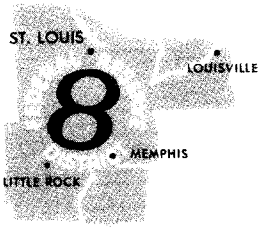
August 1965

FEDERAL RESERVE BANK OF ST. LOUIS

Review

CONTENTS



Volume 47 • Number 8

FEDERAL RESERVE BANK OF ST. LOUIS

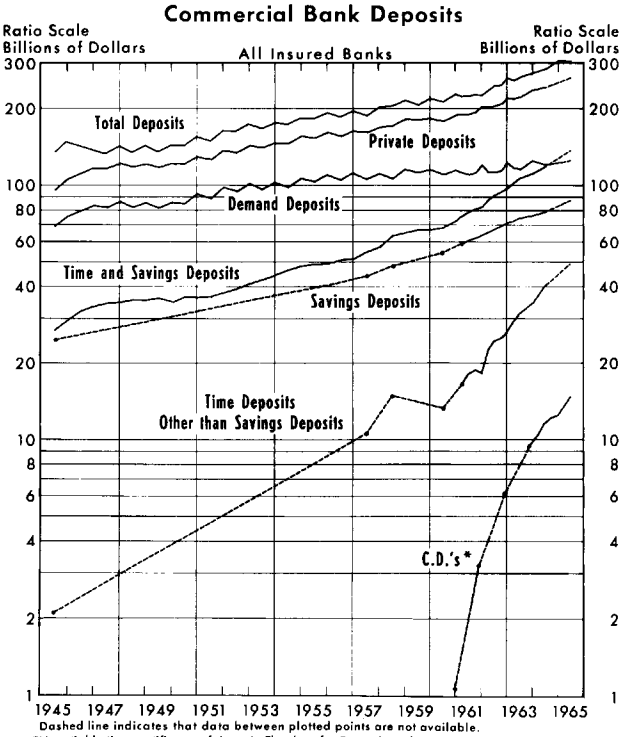
P.O. Box 442, St. Louis, Mo. 63166

Trends in Commercial Banking, 1945-1965

A RAPID GROWTH in time and savings deposits has been the most impressive development in commercial banking in recent years. From mid-1960 to mid-1965 these deposits rose from $68 billion to an estimated $137 billion or at an annual rate of 15 per cent (Chart 1). In contrast, they had risen at a 6 per cent rate in the preceding 15 years.

Chart 1

Commercial Bank Deposits



Dashed line indicates that data between plotted points are not available.
*Negotiable time certificates of deposit. The data for December of 1960, 1961, and 1962 were obtained from surveys of 410 member banks. The data for December 1963 and subsequent dates are from weekly reporting member banks and are limited to negotiable C.D.'s of $100,000 or more. Call report data (semi-annually 1945—1960, mid-1963—1964; quarterly 1961—mid-1963). Mid-1965 estimated.

Source: Federal Deposit Insurance Corporation and Board of Governors of the Federal Reserve System.

The rise in time and savings deposits has been accompanied and, in some respects, facilitated by institutional changes. In early 1961 a secondary market for large-denomination certificates of deposit developed. These C. D.'s have become useful as short-term investments for corpo-

rations, state and local governments, and others seeking temporary employment for large amounts of funds. Also, the development of the C. D. market has provided the banking system with a new means of attracting funds.

The expanded use of negotiable C. D.'s was only the first of several new means of attracting funds to the commercial banks. Since their emergence such additional debt instruments as short-term unsecured notes and long-term subordinated debentures have also been developed.[1] These innovations have helped to make the commercial banking industry an increasingly dynamic element in the financial system. Some years ago a great deal of attention was given to an apparent secular decline in commercial banking in relation to the total financial structure and to the possible effects of this decline on the efficacy of present central bank controls.[2] In view of developments of the last few years, however, it appears that this trend, while continuing, has abated.

The rapid increase in time and savings deposits has been accompanied by substantial increases in earning assets other than U. S. Government debt. Commercial bank holdings of state and local government obligations have increased especially.

To gain perspective on commercial bank developments in recent years it may be useful to view them against the backdrop of a longer span of time. Also, it may be helpful to view banking developments within a context of the general financial structure. The following section discusses trends of the postwar period. Developments since 1960-61 are then reviewed. Conclusions are presented in the final section.

