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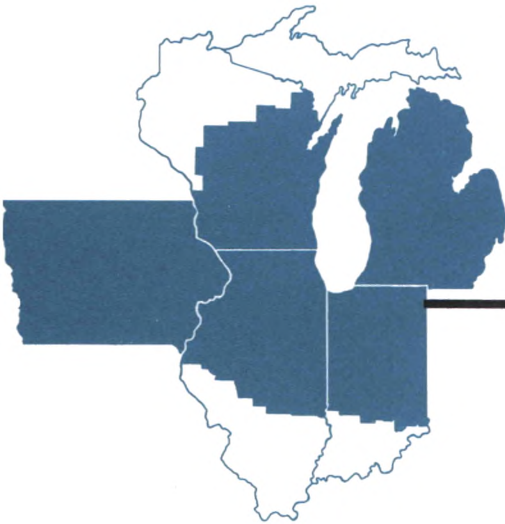
Business Conditions



1965 December

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Trends in banking and finance

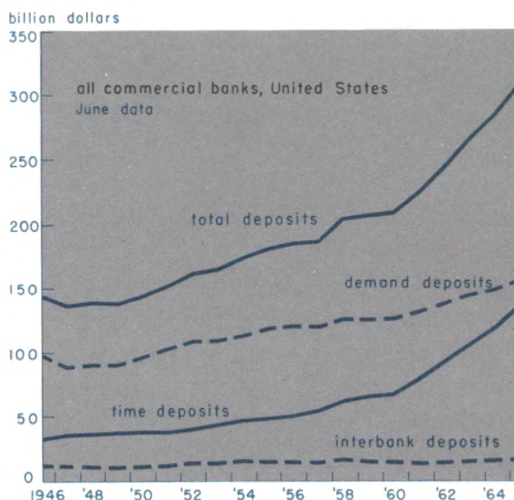
A decade of deposit growth

In the first postwar decade, total deposits of commercial banks in the United States rose about one-third. In the second decade, from June 1955 to June 1965, deposits rose more than two-thirds even though the growth in the nation's income was somewhat slower than in the earlier period. A further sharp contrast may be noted between the first half of the most recent decade when deposits rose at an average annual rate of about 3 per cent and the second half when the increase averaged nearly 10 per cent annually.

Time and savings deposits have accounted for most of the sharp upsurge in total deposits since 1960. The accelerated rate of growth, to a large extent, reflects steps taken by bankers to make time deposits more attractive to investors. These include successive increases in rates paid on savings and time deposits and the development of new techniques, especially the use of the negotiable time certificate of deposit—CD.

A favorable environment for deposit expansion throughout most of the last five years was provided by a generally stimulative monetary policy and increases in the maximum interest rates banks are permitted to pay on

Acceleration in bank growth largely due to time deposits



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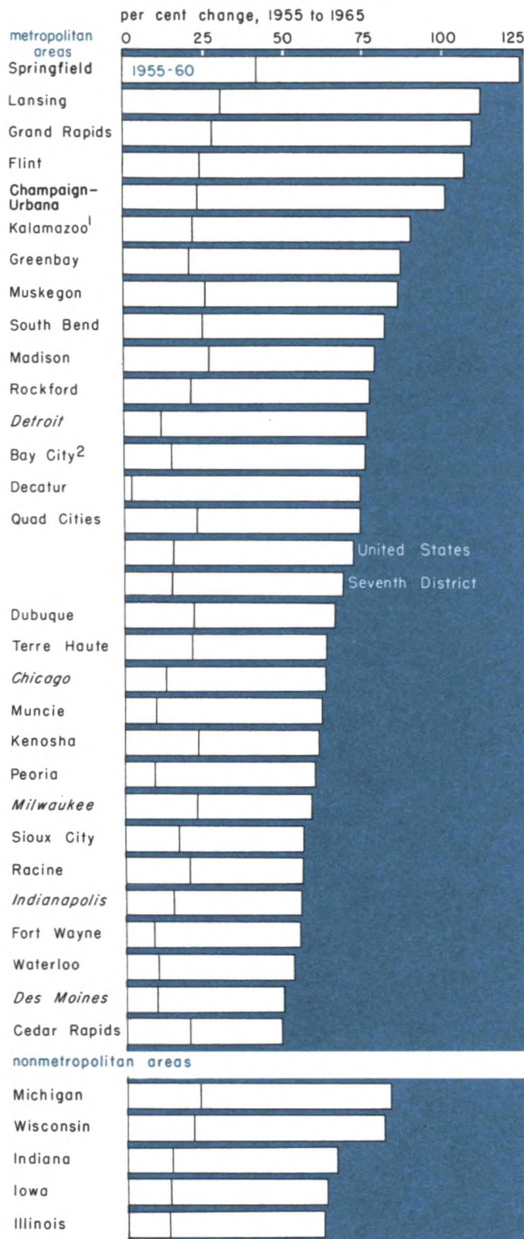
Ten-year deposit growth for District areas



[1]Includes Battle Creek and Jackson areas.
[2]Includes Saginaw area.

time deposits. Nevertheless, the faster rate of growth in deposits (and, consequently, in total bank credit) is largely attributable to more aggressive competition for funds by the banks.

Several earlier analyses have dealt with the innovations in bank practices and, in particular, the effects of interest rate changes on net deposit flows in the short run.[1] In this article growth trends of banks of different types and in various areas over a longer period of time are reviewed. To what extent has the growth been uneven? Where has it been the greatest? Do recent patterns of growth differ markedly from those prevailing earlier?

