, those of mutual savings banks more than tripled, those of savings and loan associations increased more than twelfefold, and those of credit unions,

² See Raymond W. Goldsmith, *Financial Intermediaries in the American Economy Since 1900* (Princeton, New Jersey: Princeton University Press, 1958).

³ In this article, commercial banks are compared only with other deposit-type institutions. A broader comparison with nondeposit-type financial institutions, for example, insurance companies and pension funds, would yield conclusions similar to those of this article.

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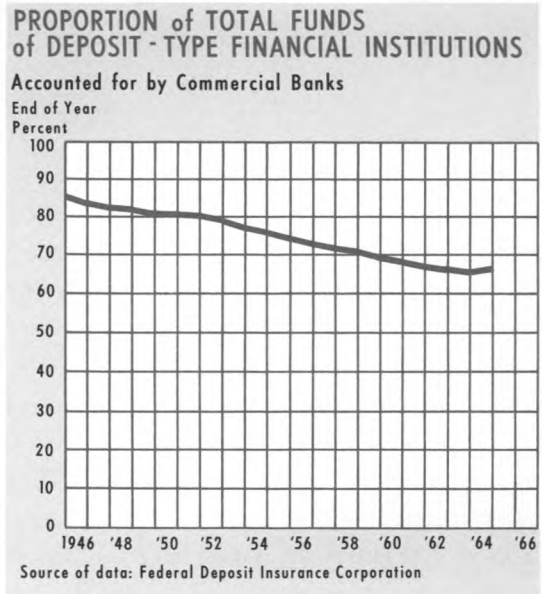
though still relatively small in absolute size, increased some twentyfold.

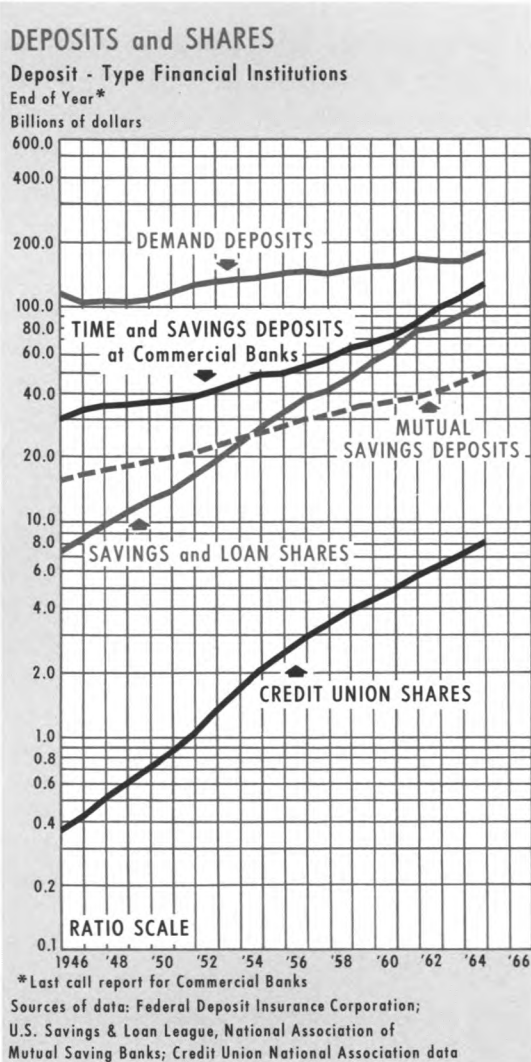
Put otherwise, while commercial banks at the end of 1945 had held 86 percent of the financial resources of all deposit-type financial institutions, the share had dropped to 65 percent at the end of 1964. In each year through 1963, as shown in Chart 2, financial resources of commercial banks—the total of

liabilities and capital—constituted a smaller proportion of the total resources of all deposit-type institutions. In 1964, however, there was the first sign of a change in this pattern. Thus, in 1964 for the only time since World War II, commercial banks succeeded in maintaining—in fact, slightly improving—their relative position. As a result, at the end of the year, sources of funds of commercial banks comprised a slightly larger portion of the total resources commanded by all deposit-type institutions than at the end of 1963—65.37 percent in 1964 against 65.35 percent in 1963.

The primary factor underlying the relatively poor showing of commercial banks in the postwar period perhaps has been the change in attitude of both businesses and individuals toward holding demand deposit balances. Both have become increasingly aware of the income foregone by holding temporarily idle

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funds in the form of "money" or, more specifically, as demand deposits; both have correspondingly become increasingly disinclined to do so. This is evidenced, in part, by the rapid growth of other deposit-type claims, which in turn reflects the public's desire to hold liquidity in income earning forms. Thus, as indicated in Chart 3, demand deposit liabilities of commercial banks over the last 20 years have grown at an average annual rate

of only 2.1 percent; this contrasts sharply to average annual growth rates of 7.5 percent for time and savings deposits at commercial banks, 6 percent for mutual savings deposits, 14 percent for savings and loan shares, and nearly 17 percent for credit union shares. On the other side of the ledger, and as shown in Table I, demand deposit and currency holdings of nonfinancial corporations have grown less rapidly than have their holdings of total financial assets (which include demand deposits and currency). Thus, the ratio of demand deposits and currency to total financial assets of nonfinancial corporations declined from nearly 29 percent in 1946 to 12.5 percent in 1964.

FACTORS ASSOCIATED WITH THE DECLINING DEMAND FOR CASH

The slower growth of demand deposits, reflecting as it does greater reluctance on the part of the public to hold idle money, is due in part to relatively high and generally rising interest rates that have characterized much of the postwar period.⁴ An additional influence in this connection has been the absence of severe alternations in the level of economic activity since the end of World War II. Unlike the previous past when financial and industrial crises periodically gripped the nation's

⁴ Lower and/or declining interest rates would not necessarily reverse the trend. One observer of the financial scene is probably correct in arguing that "once companies and individuals begin to economize on cash and place surplus funds into earning assets, the process is hard to reverse even though the return available from this economizing of cash may decline." See Paul S. Nadler, *Time Deposits and Debentures: The New Sources of Bank Funds* (New York: C. J. Devine Institute of Finance, Graduate School of Business Administration of New York University, 1964), p. 30.

TABLE I
Holdings of Financial Assets
by Nonfinancial Corporations

Year	1 Demand Deposits and Currency (billions of dollars)	2 Total Financial Assets (billions of dollars)	3 One as a Percent of Two
1946	\$21.2	\$ 74.0	28.6%
1947	23.4	81.2	28.8
1948	23.6	86.6	27.3
1949	24.7	90.7	27.2
1950	26.2	107.5	24.4
1951	27.9	116.1	24.0
1952	28.7	122.1	23.5
1953	28.8	125.2	23.0
1954	30.9	130.3	23.7
1955	31.9	147.7	21.6
1956	32.1	153.0	21.0
1957	32.1	158.1	20.3
1958	33.5	170.0	19.7
1959	32.5	183.4	17.7
1960	32.1	191.4	16.8
1961	33.7	208.4	16.2
1962	34.5	224.4	15.4
1963	32.0	241.7	13.2
1964	32.5	260.7	12.5