Postwar Trends

The history of commercial banking in the United States since 1945 may be divided into three periods: from 1945 to 1951; from 1951 to 1961; and from 1961 to date. During the first of these periods bank loans and investments other than U. S. Treasury securities grew rapidly; expansion was met largely by funds obtained from sales of U. S. Government obligations, with only a moderate increase in total bank credit. During the second period, from 1951 to 1961, credit demands abated, and banks met the demand from a continued growth of total funds. Since 1961 demands for bank credit have intensified and, for the most part, have been met without reducing holdings of Government securities.

From 1945 to 1951

From 1945 to 1951 there were strong demands for bank credit. Earning assets other than U. S. Government securities rose from about $30 billion to $67 billion or at a 14 per cent annual rate. During this period every major category of commercial bank assets other than U. S. Government securities increased rapidly. Business, consumer, and real estate loans expanded sharply; agricultural loans and obligations of states and municipalities also increased (Chart 2 and Table I).

One important means by which banks met the ex-

Table I

BANK ASSETS

(All insured commercial banks)

Compounded Annual Rates of Change

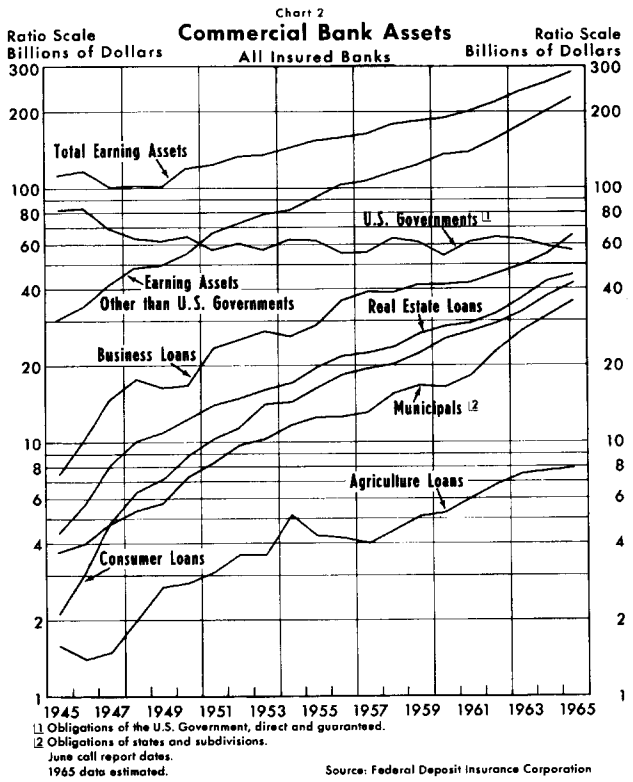
	1945-1951	1951-1961	1961-1965	1945-1961	1945-1965
Total earning assets	1.7	4.9	9.2	3.7	4.8
Earning assets other than U. S. Governments	14.3	7.6	13.2	10.1	10.7
U. S. Governments[1]	— 5.8	0.7	— 2.5	— 1.8	— 2.0
Municipals[2]	14.4	8.3	18.2	10.6	12.1
Business loans	21.0	6.2	11.2	11.5	11.4
Real estate loans	21.3	7.7	11.8	12.6	12.4
Consumer loans	30.3	10.2	11.6	17.4	16.2
Agriculture loans	11.7	6.8	7.1	8.6	8.3

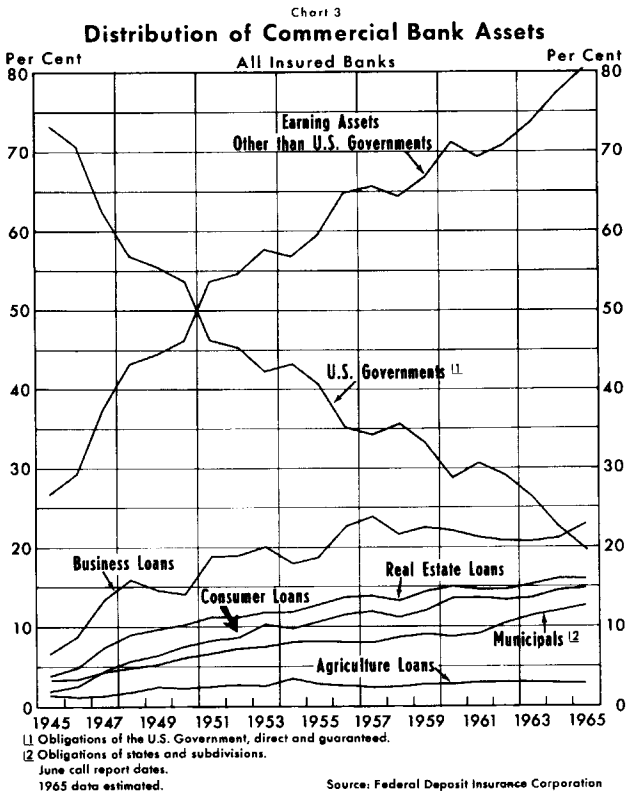
[1]Obligations of the U. S. Government, direct and guaranteed.
[2]Obligations of states and subdivisions.