Perspective on the distribution of the deposit expansion is provided by the accompanying charts. Growth rates are compared for all insured banks in the metropolitan and agricultural areas of the Seventh Federal Reserve District during the past 10 years. These comparisons reveal that the deposit gains have been very widely shared among District areas and that, for the most part, those areas showing the fastest growth since 1960 were the areas where deposit growth had been most rapid from 1955 to 1960.

District has a sixth of nation's deposits

Total deposits of all insured District banks rose 68 per cent from mid-1955 to mid-1965 compared with a 71 per cent growth in the nation. This resulted in a very slight decline—from 16.4 per cent in 1955 to 16.1 per cent in 1965—in the District's share of all commercial bank deposits. The overall growth rate for the District closely approximated the national pace in both halves of the decade.

In every District area, deposit growth has been substantial, and the rise has been faster

[1]See, for example, *Business Conditions,* May 1962, pp. 4-9, February 1963, pp. 5-9, October 1963, pp. 10-16, September 1964, pp. 2-9.

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since mid-1960 than in the previous five years. Nevertheless, some areas have experienced much faster growth than others. Gains in individual areas range from 48 to 124 per cent for the 10-year period. Michigan areas tended to show the largest growth with a total gain of 82 per cent for the state. Iowa centers had the smallest gains—49 per cent.

Indiana areas compare quite favorably with the rest of the District, considering that the legal maximum interest rate payable on time deposits in that state was not raised above 3 per cent until the beginning of 1964, about two years after banks in other states were permitted to offer higher returns to savers. Many banks, however, have maintained rates paid on savings deposits well below the current legal ceilings—3.5 per cent in Indiana and 4 per cent in other District states. Interest rates on passbook savings tend to be highest in Michigan—in both urban and rural areas—while generally lower rates prevail in Iowa and Wisconsin—particularly in rural areas. Most banks pay 4 per cent or more on time certificates of deposit. The legal ceiling on these deposits is now 4 per cent in Iowa and 4.5 per cent in the other District states.

Interest rates are not, of course, the sole determinant of deposit growth. Variation in income among areas is probably the most important factor in the long run, at least in areas with predominantly small banks which do not generally obtain funds from outside their local community. But in recent years deposits of commercial banks have shown an overall growth much faster, relative to income, than in earlier years. This reflects their increased effectiveness in attracting a bigger share of the public's savings and investment funds relative to both other financial institutions and private and public borrowers. Both of these factors have been important in accounting for inter-area differences in deposit growth.

Large banks in the major cities operate in the national markets both in making loans and acquiring funds. These banks have been the most aggressive in offering high interest rates and other inducements to depositors. Negotiable CD rates offered by these banks are adjusted frequently as their individual needs for funds change. Nevertheless, deposits of these banks have tended to show relatively small growth. Total deposits of the 10 largest banks in the District rose about 55 per cent, compared with 68 per cent for all insured banks in the District.

Moreover, the growth of total deposits of all banks in the major metropolitan areas has tended to be relatively slow even though the totals for these areas include many smaller suburban banks which generally have experienced rapid deposit growth. In the aggregate, the largest metropolitan area in each District state—Chicago, Detroit, Milwaukee, Indianapolis and Des Moines—accounted for 12 billion of the 20 billion dollar expansion in total deposits over the last 10 years. But, Detroit was the only one of these areas to show growth faster than the District average.

Demand versus time

Demand deposits would be expected to rise in response to expansionary monetary policies and rising business activity and income. However, in a period when interest rates were rising, many depositors have attempted to economize on nonearning cash balances. Demand deposits in the District rose only 25 per cent in 10 years compared with a 150 per cent gain in time deposits. In the first half of this period District banks gained demand deposits at an annual rate of 1.5 per cent while time deposits grew about 6 per cent annually. In the ensuing five years these growth rates rose to about 3 and 20 per cent, respectively. Even though the growth in demand deposits may appear