Source: Flow of funds data, Board of Governors of the Federal Reserve System

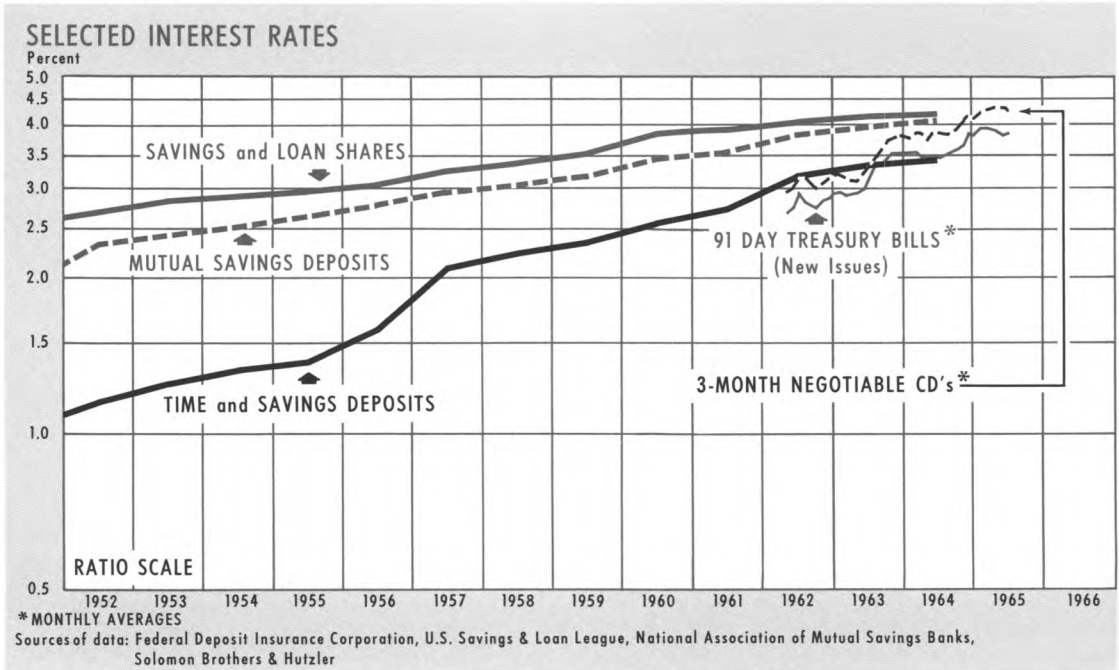
economy, the relative stability characterizing the two most recent decades has enabled business to plan their financial affairs better and hence to minimize unprofitable idle cash balances. Other factors might perhaps be cited, but whatever the causes of slower growth of demand deposits, commercial banks had to find ways of holding on to existing deposits⁵ and of attracting newly generated funds.

⁵ Shifts of funds out of demand deposits and into interest-bearing claims issued by nonbank financial intermediaries do not result in a decline in the demand deposits of the banking system—only a transfer of ownership. But, such shifts create losses for *particular* banks and increase the *volatility* of deposit balances in general. Moreover, if carried to an extreme, commercial banks would evolve into check clearing facilities—not a useless function, but certainly not one that is particularly profitable.

TRADITIONAL RESPONSE

Though commercial banks did react to the changing environment, responses—until the past few years—were pretty much along traditional lines. As a general matter, commercial banks tended to limit their competition for loanable funds—to the extent possible under limitations imposed by Regulation Q—to raising interest rates paid on time and savings deposits, and to narrowing the differential between interest rates paid on such deposits and on deposit-type claims issued by other financial institutions as well as to advertising. That commercial banks did compete in terms of interest rates is seen in Chart 4.

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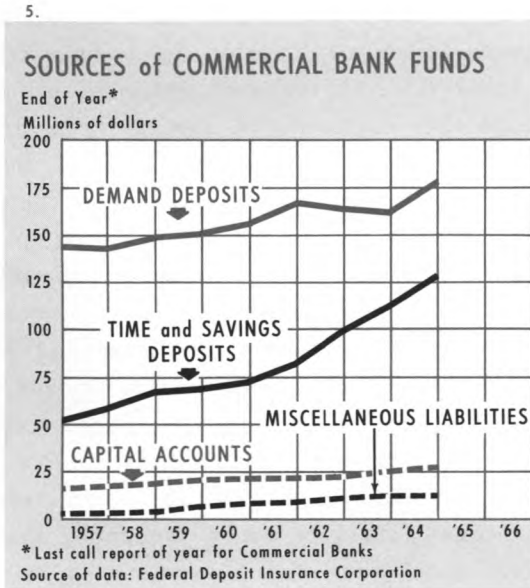
In each year from 1952 through 1964, the effective rate paid on interest-bearing claims issued by deposit-type financial institutions exceeded the rate of the previous year. Commercial banks conformed to this pattern, reflecting both a willingness to compete for funds—albeit along traditional lines—and permissive actions by the regulatory authorities in progressively raising the ceiling on Regulation Q.

Banks were successful, after 1956, in narrowing the unfavorable differential between interest rates paid on their claims and interest rates paid on the claims of major competitors. Thus, whereas rates paid by savings and loan associations between 1952 and 1956 exceeded rates paid on time and savings deposits of

commercial banks by more than 1.5 percentage points, this differential had narrowed to about $\frac{3}{4}$ of a percentage point by the end of 1964.⁶

Commercial banks have also sought to compete in the money market for the highly mobile short-term funds of both corporations and well-to-do individuals. The willingness to compete is also evident from Chart 4, where it can be seen that the rate paid on negotiable time certificates of deposit has tended to be above the bid rate on 91-day U.S. Treasury

⁶ Various factors enable commercial banks to compete successfully for loanable funds (particularly long-term savings) despite payment of lower effective rates of interest. One reason, for example, is that only commercial banks offer complete banking services and, hence, convenience.



bills, as well as to correlate closely with variations in that rate.⁷

Thus, as it became increasingly apparent that corporations and individuals were less likely to continue to hold large demand deposit balances, commercial banks attempted,

⁷ The behavior of commercial banks in setting interest rates for different forms of deposits is rather interesting, and reveals a keen understanding of the advantages of money market segmentation. It is apparent from Chart 4 that the secondary market rate paid on three-month negotiable CDs has moved up considerably faster than the rate paid on total time and savings deposits. Moreover, the former rate has moved much more in sympathy with money market rates than has the effective rate paid on all time and savings deposits. The major portion of time and savings deposits is held by individuals as long-term savings. Though such savings are by no means insensitive to relative interest rate differentials and levels, they are thought to be less sensitive than the short-term idle funds of corporations and well-to-do individuals. Thus, rather than competing for the marginal liquidity of such spending units by raising interest rates across-the-board, commercial banks have issued negotiable CDs in large denominations, especially for acquisition by this segment of the market.

as a second best alternative, to induce such depositors to keep funds on deposit as either time or savings deposits by making interest rates more attractive. In these efforts, particularly in the period beginning in 1957, some success was achieved.⁸ Commercial banks were able to retain, often with the same deposit ownership, a portion of the funds formerly held in demand balances that might have sought profitable investment outside banks, as well as to attract a share of newly generated loanable funds.

It is evident from Chart 5, which shows the various sources of commercial bank funds, that total time and savings deposits have increased at a much faster rate since the end of 1956 than have demand deposits—the former increased by 1.5 times as compared with the less than 25 percent increase of the latter. At the end of 1956, demand deposits contributed almost 67 percent of total sources of funds of commercial banks; by the end of 1964 the proportion had dropped to only slightly more than 50 percent. Time and savings deposits, on the other hand, gained in relative importance, rising from less than 25 percent to 37 percent over the same period.⁹ No particularly pronounced changes

⁸ From 1936 through the end of 1956, maximum interest rates payable on commercial bank time and savings deposits under Regulation Q remained unchanged. As of January 1, 1957, maximum interest rate ceilings were raised on all types of time and savings deposits, excepting 30-to 89-day time deposits. This action by the regulatory authorities was initiated in recognition of the general rise in interest rates beginning in 1951.

⁹ These percentages are for *total* demand and *total* time and savings deposits, as reported on bank balance sheets. The proportions thus differ from those usually derived from adjusted deposit data. Both sets of data, however, reveal similar patterns over time.

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in the magnitudes of bank capital and other miscellaneous liabilities appeared in this period; at the end of 1956, the two components combined accounted for 9.1 percent of total sources of funds of commercial banks as compared with 11.2 percent at the end of 1964. However, recent innovations affecting these sources of funds have potentially important implications for the future, which are discussed later.

CREATIVE RESPONSE

To date, the 1960's have seen commercial banks become considerably more aggressive in their competitive efforts. This has been made possible in part by the greater leeway given by the monetary authority to commercial banks in the setting of interest rates.¹⁰ But, in addition, commercial banks have found new ways of competing for funds—ways which likely will play a major role in determining the fortunes of commercial banking in coming years.