Source: Federal Deposit Insurance Corporation, June call report data. 1965 estimated.

[1]Subordinated debentures are long-term instruments secured by the general credit of the issuing bank and subordinated to the claims of the bank's depositors. Unsecured notes, like debentures, do not provide the protection of insured deposits. Notes are issued by commercial banks to obtain short-term funds. For a more complete discussion see: Paul A. Nadler, "Time Deposits and Debentures: The New Sources of Bank Funds," *Bulletin of the C. J. Devine Institute of Finance,* Graduate School of Business Administration, New York University, July 1964, and Wesley Lindow, "Bank Capital and Risk Assets," *The National Banking Review,* September 1963.

[2]Raymond W. Goldsmith, *Financial Intermediation of the American Economy Since 1900* (Princeton, N. J.: Princeton University Press, 1958). Also see J. G. Gurley and E. S. Shaw, "Financial Intermediaries and the Saving-Investment Process," *Journal of Finance,* May 1956, and John M. Culbertson, "Intermediaries and Monetary Theory: A Criticism of the Gurley-Shaw Theory," *American Economic Review,* March 1958.





panded loan demand was the reduction of relatively low-yielding U. S. Government debt. Bank holdings of U. S. Government debt declined from $82 billion in 1945 to $58 billion in 1951 (Chart 2). As a per cent of earning assets, U. S. Government securities declined from 73 per cent in 1945 to 46 per cent in 1951 (Chart 3). Because reductions of U. S. Government debt holdings largely offset the expansion in other earning assets, total assets expanded only moderately (at a 2 per cent annual rate).

Total deposits at commercial banks rose at a 2 per cent annual rate from 1945 to 1951, comparable to the increase in total earning assets (Tables I and II). Private deposits—which exclude interbank deposits, deposits of the U. S. Government, and cash items in process of collection—expanded at a 5 per cent annual rate. Most of the expansion in private deposits occurred prior to 1948 (Chart 1), reflecting a shift of deposits from public to private accounts (as the U. S. Treasury made substantial reductions in the Federal debt). The increase in private deposits was in both time and demand deposits.

Table II

BANK LIABILITIES

(All insured commercial banks)

Compounded Annual Rates of Change

	1945-1951	1951-1961	1961-1965	1945-1961	1945-1965
Total deposits	1.8	4.1	8.0	3.3	4.2
Private deposits	4.7	4.2	8.4	4.4	5.2
Demand deposits	4.4	2.2	3.1	3.0	3.0
Time deposits	5.3	8.0	14.6	7.0	8.5

	1951-1960	1960-1965	1945-1960
Total deposits	4.0	7.5	3.1
Private deposits	4.0	7.9	4.2
Demand deposits	2.4	2.5	3.2
Time deposits	7.1	15.0	6.4

Source: Federal Deposit Insurance Corporation, June call report data. 1965 estimated.

Deposit liabilities of commercial banks accounted for 82 per cent of liquid intermediation in 1945 (Chart 4, page 4); by 1951 they amounted to 78 per cent.[3] The relative decline was principally in demand deposits; time deposits as a portion of total liquid intermediation declined only slightly.

[3] Liquid intermediation is here defined as deposits at commercial banks, savings and loan shares, credit union shares, and deposits at mutual savings banks. Commercial bank deposits exclude domestic interbank deposits, deposits of the U. S. Government, and cash items in the process of collection.

From 1951 to 1961

During the 1951-61 period, demands for bank credit moderated. The banking system's earning assets other than U. S. Governments rose at an 8 per cent annual rate, compared with a 14 per cent rate in the 1945-51 period. The slowdown in growth rates occurred in every major category (Table I).