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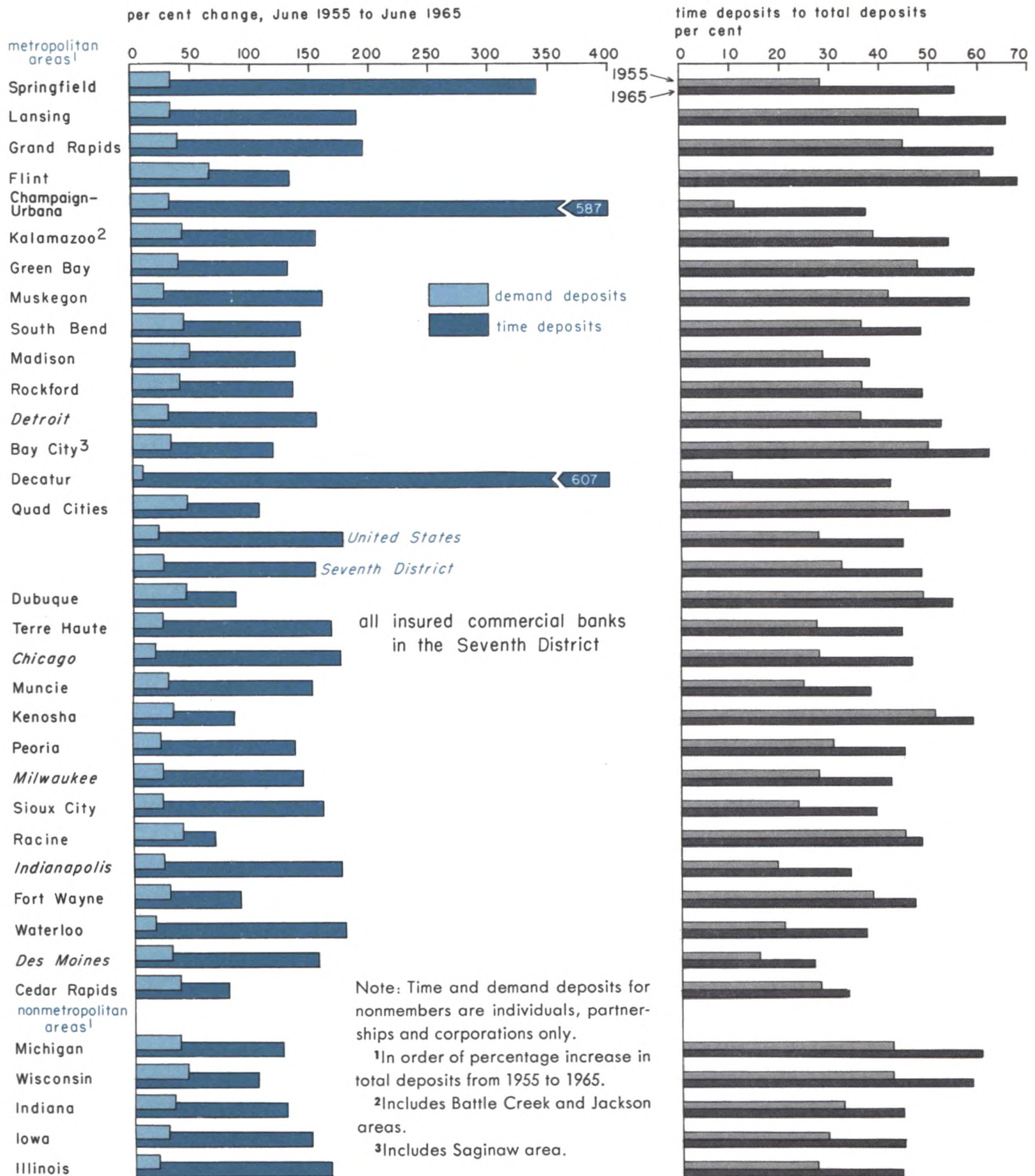
Demand deposit gains dwarfed by time deposit growth in all District areas



Note: Time and demand deposits for nonmembers are individuals, partnerships and corporations only.

[1] In order of percentage increase in total deposits from 1955 to 1965.

[2] Includes Battle Creek and Jackson areas.

[3] Includes Saginaw area.

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relatively slow during the decade, the rise was somewhat faster than in the previous 10 years.

The chart on page 5 shows the relative changes from mid-1955 to mid-1965 in demand and time deposit components for District areas in decreasing order of the rate of gain in total deposits. In addition, ratios of time to total deposits are shown for these areas at the beginning and end of this period.

Time deposit growth has far outstripped the growth of demand deposits in every District area. Variation among areas in the rate of growth of demand deposits was considerably less than for time deposits, but it should be noted that very large percentage gains indicated for time deposits in some areas are attributable to the very small amount of time deposits in those areas 10 years ago.

All the areas showed some gain in demand deposits in the period and those gains were much larger from 1960 to 1965—concurrent with the huge build-up of time deposits—than in the previous five-year period. This suggests that the growth in time deposits was not at the expense of demand balances. Nevertheless, at the District's large money market banks time deposits more than tripled while demand accounts rose less than 15 per cent.

Banks' issues of senior securities*

The issuance of preferred stock and capital notes and debentures by commercial banks provides a controversial chapter in the history of banking in the United States. Prior to the depression in the Thirties, commercial banks were capitalized solely with common equity, with no use of senior securities. During the depression years, more than 7,000 banks issued preferred stock, capital notes or capital debentures to bolster bank capital positions weakened by losses on loans and securities and declines in value of assets.

Most of the senior securities issued in the Thirties were purchased by the Reconstruction Finance Corporation—a Federal agency established in 1932 to provide assistance to firms in financial distress. The RFCs holdings of bank issues of senior securities reached a peak of 879 million dollars in the third quarter of 1935 and accounted for about 13 per cent of the total book value capitalization of all commercial banks at that time.

The amount of senior securities outstanding declined after 1935. Banks that had sold preferred stock or debentures for emergency purposes retired the issues as soon as possible because of the association of senior securities with "distress" financing. The amount outstanding declined to 431 million dollars in December 1940 and to 82 million at the end of 1950.

In the early Fifties, a few states—including New York, New Jersey and Minnesota—authorized issuance of senior securities by state chartered banks, but this method of acquiring funds did not become popular. Less

*This article, including the tables, is based upon a study by David W. Cole, "Senior Securities in the Capital Structure of Commercial Banks," unpublished doctoral dissertation, Indiana University, Copyright, May 1965. The study was completed while Mr. Cole was a research fellow at the Federal Reserve Bank of Chicago. The conclusions are those of the author. Used by permission. Mr. Cole is currently on the staff of the Ohio State University.

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than 20 million dollars of these securities were issued during the Fifties.

In 1956 an Advisory Committee appointed by the U. S. Senate to review existing Federal banking statutes recommended that national banks be authorized to use debentures, notes and preferred stock as normal means of capital financing. Opponents of the recommendation (including most Federal and state bank supervisors) maintained that the use of preferred stock and capital debentures would 1) complicate capital structures of banks and, therefore, confuse potential investors and lower the quality of banks' common stocks, 2) increase the risk to bank depositors and shareholders by adding a fixed cost to banking operations and 3) provide only temporary additions to bank capitalization because of the mandatory retirement provisions generally associated with senior types of securities. Proponents emphasized that authorization of senior securities would increase the sources of capital available to banks.

The Senate Banking and Currency Committee in 1957 concurred with the Advisory Committee's proposal that national banks be authorized to issue preferred stock but did not recommend authorization of debt obligations. The House Committee held extensive hearings on the Advisory Committee's proposals but did not issue recommendations. Congress did not act on the Senate Committee's recommendation.