Prior to the early 1960's, commercial banks, as a general matter, apparently had been content to attract funds from traditional sources and by traditional means, with rising interest rates as the primary lure. The past four years, however, have witnessed a considerable change, with innovation now playing a dominant role in terms of both characteristics of claims issued by banks and the markets to which these claims are meant to have appeal.

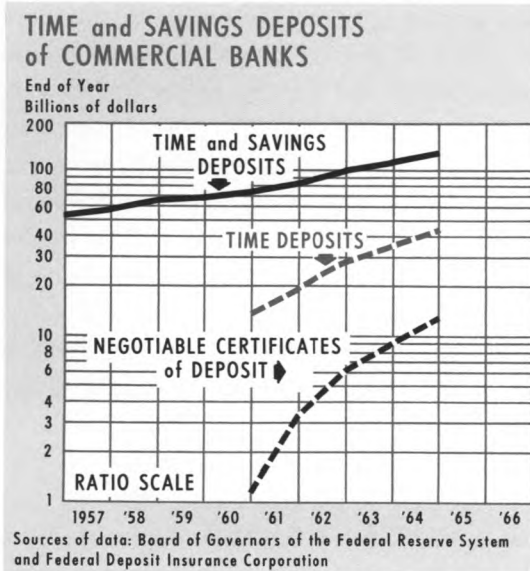
¹⁰ Permission to raise rates payable on various types of time and savings deposits has been granted in every year since 1961. Thus, changes in maximum rates payable under Regulation Q were made effective as of January 1, 1962, July 17, 1963, and November 24, 1964. As of this writing, there has been no change in 1965.

Most important thus far of the debt instruments recently introduced by commercial banks—at least in terms of magnitude—is the negotiable certificate of deposit. In sharp contrast to the past when many banks discouraged or refused corporate-owned time deposits,¹¹ negotiable CDs were issued primarily to halt the movement of demand deposit funds from large commercial banks by corporate money managers into investment in various money market instruments, for example, Treasury bills, commercial paper, and bankers' acceptances. Certificates of deposit were not unknown prior to 1961, when leading New York City banks announced that they would offer such instruments to both corporate and noncorporate customers and a leading Government securities dealer indicated that it would maintain a secondary market for such instruments. But, as seen from Chart 6, negotiable CDs totaled only slightly in excess of \$1 billion at the end of 1960. By the end of 1964, this almost insignificant figure had grown to more than \$12.5 billion—by August of this year to over \$16 billion.

Negotiable CDs clearly have grown considerably faster than the total of time and savings deposits. While at the end of 1960, negotiable CDs constituted just 1.5 percent of total time and savings deposits, by the end of 1964 they accounted for almost 10 percent. Of the \$54-billion increase in time and savings deposits between the end of 1960

¹¹ A view in the past often was (and in some cases still is) that the buildup of interest-earning time deposits owned by corporations would be at the expense of demand deposits which earn no interest.

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and the end of 1964, negotiable CDs contributed more than one-fifth. Since negotiable CDs are a form of time deposit (as distinct from savings deposits¹²), their increase has contributed far more significantly to the growth of time deposits. And it is the time deposit component in recent years that has evidenced most of the growth recorded in the total of time and savings deposits. From the end of 1961 to the end of 1964, time and savings deposits together increased by about 55 percent. Time deposits alone, however, expanded about 2.3 times. The growing volume of negotiable CDs accounted for almost 45 percent of the nearly \$26 billion increase in time deposits over the period.

The appeal of negotiable CDs reflects in part their attractive yields; it also reflects

¹² Time deposits are generally held by businesses and well-to-do individuals, and include: time deposits open account, time CDs (negotiable and non-negotiable), and other special accounts. Savings deposits, as evidenced by the ownership of a passbook, represent generally the savings of the public-at-large.

their marketability, something the traditional time deposit lacked. However, while having much appeal to money managers, negotiable CDs are not necessarily as pleasing to bankers. For one thing, CDs tend to be highly sensitive to interest rates—to the extent that adverse differentials between interest rates paid on CDs and on other money market instruments could cause a loss of CDs and, hence, a source of funds to the banks involved.

Interest rate considerations aside, there also exists the possibility of holders failing to renew maturing CDs, for example, because holders may want back their funds for working capital purposes. This is not a surprising situation in that, in many cases, CDs represent *temporarily* idle funds which in former years might have contentedly remained in demand balances. Negotiable CDs are therefore a potentially volatile source of funds, in contrast to the traditional savings, or even time, deposit. In this respect, CDs bear a strong resemblance to demand deposits.¹³ Moreover, not only must legally required reserves and adequate capital be kept against CDs (as in the case of other deposits), but bankers may often feel queasy about investing such funds in high-yielding though relatively illiquid assets. In short, negotiable CDs can easily become a rather volatile and expensive source of funds.

The issuance of negotiable CDs has probably been the most widely discussed aspect of the renewed vigor with which commercial banks have sought to strengthen their commanding position as a financial intermediary.

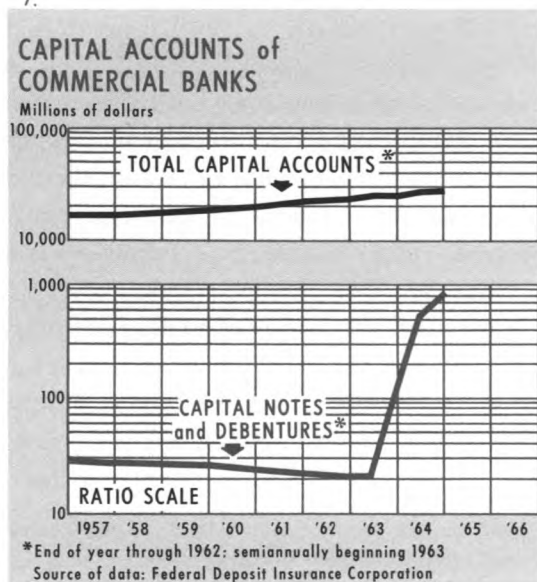
¹³ See George R. Morrison and Richard T. Selden, *Time Deposit Growth and the Employment of Bank Funds* (Association of Reserve City Bankers, 1965), Chapter III.

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Of less quantitative importance thus far—but also possessing significant implications for the future—are new sources of funds showing up in the capital and miscellaneous liability accounts of commercial banks. Of particular interest are subordinated debentures and capital notes, and more recently unsecured short-term promissory notes, which were first issued in September 1964 by The First National Bank of Boston. As seen in Chart 7, the outstanding volume of subordinated debentures and capital notes rose from a level of only \$21 million in mid-1963 to over \$800 million at the end of 1964. In relation to total bank capital of nearly \$28 billion at the end of 1964, \$800 million is an inconsiderable amount. Yet, in the absence of regulatory restraints, there is reason for believing that the total could increase sharply and to significant proportions.

From a bank's point of view, debentures and capital notes have much to recommend

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as a source of funds. To the extent that they substitute for additional sales of common stock, and to the extent that the rate of interest on these funds is less than the rate of return on invested capital, present stockholders stand to benefit from higher earnings per share and possibly higher market values of their equity holdings.¹⁴ But, aside from use as a substitute for the issuance of additional common stock, unsecured debentures and capital notes may also substitute for and/or supplement deposits (demand and time and savings) as a source of loanable funds to commercial banks.

Compared with negotiable CDs, for example, debentures and capital notes possess several distinct and widely accepted advantages. First, neither debentures nor capital notes require the maintenance of legal reserves, while as a deposit liability, CDs require such reserves. Second, debentures or capital notes do not require supporting equity capital or, at least, not to the extent that CDs or the more traditional deposit liabilities would require it. Third, neither debentures nor capital notes are subject to a Federal Deposit Insurance Corporation assessment; as a form of time deposit, CDs are subject to a 1/12 of one percent annual assessment. Finally, because funds secured through debentures and capital notes are likely to remain for a relatively long period of time, there is less need for maintaining secondary reserves, such as Treasury bills and other low-yielding though highly liquid assets. Thus, nearly all the proceeds from debentures and capital notes can be placed in loans and longer maturity investments.