A new policy toward bank issues of senior securities was announced in the early Sixties by the Comptroller of the Currency. Stating that he was impressed by 1) the need of many banks for additional capital, 2) the need for banks to have alternative sources of capital, 3) the potential advantages to banks from use of senior types of capital and 4) the successful use of debt and preferred stock by many firms in other industries, the Comptroller issued new regulations permitting national banks to utilize senior securities as a normal means of financing.

Not everyone concurred with the new regulations. Some bankers and bank supervisors expressed concern that issuance of senior securities would increase risks to banks and to the public. The Board of Governors of the Federal Reserve System ruled that debentures do not constitute capital for compliance with certain provisions of the Federal Reserve Act, and some of the state supervisory authorities held that notes and debentures could not be considered as capital under the existing banking statutes of their states.

Despite opposition to bank senior capital issues, a number of banks—both national and state—have issued senior securities in recent months. From January 1963 to July 1965, 130 banks in 35 states issued an aggregate of 1,526 million dollars of such securities. The issues included 11 offerings of preferred stock (27 million dollars), 10 issues of convertible capital debentures (342 million) and 111 issues of capital notes and debentures (1,157 million). Two banks have issued more than one type of senior security.[1]

Size, rate and maturity of issues

The banks that have issued capital notes and debentures have ranged in size from small to very large. Size of issues varies directly, of course, with bank size (see table on page 8). Of the 102 debt issues placed between January 1, 1962, and July 1, 1965, 18 were in

[1]Although corporate financial literature normally differentiates between debentures and notes by 1) initial term to maturity and 2) formality of contract, bank issues of notes and debentures differ primarily with respect to formality of contract. Some banks which have privately placed debt obligations have called their securities "capital notes" because the states do not generally assess an issuance or registration tax against "notes."

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amounts of less than 1 million dollars and five were 50 million dollars or larger. These five large issues account for about 50 per cent of the total nonconvertible capital debt placed by banks. As of mid-1965, the largest issue of nonconvertible debt was 250 million dollars, and the smallest was 150,000 dollars.

Coupon rates on the notes and debentures range between 4.5 and 5.5 per cent. More than 80 per cent of the issues have a coupon rate of 5 per cent and under. The average coupon rate for all of the 102 issues is 4.89 per cent.

The smaller issues generally have required higher coupon rates than the larger issues. While 19 of the 60 issues of less than 5 million dollars have coupons in excess of 5 per cent, no issue in excess of 5 million dollars has a coupon over 5 per cent. Twenty-three of the issues have a 5 per cent coupon; 15, 4.875 per cent, and 12, 4.75 per cent. The average coupon rate for the three issues of 100 million dollars and over is 4.57 per cent; the average rate for the 18 issues under 1 million dollars is 5.13 per cent.

Maturities of the issues range from 7 to 25 years. However, only a small proportion of the issues have less than a 20-year life. With the exception of one 25 million dollar placement, all the issues of 10 million dollars and over have 25-year terms. The average maturity of the 102 issues is 22.1 years.

Five of the six largest issues were sold to the public through underwriting syndicates. The remaining 97 issues were placed privately with one or a small group of institutional investors. Most of the banks employed an intermediary to "find" buyers for their debt issues. Purchasers of the private placements include life insurance companies, mutual savings banks, trust departments of commercial banks, state and local government retirement systems, fraternal organizations, educational institutions, religious organizations and hospitals.

Relative importance of funded debt

The ratios of outstanding funded debt to total capitalization on December 31, 1964, ranged from 11.7 to 39 per cent for the issuing

Characteristics of commercial bank capital notes and debentures
issued January 1, 1963 to July 1, 1965

Issue		Coupon rate		Maturity		December 31, 1964: Funded debt to total capital		December 31, 1964
Size	Number	Range	Average	Range	Average	Range	Average	Total deposits
(million dollars)		(per cent)		(years)		(per cent)		(million dollars)
100 and over	3	4.50 -4.60	4.57	25	25	21.6-32.9	26.0	3,217-11,357
50 to 100	2	4.50	4.50	25	25	24.1-26.1	25.1	2,746- 3,312
25 to 50	5	4.60 -4.75	4.645	20-25	24	24.4-26.9	25.3	838- 1,270
15 to 25	10	4.50 -5.00	4.735	25	25	17.6-33.3	26.7	397- 1,207
10 to 15	8	4.625-4.875	4.70	25	25	19.8-27.1	23.8	309- 644
1 to 10	56	4.50 -5.25	4.92	7-25	22	11.7-34.8	24.4	40- 364
Under 1	18	4.50 -5.50	5.13	10-25	18	14.9-39.0	25.5	5- 30
All issues	102	4.50 -5.50	4.89	7-25	22.1	11.7-39.0	24.9	5-11,357

Note: The 102 issues do not include: 10 issues of convertible capital debentures, 11 issues of preferred stock and 9 issues of unconvertible capital notes for which only limited information was available.

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banks. Only 12 of the banks had a ratio above 30 per cent. The average ratio for the 20 banks with size of issue of 15 million dollars and above was 26.1 per cent, and the average ratio for the other 82 banks was 24.6 per cent. The average for the 102 banks was 24.9 per cent. Debt-to-capital ratios for banks grouped by size of issue are shown in the table on page 8.