¹⁴ For discussion and illustration of this, see Nadler, *op. cit.*, pp. 20-24.

In the absence of regulatory restraint, it is likely that unsecured short-term notes will become an increasingly important source of funds for commercial banks. Having some of the advantages of debentures and capital notes, short-term notes, in addition, are not burdened with similar marketing problems.¹⁵

CONCLUDING COMMENTS

Having said this, however, it should be remembered that, if not handled properly, that is, with full appreciation of the costs and risks involved, these "new" sources of funds could present serious problems to commercial banks.¹⁶ Thus, it should not be surprising that

¹⁵ On August 26, 1965, the Banking Department of the State of New York gave state chartered banks permission to offer non-negotiable promissory notes (in amounts exceeding \$1,000,000) to corporate customers. As of this writing, six large New York banks have issued such notes.

¹⁶ Acquisition of substantial amounts of loanable funds through the issuance of capital notes and debentures commits the issuing bank to fixed interest payments over extended periods of time. Should market rates of interest subsequently decline, the bank's earning power

the supervisory authorities have demonstrated prudent caution in evaluating such sources of funds. Nevertheless, the fact that new sources of funds have been "innovated" does suggest that commercial banks are seriously seeking to revitalize their position as a financial intermediary. The ultimate success of any single innovation is perhaps not important. What is important is that creative innovation has been reintroduced to commercial banking. And this virtually guarantees that the business of banking will never again be the same—as it probably should not since change happens all the time in the various segments of U. S. business and financial enterprise.

may become jeopardized. An additional source of possible difficulty arises from the relatively high interest rate paid on these sources of funds. At, say, a 5 percent rate of interest on debentures, proceeds from this source could hardly be placed in shorter-term loans and investments. Thus, it might become necessary to place these funds in longer-term and less liquid loans and investments. At some point the desire for profit might conflict with prudent behavior. For additional discussion see L. Wayne Dobson, *The Issuance of Capital Notes and Debentures by Commercial Banks* (Kentucky Bankers Association, 1965), pp. 22-26.

SURVEY OF HIGH SCHOOL SENIORS IN CUYAHOGA COUNTY

The Research Department of the Federal Reserve Bank of Cleveland is currently engaged in a study of the economics of higher education in the Cleveland area. As part of this general study, special surveys and analyses will be conducted from time to time that should be of interest to many observers. On such occasions, short articles dealing with limited portions of the broader study will be published. The present report is such an article.

In late May 1965, the Federal Reserve Bank of Cleveland in cooperation with the Cleveland Commission on Higher Education surveyed students of the senior classes in the public and parochial high schools of Cleveland and Cuyahoga County on their plans for further education. Nearly three-fourths of those replying indicated plans for some form of education after high school graduation.

Table I summarizes replies received from students in 13 public high schools in the City of Cleveland, 30 suburban high schools in 28 school districts, and 27 parochial high schools (25 Catholic and 2 Lutheran). The percent of those who planned to continue their education differs among the three groups of schools, and may overstate somewhat the percent who actually will continue. However, it does indicate that a larger proportion of the graduates of Cuyahoga County high schools

TABLE I
High School Seniors in Cuyahoga County Who Planned to Continue Their Education as of May 1965

Area	Number of Respondents	Number Planning to Continue Education	Percent Planning to Continue Education
City of Cleveland public high schools . . .	4,255	2,740	64.4%
Public high schools in Cuyahoga County outside Cleveland . . .	10,691	8,448	79.0
Parochial high schools . .	3,023	2,217	73.3
Total	17,969	13,405	74.6%

Source: Federal Reserve Bank of Cleveland

(75 percent) planned to continue their education than is the case in either the nation or the State of Ohio. (In the fall of 1964, first-time college enrollment was 54 percent of high school graduates nationally and just a shade over 50 percent for Ohio.)

On the basis of the survey, what is the typical high school senior in Cuyahoga County like? A composite picture drawn from replies to the questionnaire would show an eighteen-year-old, slightly more apt to be a girl than a boy,¹ from a family with an income between \$5,000 and \$10,000. The chances are one in three that the student's father attended college and slightly better than one in five

¹ Girls outnumbered the boys in the responses by 1,481.

that the mother went to college. The vast majority of those who planned to continue their education expected to do so not later than the fall of 1965. More than a thousand planned to hasten the process by attending summer school. However, some 500 planned to defer their education for at least a year—most commonly in order to earn necessary funds.

Thus far the data collected in the survey have been subjected only to the following tabulations: (1) aggregates for city, suburban, and parochial schools; (2) a breakout for those who answered affirmatively the question, "Are you planning to continue your education?"; and (3) a breakout for those who said that they already had been accepted. This article follows essentially the same pattern.²

A word of caution is necessary at this point. While the survey sample comprised approximately 80 percent of the universe of high school seniors in Cuyahoga County, generalizations to a broader universe would be unwarranted. Thus, only to the degree that Cleveland typifies other large, urban, northern, industrial communities might inferences be drawn. No attempt has been made to deal with the question, "Is Cleveland typical?" The purpose of the survey was simply to obtain some preliminary insights into education plans of high school seniors in Cuyahoga County and possible implications concerning the demand for higher education in the Cleveland area.

² Currently, the data are being cross-sorted and evaluated for relationships. Should additional patterns of interest appear, they will be reported in a later issue of the *Economic Review*.

HOW MANY WILL ACTUALLY ENTER COLLEGE IN SEPTEMBER 1965?

Do the 13,405 students who said they planned to continue their education represent a realistic figure? First, this figure includes 500 students who expected to defer this step for a year or more. Second, it also includes some 700 who indicated that their plans for continued education involved a vocationally oriented school, for example, beauty college, key punch school, or a practical nursing course. Third, there are several normal attrition factors: some girls may have married by the time this analysis is written; some boys may have decided to fulfill their military obligations before continuing their education; and still others may have found what promises to be permanent employment which is to their liking.

Another figure is available—the number who actually had been accepted by one or more colleges at the time of the survey (late May 1965). Table II shows the number accepted and the number of those accepted who actually planned to continue their education. There is no precise way of determining from the survey results why the second figure is lower. However, several possible explanations

TABLE II
Number of Students Who Had Been Accepted as of May 1965

Area	Number Accepted	Number who Planned to Continue of Those Accepted
Cleveland	1,242	1,206
Suburban	6,170	5,990
Parochial	1,736	1,638
Total	9,148	8,834

Source: Federal Reserve Bank of Cleveland

TABLE III
Pattern of Acceptances Received by Those Students Who Had Been Accepted as of May 1965

Location of School	Number of Acceptances Received		
	1	2	3
Cuyahoga County	3,150	292	29
Ohio ex Cuyahoga County	3,932	843	117
Outside Ohio	1,596	385	124
Total	8,678	1,520	270

Source: Federal Reserve Bank of Cleveland

suggest themselves: simply a change of plans; difficulty in financing the projected education; or the fact that the acceptance received was not from the school to which the student really wanted to go. It is interesting that the data show 35 who decided not to go although they were accepted by two or more schools (and of these, four had also been offered scholarships).

Between the high figure of 13,405 from Table I and the low figure of 8,834 from Table II what realistic compromise figure can be reached? It is reasonable to assume that the totals in Table II are on the low side because only the first round of acceptances had gone out from most colleges at the time the questionnaires were completed. Locally, the transfer of Fenn College to Cleveland State University was in process with all the delays and complications attendant upon the conversion of a private to a public institution.

Table III, which shows the pattern of single and multiple acceptances, evidences the frequency of both multiple applications and resulting acceptances. On the assumption that each person who receives more than one acceptance actually does go to one of the

accepting schools, a spot is thereby released simultaneously for one who has not yet been accepted.