A comparison of coupon rates with funded debt ratios indicates that higher debt to capitalization ratios did not necessarily lead to higher coupon rates (see table on this page). The three banks, for example, whose issues carried the highest coupons (5.3 per cent and over) had an average debt ratio of 26.5 per cent, while the 22 banks whose issues carried coupons of 4.85 to 5 per cent had an average debt ratio of 28.3 per cent. Furthermore, while the banks whose issues had the lowest coupon rates (under 4.55 per cent) had relatively low average ratio of funded debt to total capital, those banks whose issues carried coupon rates of 5 to 5.15 per cent had essentially the same debt ratio.

Ratio of debt to capital

Issues		Funded debt to total capital*	
Coupon rate	Number	Range	Average
(per cent)		(per cent)	
5.3 and over	3	14.9-39.6	26.5
5.15 to 5.30	8	17.3-30.6	24.8
5.00 to 5.15	31	17.8-34.8	22.7
4.85 to 5.00	22	16.3-31.8	28.3
4.70 to 4.85	22	19.2-31.4	24.6
4.55 to 4.70	10	22.6-32.9	25.7
Under 4.55	6	11.7-35.8	22.8

*Capitalization is the total of common stock, surplus, undivided profits, outstanding preferred stock and outstanding capital notes or debentures, December 31, 1964.

Times-interest-earned

The ratio of net pre-tax operating earnings to the periodic interest on funded debt provides some indication of a firm's ability to maintain and service such debt. Although an excess of earnings over interest charges in a past or present period does not guarantee that a firm will have adequate cash in the future to meet debt service requirements, before-tax income several times larger than the interest expense during recent years does provide some assurance of a firm's ability to cover future debt charges from future earnings. Many of the contracts covering bank issues of capital notes specify that additional funded debt can be sold only if the average amount of net pretax operating earnings for the three years preceding sale of additional funded debt equals or exceeds three times the three-year average amount of 1) interest on all funded debt or 2) funded debt interest plus a stipulated percentage of the bank's lease payments.

The times-interest-earned ratios for the banks are shown in the table on page 10. These ratios, based on 1964 net pre-tax operating earnings and annual funded debt interest payable on the principal amount of debt issued, ranged from a low of 5.3 times to a high of 27.5 times for the 86 banks included. (Earnings figures for 16 of the 102 banks were not available.) The average 1964 coverage ratio was 12.8 times.

There appears to be an inverse relationship between interest coverage and coupon rates. Banks whose issues required relatively high coupon rates tended to have the lower times-interest-earned ratios. Those banks with coupons in excess of 5 per cent, for example, had 1964 interest-earned ratios lower than those with coupons below 5 per cent.

Amortization and call provisions

Most of the bank debt securities provide for

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periodic retirement of principal during the term of the issue. (Available information indicates that at least six of the 102 issues do not provide for amortization of principal.) A study of the sinking fund provisions of 26 of the issues indicated that four provide for sinking funds to begin one year after date of issue. The remaining 22 require initial debt repayment to start five to ten years after date of issue. Twelve of the 26 debt issues provide for equal annual amortization of principal during the period from sinking fund starting date to final maturity. One of the issues requires a stipulated annual increase in sinking fund payments over the life of the issue. The other 13 issues provide for "balloon" final payments ranging from 20 to 60 per cent of the initial principal.

In addition to mandatory prepayment provisions, many of the 26 debt agreements analyzed permit the banks, at their option, to prepay annually without premium an amount equal to periodic sinking fund requirements. The provision is noncumulative, so that an optional payment skipped in any one year cannot be used in subsequent years. One note agreement, for example, requires the bank to retire 400,000 dollars of notes annually starting in 1975, but the bank may, under a noncumulative optional prepayment provision, retire without premium up to 400,000 dollars of notes each year beginning in 1970.

All of the 26 agreements studied give bank management the option to call, at a premium, outstanding securities for redemption prior to maturity. The call provisions for 14 of the issues do not become effective until five to ten years after date of offering. The call options for the other 12 issues are available throughout the lives of the issues.

Although the premium applicable to the first call year ranges from 3.375 to 7 per cent of par for the 26 issues reviewed, only one of the issues provides for an initial call premium in excess of the coupon rate on the issue. All of the issues provide for a declining schedule of call premiums as maturity approaches. One issue, for example, is callable from June 1, 1965, to May 31, 1966, at a premium of 4.618 per cent of par. In the following year, the call premium is 4.361 per cent, and the premium declines by .257 percentage points each year thereafter until one year prior to maturity.

Fourteen of the issues are nonrefundable for a specified period after issuance. This nonrefunding provision prevents management from retiring or replacing notes through application of funds obtained from another debt issue with an interest rate lower than the coupon on the initial issue.

Ratio of earnings to interest on capital notes and debentures issued January 1, 1963 to July 1, 1965

Issues		Times interest earned, fiscal 1964*	
Coupon rate	Number	Range	Average
(per cent)		(number of times)	
5.3 and over	1	9.6	9.6
5.15 to 5.30	6	8.0-12.5	9.9
5.00 to 5.15	22	5.3-19.1	9.9
4.85 to 5.00	20	6.4-13.9	10.1
4.70 to 4.85	22	7.3-25.6	11.2
4.55 to 4.70	10	7.9-16.3	11.9
Under 4.55	5	10.4-27.5	16.4

*Net pre-tax operating earnings to periodic funded debt interest.

Dividends and additional borrowing

Most capital note agreements provide some restriction on the amount of cash dividends that management can pay to common shareholders. Only three of the 26 analyzed have no such restriction. All the others either place minimum limits on total capital funds or restrict cash dividends to net income after a given date or to net income plus a stated dol-

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lar amount. Five of the agreements stipulate the minimum amount of capital funds that the firms must maintain. Only net income in excess of that required to maintain the stated amounts of capital may be used for cash dividends. Three of the agreements restrict total cash dividend payments to net income earned during the term of the notes. Ten of the issues permit the banks to pay maximum cash dividends equal to net income during the term plus a stipulated dollar amount. The other five issues, all under 4 million dollars in principal, limit cash dividend payments to between 50 and 75 per cent of the net after-tax earnings reported after date of issue.[1]

Twenty of the 26 note agreements prohibit sale of any unsecured funded debt which, in liquidation, would have claims to bank assets prior to claims of outstanding notes or debentures. Seven of the 26 either permit the issuer to sell a stipulated amount of secured funded debt or permit the issuer to assume or guarantee secured debt issued by a real estate subsidiary.