A final factor suggesting that the low figure of 8,834 will have risen substantially by the time colleges opened in the fall is the state law in Ohio which requires that, "The graduate of any chartered Ohio high school should be entitled to admission to publicly assisted colleges or universities, but some distribution of this enrollment among various institutions and branches will be necessary to insure full utilization of all facilities."³ While this rule does not guarantee to every Ohio applicant immediate admission to the state-assisted school of his choice, it does give each high school graduate an opportunity to demonstrate that he qualifies for advanced education. In the light of the foregoing factors, it would seem reasonable to conclude that the actual number of Cuyahoga County high school graduates who registered in September at some college or university, public or private, was around 12,000.

THOSE WHO PLAN TO CONTINUE AND THOSE WHO HAD BEEN ACCEPTED

Tables IV and V make it possible to compare those who indicated an intent to continue their education with those who had been accepted at the time of the survey. Approximately equal numbers of boys and girls planned to continue, but more girls were accepted in the first go-round. Similarly,

³ *Provisional Master Plan for Public Higher Education in Ohio*, Ohio Board of Regents, April 1965, page 3.

TABLE IV
Profile of Those High School Seniors Who Planned to Continue Their Education

Area	Sex			Age					Family Income					Father Attended College			Mother Attended College			Accepted May 1965			Total
	M	F	n.a.	16 &		19 &			Under \$5,000	\$5,000-\$10,000	Over \$10,000	Unknown	n.a.	Yes	No	n.a.	Yes	No	n.a.	Yes	No	n.a.	
				under	17	18	over	n.a.															
Cleveland	1,395	1,341	4	13	1,194	1,310	157	55	305	1,331	239	825	40	423	2,273	44	310	2,384	46	1,206	1,447	87	2,740
Suburban	4,463	3,953	32	30	3,752	4,107	210	349	323	3,179	2,489	2,281	176	3,247	5,041	160	2,195	6,051	202	5,990	2,068	390	8,448
Parochial	837	1,375	5	37	1,073	1,002	17	88	161	1,074	330	599	53	580	1,594	43	349	1,808	60	1,638	453	126	2,217
Total	6,695	6,669	41	80	6,019	6,419	384	492	789	5,584	3,058	3,705	269	4,250	8,908	247	2,854	10,243	308	8,834*	3,968	603	13,405

* The difference between the number who reported having been accepted in Table IV (8,834) and the number who reported acceptance in Table V (9,148) is due to the fact that 314 of those in the tabulation on which Table V is based either indicated that although accepted they did not plan to continue (35 responses) or did not answer the question (279 n.a.'s) on which the tabulation for Table IV was based.

Source: Federal Reserve Bank of Cleveland

TABLE V
Profile of Those High School Seniors Who Had Been Accepted as of May 1965

Area	Sex			Age					Family Income					Father Attended College			Mother Attended College			Multiple Acceptances			Total
	M	F	n.a.	16 &		19 &			Under \$5,000	\$5,000-\$10,000	Over \$10,000	Unknown	n.a.	Yes	No	n.a.	Yes	No	n.a.	2	3	n.a.	
				under	17	18	over	n.a.															
Cleveland	631	608	3	6	648	527	34	27	127	692	142	271	10	220	1,004	18	179	1,047	16	218	86	24	1,242
Suburban	3,149	3,001	20	21	2,831	2,978	99	241	201	2,189	2,078	1,575	127	2,736	3,323	111	1,867	4,161	142	1,420	532	61	6,170
Parochial	681	1,050	5	31	848	781	12	64	130	827	288	455	36	486	1,220	30	292	1,400	44	346	128	11	1,736
Total	4,461	4,659	28	58	4,327	4,286	145	332	458	3,708	2,508	2,301	173	3,442	5,547	159	2,338	6,608	202	1,984	746	96	9,148*

* The difference between the number who reported having been accepted in Table IV (8,834) and the number who reported acceptance in Table V (9,148) is due to the fact that 314 of those in the tabulation on which Table V is based either indicated that although accepted they did not plan to continue (35 responses) or did not answer the question (279 n.a.'s) on which the tabulation for Table IV was based.

Source: Federal Reserve Bank of Cleveland

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about 400 more eighteen-year-olds than seventeen-year-olds planned to continue but when it came to acceptances, the seventeen-year-olds had a slight edge. Fewer than half the nineteen-year-olds who planned to continue had received acceptances by May. In much the same manner, the boy or girl whose father or mother had attended college would appear to have had an advantage in terms of first-round acceptances. Any inferences concerning the role of family income in college plans are somewhat limited so far as the present survey is concerned, by the fact that 30 percent of all respondents marked this item "unknown," while an additional 2 percent did not answer the question at all. The evidence does suggest, however, not only that a higher proportion of students from higher income families and/or students in the suburban and parochial schools plans to continue their education, but even more significantly that these students received substantially more first-round acceptances and multiple acceptances. This observation is substantiated by the figures in the last column of Table VI, which are essentially first-round acceptances, when they are related to the number planning to continue their education as shown in Table I.

The geographic distribution of acceptances has considerable significance for those responsible for educational planning. A grand total of 10,468 acceptances had been received at the time of the survey. Of these, 3,471 were from schools in Cuyahoga County and 4,892 from other colleges and universities in Ohio. Thus, 80 percent of all acceptances originated in Ohio. This indicates that by choice or necessity a great majority of the students in Cuyahoga County look to their home community and/or state for education beyond high school. The necessity may be in part financial and, in this era of keen competition for admission, it may also arise in considerable measure from greater assurance of acceptance from the public colleges of one's own state. Whatever the balancing of forces which determined the students' applications, it is only in the suburban high schools that out-of-state acceptances accounted for more than one-fifth of the total (21 percent), as compared with 16 percent for city schools and 15 percent for parochial schools.

On the questionnaire the students were asked in the following order: Are you planning to continue your education? Yes No ; Have you been accepted at a college, university, or other educational institution?

TABLE VI
Geographic Pattern of Single and Multiple Acceptances as of May 1965

Area	Location and Number of Acceptances													Total			
	Cuyahoga County				Rest of Ohio				Outside Ohio								
	1	2	3	Total	1	2	3	Total	1	2	3	Total	1	2	3	Total	
Cleveland	582	48	2	632	423	90	14	527	176	38	9	223	1,181	176	25	1,382	
Suburban	1,648	129	15	1,792	3,005	668	90	3,763	1,151	290	100	1,541	5,804	1,087	205	7,096	
Parochial	920	115	12	1,047	504	85	13	602	269	57	15	341	1,693	257	40	1,990	
Total	3,150	292	29	3,471	3,932	843	117	4,892	1,596	385	124	2,105	8,678	1,520	270	10,468	

Source: Federal Reserve Bank of Cleveland

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TABLE VII
Schools Which the Students Who Had Been Accepted Planned to Attend

Area	College									
	Baldwin-Wallace College	Case Institute of Technology	John Carroll University	Notre Dame College	St John College of Cleveland	Ursuline College for Women	Western Reserve University	Cleveland State University	Cuyahoga Community College	Other
Cleveland	26	10	11	6	9	2	18	150	148	93
Suburban	90	76	50	8	5	4	79	282	442	330
Parochial	8	12	115	48	58	58	24	158	168	188
Total	124	98	176	62	72	64	121	590	758	611
(a)	130	102	194	61	80	59	124	805	1,300	840
(b)	135	104	199	65	86	66	133	830	1,364	875

Area	College							
	Ohio Private*	Kent State University	Miami University	Ohio University	Ohio State University	Central State College	Bowling Green State University	Outside Ohio
Cleveland	69	63	21	81	89	11	38	150
Suburban	629	371	204	473	706	2	392	1,143
Parochial	165	87	17	50	72	—	47	227
Total	863	521	242	604	867	13	477	1,520
(a)	938	600	257	658	935	18	511	1,663
(b)	979	617	263	673	965	19	516	1,709

(a) Total for all those who planned to continue their education (including those who had been accepted).

(b) Gross total of preferences expressed by all respondents.