[1]Address by author before the Finance Session of the 19th Annual Indiana Business Conference, Bloomington, Indiana, April 30, 1965.

Summary

Although less than 1 per cent of the total number of insured banks in the United States have participated in the post-1962 senior security offerings, the dollar amount of senior securities outstanding represented over 5.2 per cent of the June 30, 1965, total capital of insured banks. Since December 1962, banks have issued over 1,526 million dollars of preferred stock, capital notes and debentures. This financing represents a significant increase from the 36 million dollars of bank senior capital outstanding at the end of 1962. Furthermore, the placement of senior capital issues by banks in recent years represents financing under nonemergency conditions, a very different situation than in the Thirties when almost all of the issues represented "distress" financing.

The structure of banking in the District states

The number of commercial banks in the United States has increased since 1962, reversing the downward trend of earlier postwar years. Nevertheless, at the end of 1964, the number was considerably smaller than in 1950.

In the five states included in the Seventh Federal Reserve District, however, the number of banks rose to a postwar high in 1964 after remaining relatively constant for most of the period since 1950. The increase was small—a net gain of only 41 banks or 1 per cent in the 14-year period.

The growth of population and income have been reflected largely in the average size of banks instead of the total number. Between 1950 and 1964, average deposits at banks in the District states rose from near 9 million

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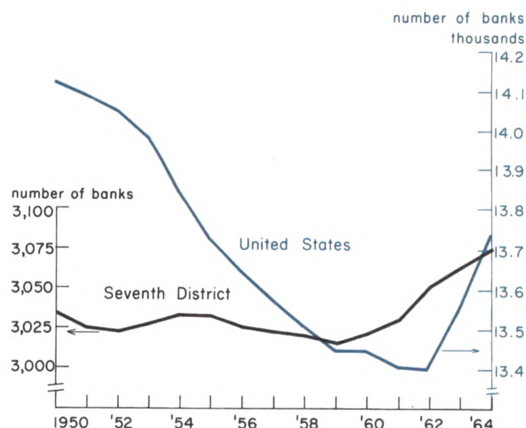
dollars to more than 17 million dollars.

Changes in the number of banks are affected by decisions of both private investors and Federal and state supervisory authorities. The establishment of new banks and branches, consolidations of existing banks and acquisitions of banks by holding companies are all subject to the approval of one or more public officials. Since the laws administered by these officials differ from state to state (as well as between the states and the Federal Government), the numbers and types of banks and banking offices in individual states reflect, in part, the differences in state statutes.

Although the overall change in the number of banks in the District states has been small, the pattern has varied significantly for individual states. In Illinois, Iowa and Wisconsin the number of banks increased, while in Indiana and Michigan the number decreased. The three states showing increases are all "unit banking" states—that is, states in which banks are prohibited, for the most part, from establishing additional branches engaged in "full-service" banking.[1] The number of banks in these states increased by 177, about 8 per cent, between 1950 and 1964.

Indiana and Michigan are "limited branching" states. With the approval of the relevant public officials, banks in these states are permitted to establish full-service branches within a designated area or distance from the bank's home office. In Indiana, branches are confined to the same county as the head office,

Number of banks
in District states at postwar high



while in Michigan banks may establish branches within the home county or a distance of 25 miles from the home office. Although the number of banks in Indiana and Michigan declined by 136 in the 1950-65 period, the number of branches increased enough to boost the total number of bank offices by 662, more than 50 per cent.

At the end of 1964, there were more than 1,000 banks in Illinois. This was the largest number in any of the District states and accounted for one-third of all banks in these states. Iowa was second with 675, followed by Wisconsin with 578, Indiana with 431 and Michigan with 361. Banks are thus more numerous in the states which prohibit full-service branch banking than in states which do not.

Group banking

Banking facilities may be interconnected through a system of branches or the common ownership of individual banks. Common own-

[1]In Wisconsin, banks are effectively permitted to maintain full-service branches that were established prior to 1947. In Iowa, banks are permitted to establish offices to receive deposits and pay checks in cities in the same or adjoining counties not served by existing banks.

In this article, *banks* refer to separate corporate entities, *branches* to all offices, whether limited or full-service, in addition to the head office and *offices* to all banks and branches as defined above.

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ership may take the form of either group banking or chain banking. In the former, a holding company owns the controlling interest in more than one bank. In the latter, an individual stockholder or an associated group of individuals own the controlling interest in more than one bank.

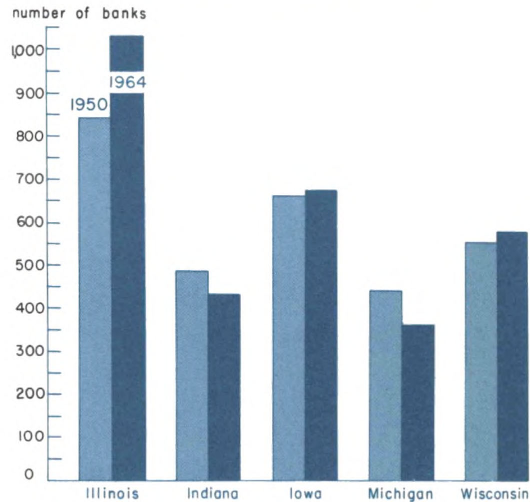
Group banking is regulated by both Federal and state statutes. The Federal Government defines a bank holding company as any corporation which owns at least 25 per cent of the stock of two or more commercial banks. Any firm coming under this definition must receive the approval of the Board of Governors of the Federal Reserve System before acquiring 5 per cent or more of the stock in any additional banks. Holding companies must also comply with state laws, some of which are more restrictive than the Federal laws. Although holding companies may operate across state boundaries, acquisition of additional banks in states other than those in which the head office of the holding company is located has been severely restricted since 1956 by the Federal Bank Holding Company Act.