*The three municipal Universities (Akron, Cincinnati, and Toledo) have been included under "Ohio Private" to distinguish them from the State University System.

Source: Federal Reserve Bank of Cleveland

Yes No ; Which one(s) specifically? _____; Which one are you planning to attend? _____. It was expected that, if a student said he was not planning to continue his education, or if he said he was planning to continue his education but had not yet been accepted, he would not in the following question name any institution. Instead, many students must have construed, "Which one are you planning to attend?" as the equivalent of "Which one do you want or hope to attend?" Specific schools were named repeatedly by those who answered that they had not yet been accepted, and even by those who said they did not plan to continue their education.

Table VII attempts to adjust for these patterns of thought. It shows in detail—for Cleveland public, suburban public, and parochial schools—the college, university, or other educational institution that each student who had received one or more acceptances said he planned to attend. It also shows in aggregates the schools (a) as indicated by all those who said they planned to continue their education regardless of whether or not they had been accepted at the time, and (b) as answered by all respondents.

The chief item of note perhaps is the sharp rise in the totals for Cleveland State University and Cuyahoga Community College in items (a) and (b). The push of those who were not

TABLE VII
Schools Which the Students Who Had Been Accepted Planned to Attend

Area	College									Other
	Baldwin-Wallace College	Case Institute of Technology	John Carroll University	Notre Dame College	St John College of Cleveland	Ursuline College for Women	Western Reserve University	Cleveland State University	Cuyahoga Community College	
Cleveland	26	10	11	6	9	2	18	150	148	93
Suburban	90	76	50	8	5	4	79	282	442	330
Parochial	8	12	115	48	58	58	24	158	168	188
Total	124	98	176	62	72	64	121	590	758	611
(a)	130	102	194	61	80	59	124	805	1,300	840
(b)	135	104	199	65	86	66	133	830	1,364	875

Area	College								Outside Ohio
	Ohio Private	Kent State University	Miami University	Ohio University	Ohio State University	University of Toledo	Central State College	Bowling Green University	
Cleveland	68	63	21	81	89	1	11	38	150
Suburban	615	371	204	473	706	14	2	392	1,143
Parochial	165	87	17	50	72	—	—	47	227
Total	848	521	242	604	867	15	13	477	1,520
(a)	921	600	257	658	935	17	18	511	1,663
(b)	962	617	263	673	965	17	19	516	1,709

(a) Total for all those who planned to continue their education (including those who had been accepted).

(b) Gross total of preferences expressed by all respondents.

Source: Federal Reserve Bank of Cleveland

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yet sure that they actually would be going to college at the time of the questionnaire appeared to be toward local, public institutions.

FINANCING EDUCATION

Basically there are three ways of financing education beyond high school: from the family exchequer, by scholarships and loans, and by the earnings of students themselves. Those students who answered the question on family income appeared to regard themselves as predominately middle income, that is \$5,000-\$10,000 (see Tables IV and V). In line with this, more than a third of those who planned to continue their education said that they expected "to be employed while studying." Depending on whether the percentages are computed on those who said they planned to continue or those who said they had been accepted, those who expected to be employed ranged from a high of 48 percent (43 percent of those who had been accepted) in the city schools to a low of 34 percent (30 percent of those accepted) in the suburbs.

These figures should also be interpreted with some caution for they encompass a wide variety of student employment situations. Although the question, "Do you expect to be employed while studying?" was intended to refer to the academic year, some students construed the question as, "Do you expect to be employed during your years of college?" and replied in the affirmative, specifying summer jobs. Others gave in some detail the arrangements of scholarship *cum* college job or loan *cum* college job, which had been worked out in advance between the college and the prospective student. Students in both the foregoing situations may reasonably be regarded as full-time students.

In addition, a large number of those planning to attend local colleges (Cuyahoga Community College and John Carroll University in particular) indicated that they expected to go to college part-time, usually in the evening, and to hold a full-time or part-time job as well. Several indicated that their employers would aid in the financing of their studies.

On scholarships and loans, it can be generalized that scholarships were both more numerous and for larger amounts than loans. Slightly over 10 percent of those planning to continue their education, or 14 percent of those accepted at the time of the survey, had received scholarships. The vast majority received a single scholarship; some 10 percent received two; and four students reported three scholarships. About one-third were for less than \$500 a year, slightly more than one-fourth for between \$500 and \$1,000, and 7 percent for over \$2,000 a year. The balance fell in the range of \$1,000-\$2,000.

Almost three times as many students received scholarships as loans. Only four students reported receiving more than one loan. Almost half the loans were for \$500 or less; another third were for amounts between \$500 and \$1,000. There were only 60 loans as compared with more than 200 scholarships in the \$1,000-\$2,000 range, and five loans in contrast to 81 scholarships for amounts in excess of \$2,000.

While the colleges themselves were the chief source of scholarships, providing more than half the total number, government was the chief source of loans, with the colleges as the second most important source. In the case of scholarships, private organizations ranked second, and government third. Apparently, the

use of banks and other financial institutions as a source of loans, despite recent publicity, has not become a usual practice, for only 11 were reported.

When the pattern of loans and scholarships is regarded from the standpoint of the schools from which the students were graduated, nearly one student in five graduating from the city schools received a scholarship, slightly more than one in ten from the suburban schools, and approximately 13 percent of those from the parochial schools. The distribution of loans among schools was similar; approximately 7 percent of those from the city schools, 4 percent from the suburban, and 5 percent from the parochial schools had received loans. The share of the larger scholarships—those in excess of \$1,000 a year—was practically constant at 25 percent of the total number for all three school groups.

THOSE WHO DO NOT PLAN TO CONTINUE THEIR EDUCATION

About 25 percent of those completing the questionnaire said they had no plans for continuing education. The range was from 35 percent in the city to 21 percent in the suburbs. The parochial school students, who are both urban and suburban, were in the middle at approximately 26 percent.

If any attempt is made to see why some students had no education plans, only two clues are available. (The questionnaire provided no information on the scholastic attainments or aptitudes of the respondents beyond the simple fact that all were high school seniors.) One clue is parental income. Of those who plan to continue their education 6 percent reported family incomes of under

\$5,000, 42 percent incomes of \$5,000-\$10,000, 23 percent incomes of over \$10,000, and 29 percent income unknown or not available. In comparison, the pattern for those who reported that they did not plan to continue their education is interesting; 7 percent reported incomes under \$5,000, 42 percent incomes between \$5,000-\$10,000, 9 percent incomes in excess of \$10,000, and 42 percent incomes unknown or not available.

A second clue as to students' plans for continuing education may be found in the record of college attendance of parents. The replies on college attendance by father or mother appear both to be consistent with known patterns and to have a low "no answer" factor (351 in father's and 424 in mother's). It is also in this area that relatively sharp contrasts appear. While 31 percent of the fathers and 21 percent of the mothers of those who expected to continue their education attended college, only 10 percent of the fathers and 5 percent of the mothers of those who did not plan to continue their education themselves attended college.

PRIVATE PREPARATORY SCHOOLS IN CUYAHOGA COUNTY

Although the students in the several private preparatory schools in the county were not included in the original survey, in September the headmasters or principals were asked to provide information concerning the college plans of their June graduating classes. The responses confirmed the traditional pattern associated with such schools. Of the 284 graduates for whom reports were made, 98 percent were continuing their education with the great majority, over 200, going to schools

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outside Ohio.⁴ Less than 10 percent were going to schools in Ohio exclusive of those in Cuyahoga County, and with the exception of one school which had a substantial number of graduates going to college within the county, only three students were continuing their education at local colleges.

⁴ One school indicated that final reports were not in on all students and gave first and second choices on a few students so that the total of "where-going" figures was slightly higher than the total number of graduates. For this reason, the exact number of going out-of-state and to schools in Ohio but outside Cleveland cannot be stated with absolute precision.

CONCLUDING COMMENTS

This article of necessity has been descriptive rather than definitive. It has been intended only to share some preliminary insights into a subject that is of primary interest to the Cleveland area. The article tells something of the plans for further education of the bulk of high school seniors in the central county of a large metropolitan area. As such, it is a reasonable beginning of a broader study that will be continued in time and in more detail.



ANOTHER LOOK AT MUNICIPAL PORTFOLIOS

One of the more significant changes in the asset management policy of commercial banks in recent years has been a shift in the composition of investment portfolios. Holdings of U. S. Government securities, which have historically accounted for the bulk of bank investments, have constituted a steadily declining proportion of total investments in recent years, while holdings of other securities (principally state and local government obligations — "municipals") have risen sharply. As holdings of municipals gained increasing prominence as a component of total bank credit, attempts to assess the nature and composition of such holdings, for example, maturity and quality, were frustrated by a lack of detailed data.

In late 1963, the Research Department of this bank initiated a survey of holdings of municipals by Fourth District weekly reporting member banks. The initial survey obtained detailed information on the composition of municipal portfolios as of the end of each year from 1956 through 1962 and at midyear 1963. Analysis of the information provided by 24 of the 26 weekly reporting banks documented the growing importance of municipal

securities in commercial bank investment portfolios and evaluated differences in portfolio behavior of banks in different communities and among various classes of banks.¹ Similar surveys have been conducted by this bank on a regular semiannual basis (as of December 31 and June 30) since midyear 1963. All 26 weekly reporting banks in the Fourth District are now included as regular respondents.²

This article reviews changes in the volume and composition of municipal portfolios of the 26 banks since midyear 1963, including an analysis of the maturity distribution, quality characteristics, and rates of return. While information obtained from this sample of large Fourth District banks cannot be construed as entirely representative of the situation at all commercial banks, it does seem realistic to assume that the findings are a reasonable approximation of conditions prevailing at other banks of comparable size.

¹ See "Survey of Municipal Portfolios, Fourth District Weekly Reporting Banks," *Monthly Business Review*, Federal Reserve Bank of Cleveland, December 1963.

² The banks range in size from \$86 million to \$2.7 billion in total deposits.

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TABLE I
Holdings of Municipal Securities
 26 Fourth District Weekly Reporting Banks
 Amount Outstanding
 (in thousands of dollars)

Maturity	6/30/63	12/31/63	6/30/64	12/31/64	6/30/65
Under 1 year	\$ 297,958	\$ 377,092	\$ 290,825	\$ 326,570	\$ 244,292
1-5 years	655,387	646,390	671,007	655,865	677,640
5-10 years	464,878	503,275	532,563	564,451	572,279
Over 10 years	504,806	539,515	621,845	713,015	819,896
Total*	\$1,923,029	\$2,066,272	\$2,116,240	\$2,259,901	\$2,314,107

	Percentage Distribution				
Under 1 year	15.5%	18.2%	13.7%	14.5%	10.6%
1-5 years	34.1	31.3	31.7	29.0	29.3
5-10 years	24.2	24.4	25.2	25.0	24.7
Over 10 years	26.2	26.1	29.2	31.5	35.4
Total	100.0%	100.0%	100.0%	100.0%	100.0%

*Includes holdings of Public Housing Authority bonds.

Source: Federal Reserve Bank of Cleveland

VOLUME AND MATURITY

As indicated in Table I, the volume of municipals held by reporting banks increased from \$1.9 billion at midyear 1963 to \$2.3 billion at midyear 1965, or by 20 percent. The increase, while impressive, is only moderate when compared with the gain of 143 percent in such holdings in the 2½-year period from yearend 1960 to midyear 1963 (not shown in table). It should be remembered, however, that the earlier period was marked by the large-scale entry of banks into the municipal market, as banks attempted to improve rates of return on earning assets; this situation reflected at least in part sharply increased expenses associated with a growing proportion of time deposits in the total deposit mix.

The appeal to banks of investment in municipals was also probably heightened in the

earlier period by relatively moderate demands for loans as an alternative outlet for funds, at least as compared with the recent period. For example, total earning assets of Fourth District weekly reporting banks increased by 21 percent from yearend 1960 to midyear 1963. (See Table II). During that period, adjusted loan volume rose by only 14 percent, while total investments increased by nearly one-third. All of the gain in investments was centered in holdings of municipal securities, as holdings of U. S. Government issues were reduced slightly. Putting it another way, loan volume fell from 58 percent of earning assets at yearend 1960 to about 55 percent at midyear 1963. In contrast, investments increased steadily as a proportion of earning assets, with holdings of municipal securities rising from 9 percent to 18 percent of the total. Moreover, as a proportion of total investments.

municipal holdings increased to nearly two-fifths of the total at midyear 1963 from about one-fifth at yearend 1960.

In the two-year period from midyear 1963 to midyear 1965, the pattern at reporting banks was unlike that in the earlier period, with loan volume assuming an increasingly important role in bank portfolios. In the 1963-65 period, earning assets increased by only one-seventh, but loan volume rose by nearly one-third. Total investments actually declined, as the banks accommodated a part of rising loan volume and further additions to holdings of municipal securities by reducing holdings of U. S. Treasury issues about one-fifth. During the recent period, therefore, the composition of earning assets at reporting banks was noticeably changed. At midyear 1965, loans constituted 63 percent of total earning assets, a substantially higher proportion than had prevailed two years previous. In contrast, municipal holdings rose only moderately as a proportion of earning assets, and the share represented by holdings of U. S. Government issues fell sharply. Nevertheless, despite the

more moderate rate of accumulation of municipal securities in the 1963-65 period compared with the earlier period, holdings of municipal securities amounted to slightly more than one-half of total investments of reporting banks at midyear 1965.

In addition to continued accumulation of municipal securities, reporting banks shuffled the composition of such holdings substantially in the 1963-65 period, as indicated by the maturity distribution in Table I. Holdings of short- and intermediate-term issues (due in less than 5 years) showed a steady decline as a proportion of total volume, while holdings of longer-term issues (due in over 5 years) represented a steadily growing proportion. At midyear 1963, holdings were divided about equally between issues maturing in less than 5 years and those maturing in over 5 years. By midyear 1965, in contrast, over-5-year maturities accounted for three-fifths of total volume, with virtually all of the added concentration in longer-term maturities accounted for by issues maturing in more than ten years. The marked preference for issues

TABLE II
Changing Composition of Earning Assets
 26 Fourth District Weekly Reporting Banks
 (in millions of dollars)

Items	Yearend Percentage		Midyear Percentage		% Change 1960-63	Midyear Percentage		% Change 1963-65
	1960	Distribution	1963	Distribution		1965	Distribution	
Total Earning Assets	\$8,805	100.0%	\$10,685	100.0%	+ 21.3%	\$12,220	100.0%	+14.4%
Loans (adjusted)*	5,109	58.0	5,838	54.6	+ 14.3	7,730	63.3	+32.4
Total Investments**	3,696	42.0	4,847	45.4	+ 31.1	4,490	36.7	- 7.4
U.S. Governments	2,776	31.5	2,692	25.2	- 3.0	2,132	17.4	-20.8
Municipals	792	9.0	1,923	18.0	+142.8	2,314	18.9	+20.3

* Adjusted to exclude interbank loans.

** Includes corporate and Federal Agency securities, Federal Reserve bank stock and some miscellaneous investments, not shown separately.