Group banking most important in Iowa and Wisconsin

State	Holding companies[1]		Group banks: Banks		Facilities to total facilities		Deposits to total deposits	
	1957	1964	1957	1964	1957	1964	1957	1964
	(number)				(per cent)			
Illinois	2	2	5	4	0.5	0.4	0.9	0.4
Indiana	3	2	5	3	1.0	0.7	2.2	0.9
Iowa	3	2	14	18	2.8	3.6	7.6	8.7
Michigan	0	0	0	0	0	0	0	0
Wisconsin	3	7	8	31	3.3	7.6	20.9	34.6

[1]Companies registered pursuant to Bank Holding Company Act of 1956 having subsidiary banks in the respective state.

Banks increased in unit banking states and declined in branch banking states



Acquisition of banks by holding companies is permitted in Iowa and Wisconsin but is effectively prohibited in Michigan, Illinois and Indiana. A few holding companies exist in Illinois and Indiana under "grandfather" clauses which permit the retention of such systems in existence at the time the restricting state legislation was enacted.

Group banking is significant in the District states only in Wisconsin and Iowa. In Wisconsin, seven holding companies controlled a total of 31 banks at the end of 1964, accounting for 8 per cent of all banking offices in the state and more than one-third of total deposits. In Iowa, two holding companies controlled 18 banks, representing 4 per cent of the banking offices and 9 per cent of total bank deposits.[2]

[2]Four banks in Iowa and one in Wisconsin were controlled by the same holding company operating in both states.

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In no other District state did banks controlled by holding companies account for more than 1 per cent of the total deposits in the state.

Only in Wisconsin has group banking increased significantly since the enactment of the Bank Holding Company Act in 1956. In this period, the number of holding companies operating in the state has increased from three to seven. The banks controlled by these holding companies have expanded their share of total bank offices in the state from 3 to 8 per cent and their share of deposits from 21 to 35 per cent.

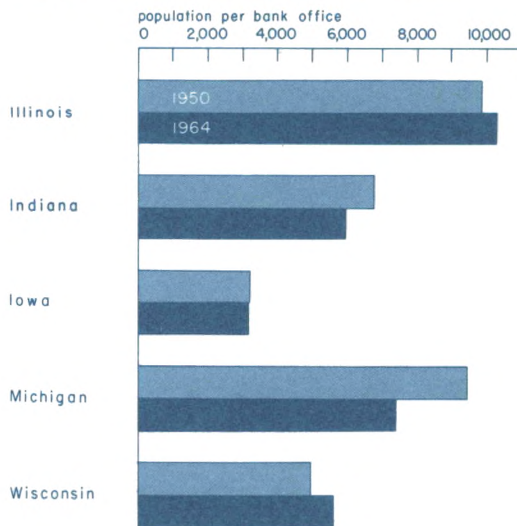
The control of more than one bank through direct stock ownership by one or several individuals is not restricted by either Federal or state law, and little information on the extent and importance of chain banking is available. However, a recent study by a Congressional committee indicates that interlocking bank ownership by individuals is not uncommon.

Population per bank

Population per bank is sometimes used to provide a rough measure of the relative availability of banking services. In 1964 District banks served an average of about 10,000 persons, considerably below the national average of 14,000. The average number of persons per bank varied substantially from state to state, however. Population per bank averaged near 22,700 persons in Michigan, 11,300 in Indiana, 10,300 in Illinois, 7,100 in Wisconsin and 4,100 in Iowa. The pattern is influenced strongly by state branching legislation; the population per bank being greater in states permitting full-service branches than in states prohibiting such branches.

Although limited-service branches typically cannot provide loan services, they can accept deposits and cash checks. The availability of deposit services, therefore, may best be approximated by population per overall bank

Average population
served by bank offices
varies widely among District states



office. The accompanying chart shows that the average population per office is lowest in Iowa and highest in Illinois which, except for military bases, permits no branch offices.

The number of banks has increased less rapidly than population in each of the District states, so that at the end of 1964 banks served on the average a larger population than in 1950.

Metropolitan areas

The market areas served by individual banks vary greatly. Most bank customers tend to do business with banks located nearby. Some customers, primarily large business firms, may utilize the services of banks located beyond the immediate vicinity. Business firms that are well known and have a need for large amounts of banking services have access to large banks throughout the country and even in foreign countries.