Source: Federal Reserve Bank of Cleveland

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TABLE III
Holdings of U.S. Government and Municipal Securities
 26 Fourth District Weekly Reporting Banks
 (in millions of dollars)

Date	Total Holdings	Percentage Distribution by Maturity		
		Under 1 yr.	1-5 yrs.	Over 5 yrs.
6/30/63	\$4,615	21.4%	46.5%	32.1%
12/31/63	4,640	24.8	44.4	30.8
6/30/64	4,394	22.6	42.4	35.0
12/31/64	4,594	24.8	38.0	37.3
6/30/65	4,446	18.9	35.1	46.0

Date	Holdings of U. S. Governments	Percentage Distribution by Maturity		
		Under 1 yr.	1-5 yrs.	Over 5 yrs.
6/30/63	\$2,692	25.7%	55.3%	19.0%
12/31/63	2,574	30.1	54.9	15.0
6/30/64	2,278	30.9	52.3	16.8
12/31/64	2,334	34.7	46.7	18.6
6/30/65	2,132	28.0	41.4	30.6

Date	Holdings of Municipals	Percentage Distribution by Maturity		
		Under 1 yr.	1-5 yrs.	Over 5 yrs.
6/30/63	\$1,923	15.5%	34.1%	50.4%
12/31/63	2,006	18.2	31.3	50.5
6/30/64	2,116	13.7	31.7	54.4
12/31/64	2,260	14.5	29.0	56.5
6/30/65	2,314	10.6	29.3	60.1

Source: Federal Reserve Bank of Cleveland

of longer maturity undoubtedly reflected the effort to increase, or at least maintain, the rate of return on municipal portfolios. This effort was complemented, as will be seen, by appreciable shifts in the quality composition of portfolios. Both factors—lengthening and quality adjustments—worked toward reducing the liquidity of municipal holdings.

With reference to liquidity, it should be added that the 26 banks reported a decline in total short-term investments (U.S. Govern-

ments and municipals due in less than one year) in the 1963-65 period, with all of the decline occurring between the yearend 1964 and midyear 1965 surveys. This development is evident from Table III, which shows the changing relationship of municipals and U.S. Government securities in bank portfolios. It is apparent that reporting banks reduced holdings of U.S. Governments somewhat faster than they accumulated municipals, with total investments consequently lower at midyear

TABLE IV
Holdings of Municipal Securities
 26 Fourth District Weekly Reporting Banks
 Percentage Distribution by Quality Rating

Date	Moody Ratings					Total
	Aaa	Aa	A	Baa	Below Baa*	
6/30/63 . . .	21.4%	25.1%	38.9%	7.1%	7.5%	100.0%
12/31/63 . . .	19.3	28.7	34.8	8.0	9.2	100.0
6/30/64 . . .	20.0	25.2	36.2	8.5	10.1	100.0
12/31/64 . . .	16.2	27.7	37.0	10.2	8.9	100.0
6/30/65 . . .	15.8	30.6	34.4	8.8	10.4	100.0

* Unrated securities are included in the "Below Baa" quality category. This grouping is not intended as an indication of the quality of such issues.

Source: Federal Reserve Bank of Cleveland

1965 than two years previous. The maturity distribution of holdings of Treasury issues also changed. The proportion of the total due in under one year rose steadily from midyear 1963 until yearend 1964, and then retreated from nearly 35 percent to 28 percent. Holdings in the 1-5 year maturity range declined steadily as a percent of the total (from 55 percent to 41 percent), while the proportion of the total maturing in over 5 years fluctuated in a relatively narrow range until yearend 1964, and then rose sharply (to nearly 31 percent). As a result, the proportion of holdings of U.S. Governments maturing in more than one year was somewhat less at midyear 1965 than at midyear 1963, but a considerably larger share of the total was concentrated in over-5-year maturities.

Although holdings of short-term U.S. Government issues actually represented a somewhat larger share of total Government holdings at midyear 1965 than at midyear 1963, the dollar volume of issues in the under-one-year maturity category was less than two years earlier. Since holdings of short-term municipals also declined (both absolutely and

as a proportion of total municipal holdings), the liquidity of investment portfolios was reduced (see top panel in Table III). The total volume of Governments and municipals due in less than one year at midyear 1965 was 15 percent below the level at yearend 1963, and constituted less than one-fifth of total holdings. Holdings in the 1-5 year maturity range declined by 27 percent and constituted a steadily declining share of the total. In contrast, the volume of holdings maturing in over 5 years rose by 38 percent and accounted for an increasing share of the total.

Bank management efforts to bolster bank revenue, in the face of steadily rising expenses, have involved a growing emphasis on acquisition of higher yielding assets. This program has been implemented, in part, by reducing the proportion of assets allocated to short-term investments, which, despite their traditional importance as secondary reserves, require some sacrifice in yield. It has been suggested by some observers that this investment rationale is justified, given the smaller degree of deposit volatility associated with a growing porportion of savings deposits and

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the development of new techniques for bank liquidity adjustment, for example, more intense use of the Federal funds market and issuance of negotiable certificates of deposit or unsecured promissory notes.³ Without arguing the merits of the policy, it seems reasonably accurate to describe the programs that have been adopted by Fourth District reporting banks as consistent with such a policy.

The lengthening of municipal maturities has been accompanied by a reduction in overall quality of municipal holdings, as shown in Table IV. The volume of issues carrying a rating of less than A (including unrated issues) rose steadily, from 14.6 percent of the total at midyear 1963 to 19.2 percent at midyear 1965. A growing proportion of such issues clearly reduces the marketability of banks' municipal portfolios. The marketability of lower quality issues is limited by the narrower range of investors to whom such issues appeal, partly as a result of quality restrictions that govern the investment policy of many institutional investors. At the same time, while unrated issues may be well supported by a sound financial statement of the obligor, marketability is similarly limited by the relatively small size of such offerings, the consequent small supply of such issues in the market, and a name that is often not familiar to a wide range of investors.

About four-fifths of total volume at midyear 1965 was centered in holdings of issues carrying a rating of A or above, with the proportion represented by such higher quality issues

³ See the discussion in the accompanying article in this issue.

TABLE V
Yields on Municipal Securities Held by
26 Fourth District Weekly Reporting Banks and
Open Market Yields Semiannually, 1963-1965

Period	Open Market Yields Moody Ratings*			Reporting Banks** Weighted Average Yield
	Aaa	Aa & A	Baa	
1963				
First Half	2.99%	3.23%	3.57%	2.64%
Second Half	3.13	3.32	3.60	2.68
1964				
First Half	3.10	3.30	3.55	2.73
Second Half	3.08	3.27	3.54	2.83
1965				
First Half	3.06	3.25	3.49	2.90

* Open market yields are semiannual averages of monthly figures. Only general obligation bonds are included, and the average term is 20 years.

** For reporting Fourth District banks, the yield is the weighted average reported as of the end of each period.

Sources of data: Moody's Investors Service and
Federal Reserve Bank of Cleveland

having receded steadily since midyear 1963. Higher quality holdings at midyear 1965 were more heavily concentrated in issues rated Aa than at midyear 1963; the proportion of the total carrying the highest rating (Aaa) declined fairly steadily during the period, and that centered in A rated issues declined irregularly.

YIELD

During most of the period from midyear 1963 to midyear 1965, the behavior of interest rates on state and local government securities was one of general stability with a slight downward bias.⁴ As indicated in Table V, average market yields on outstanding state

⁴ Recent behavior of municipal yields is outside the scope of this discussion because of the time period included in the survey data.

and local government securities (issues rated Baa and above) were somewhat lower in each successive six-month period after the second half of 1963. The trend of yields during the period was clearly influenced, to some unknown extent, by growing commercial bank demand for municipal securities, particularly in view of the fact that the supply of new municipal issues continued to expand steadily. Despite the slight downdrift in market yields, the average weighted yield on municipal holdings of Fourth District reporting banks rose continuously from midyear 1963. Thus, while market yields were, on average, eight basis points lower during the first half of 1965 than during the second half of 1963, the average weighted yield on portfolios of District banks showed an increase of 22 basis points. The banks were obviously able to achieve

increased yields by lengthening maturities and lowering the quality of holdings.

CONCLUDING COMMENTS

The foregoing analysis documents a decided change in the attitude of management toward the function that investment portfolios of Fourth District weekly reporting banks should perform. A growing representation of municipal securities, and the shifting composition (longer maturities and lower quality) of holdings, reflect the adoption of asset management policies designed to increase bank revenue in the face of steadily rising expenses. When coupled with a steadily rising proportion of loans and a declining proportion of U. S. Government securities in the earning asset mix, an increase in the risk asset ratio and consequent decline in bank liquidity is an obvious result.

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