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Banking structure in District metropolitan areas

Metropolitan areas[1]	Banks		Bank offices		Population				Deposit concentration[2]	
					Per bank		Per bank office			
	1950	1964	1950	1964	1950	1964	1950	1964	1950	1964
	(number)				(number)				(per cent)	
Illinois										
Champaign-Urbana	19	21	19	21	5,579	6,905	5,579	6,905	52.0	52.4
Chicago	208	273	208	273	24,894	24,330	24,894	24,330	54.2	48.2
Decatur	9	12	9	12	11,000	10,500	11,000	10,500	90.7	80.6
Peoria	25	30	25	30	10,040	10,233	10,040	10,233	58.9	59.0
Quad Cities[3]	21	26	23	31	11,143	11,077	10,174	9,290	58.5	48.3
Rockford	6	12	6	12	25,333	19,083	25,333	19,083	86.6	74.4
Springfield	12	16	12	16	10,917	9,500	10,917	9,500	87.9	81.4
Indiana										
Fort Wayne	10	8	10	26	18,400	32,500	18,400	10,000	86.5	82.2
Gary-Hammond	20	21	23	54	20,400	29,905	17,739	11,630	52.3	53.0
Indianapolis	17	6	48	94	32,470	165,500	11,500	10,564	72.1	96.1
Muncie	7	6	8	19	12,857	19,666	11,250	6,211	88.2	94.2
South Bend	10	10	20	35	20,500	28,400	10,250	8,114	69.4	68.2
Terre Haute	5	3	7	11	21,000	36,000	15,000	9,818	92.9	100.0
Iowa										
Cedar Rapids	15	16	18	22	6,933	9,313	5,778	6,773	82.7	73.6
Des Moines	14	21	17	28	16,143	13,619	13,294	10,214	81.9	73.0
Dubuque	10	11	11	12	7,100	7,636	6,455	7,000	84.2	84.7
Sioux City	18	19	22	24	5,778	6,474	4,727	5,125	64.8	69.5
Waterloo	8	10	9	13	12,500	13,100	11,111	10,077	81.7	74.9
Michigan										
Ann Arbor	12	10	14	26	11,250	19,000	9,643	7,308	73.5	76.1
Bay City	6	3	9	11	14,667	37,000	9,778	10,091	93.4	100.0
Detroit	58	49	186	406	52,000	81,020	16,215	9,778	71.8	67.7
Flint	11	6	24	43	24,636	68,667	11,292	9,581	79.0	95.5
Grand Rapids	16	13	31	63	18,000	29,769	9,290	6,143	80.2	91.1
Jackson	7	6	7	19	15,429	22,833	15,429	7,211	93.6	97.7
Kalamazoo	5	4	10	36	25,400	45,000	12,700	5,000	90.9	98.4
Lansing	24	20	32	42	10,167	16,200	7,625	7,714	73.5	75.5
Muskegon	6	4	7	18	20,333	40,000	17,429	8,889	90.5	95.8
Saginaw	8	9	11	17	19,250	22,222	14,000	11,765	90.0	88.7
Wisconsin										
Green Bay	14	16	15	18	7,000	8,625	6,533	7,667	60.5	55.3
Kenosha	5	5	5	5	15,000	22,400	15,000	22,400	97.4	91.3
Madison	28	31	32	32	6,036	8,419	5,281	8,156	61.8	54.3
Milwaukee	39	53	63	81	24,538	24,755	15,190	16,198	75.2	60.4
Racine	10	12	12	14	11,000	13,083	9,167	11,214	70.9	63.4

[1]Standard metropolitan statistical areas entirely within the Seventh Federal Reserve District.

[2]Deposits of three largest banks divided by total deposits.

[3]Including Scott County, Iowa.

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Because banks are multi-service firms, their market areas differ according to the service. The markets for consumer loans and passbook savings, for example, are typicaly more confined than those for large business loans and negotiable certificates of deposit.

While no single measure of market area will be accurate for all banks or all the services of any one bank, metropolitan areas may reasonably be expected to approximate the average market area for many of the banks and bank customers located in the major cities and the surrounding suburbs. Banks generally provide most of their services for customers within commuting distance of their offices.

Changes in the number of banks in individual metropolitan areas have followed patterns similar to those in the respective states as a whole. Banks tended to increase in metropolitan areas in unit banking states and to decline in metropolitan areas in branch banking states. In all but one of the 17 areas located entirely within the unit banking states of the District, the number of banks increased, and in all but three of the 16 areas in the branch banking states, the number declined.[3] Population per bank increased in all but six areas, and all of these were in unit banking states. Population per bank office, on the other hand, declined in all but two of the 16 areas in states permitting full-service branches.

Concentration ratios

One commonly used measure of the potential market power of individual firms is the ratio of the size of the firm to the size of the industry in the relevant market area. For commercial banking, this "concentration" ratio is frequently computed in terms of deposits. As noted above, deposits represent only one of the many services offered by banks. Furthermore, the market area for customers having large deposits may be expected to be quite different than for customers having small deposits. Hence, concentration ratios based on total deposits provide an oversimplified view of market structure and probably tend to overstate the relative importance of large banks in most metropolitan areas. In addition, this concentration ratio does not reflect the importance of either banks located outside the area but having customers in the area or nonbank financial institutions such as savings and loan associations and insurance companies. Nevertheless, these ratios provide a crude basis for comparing the structure of banking in more or less similar communities.

The table on page 15 shows that in 1964 the three largest banks in each of the metropolitan areas entirely within the District states accounted for between 45 and 100 per cent of the total deposits in the areas. Because concentration tends to be inversely related to the number of banks, it is not surprising that concentration ratios tend to be greater in metropolitan areas in branch banking states than in unit banking states. In only two metropolitan areas, both in Illinois, did the three largest banks account for less than half of total deposits. In ten areas, nine in states permitting branches, the three largest banks accounted for more than 90 per cent of deposits. Concentration increased in 12 of the 16 metropolitan areas in the branch banking states between 1950 and 1964 and in only four of the 17 metropolitan areas in the unit banking states.

[3]This statement refers to the 33 metropolitan areas located entirely within the Seventh Federal Reserve District states. The 1962 definitions of standard metropolitan areas are used in this article. For areas crossing state boundaries, only the portions lying in the District states are included in this calculation.

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Business Conditions

a review by the Federal Reserve Bank of Chicago

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