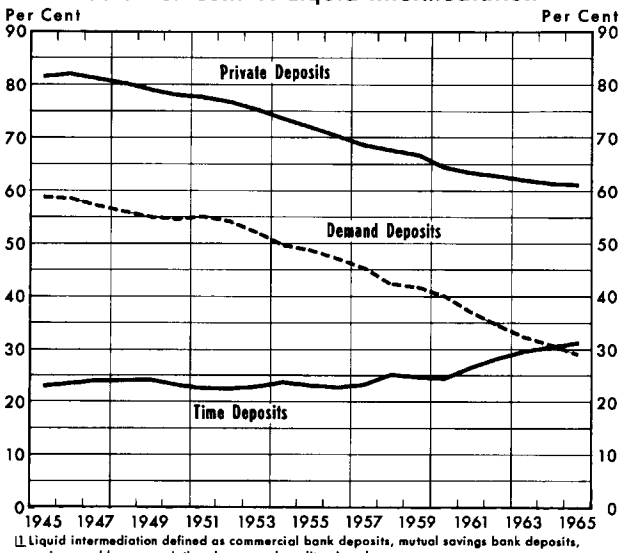
Although non-U. S. Government demand for bank credit rose less rapidly from 1951 to 1961 than in the 1945-51 period, there was, nonetheless, a more rapid increase in total earning assets. Total earning assets expanded at an average annual rate of 5 per cent from 1951 to 1961, compared with a 2 per cent rate in the 1945-51 period. In the earlier period, a period during which the Federal Reserve System "pegged" the prices of Government securities, the least-cost method by which banks could obtain loan funds was by reduction of U. S. Government debt holdings. After the Federal Reserve-Treasury Accord in 1951, Government security prices became increasingly responsive to market forces. Accordingly, the cost of obtaining funds through security sales came to depend on market forces: as market interest rates rose (security prices fell), losses were incurred on security sales. During the 10 years from 1951 to 1961, a period of generally rising interest rates, holdings of U. S. Government debt fluctuated around the $60 billion level (Chart 2). Banks apparently found it most efficient to increase earning assets from net expansion in their deposit liabilities.

Along with the more rapid increase in total earning assets, deposits expanded more rapidly from 1951 to 1961 than in the 1945-51 period. Total commercial bank deposits rose at a 4 per cent annual rate from 1951 to 1961, compared with a 2 per cent rate from 1945 to 1951. Private demand deposits expanded at a 2 per cent rate from 1951 to 1961, compared with a 4 per cent rate in the preceding six years. Time deposits, on the other hand, increased more rapidly from 1951 to 1961 than in the 1945-51 period, at an 8 per cent rate compared with a 5 per cent rate.

In relation to total liquid intermediation, deposits of commercial banks declined more sharply from 1951 to 1961 than in the 1945-51 period. The relative decline was confined solely to demand deposits; time deposits rose more rapidly than during the earlier period (Chart 4).

Considering the 1945-61 period as a whole, the commercial banking system changed substantially. Reflecting partially offsetting movements, total earning assets rose $89 billion or at a 4 per cent annual rate. Earning assets other than U. S. Government debt expanded $110 billion or at a 10 per cent annual rate (Chart 2). To accommodate this non-Federal Government loan demand, banks reduced their holdings of U. S. Government debt by $21 billion. Total deposits expanded at a 3 per cent rate during the period, with time deposits rising at a markedly greater rate than demand deposits (Chart 1 and Table II). Commercial bank deposits as a per cent of liquid intermediation declined from 82 per cent to 64 per cent from 1945 to 1961 (Chart 4). The relative decline was due wholly to demand deposits. As a per cent of liquid intermediation, demand deposits declined from 59 per cent in 1945 to 37 per cent in 1961; time deposits increased from 23 per cent to 27 per cent.

Chart 4
Commercial Bank Deposits as a Per Cent of Liquid Intermediation [1]



[1] Liquid intermediation defined as commercial bank deposits, mutual savings bank deposits, savings and loan association shares, and credit union shares. End-of-June data. 1965 estimated.

Source: Board of Governors of the Federal Reserve System and Department of Health, Education, and Welfare

From 1961 to 1965

The most conspicuous quantitative banking development in recent years has been the rapid and prolonged rise in time and savings deposits. From mid-1961 to mid-1965 these deposits rose at a 15 per cent annual rate, nearly double the rate of increase of the previous decade. As a share of liquid intermediation, time and savings deposits expanded from about one-fourth in 1961 to nearly one-third in 1965 (Chart 4).

Total deposits of commercial banks, reflecting primarily the growth in time deposits, have risen much more rapidly since 1961 than during the preceding 16 years (Chart 1 and Table II). However, as a factor in total liquid intermediation, commercial banks have continued to decline, though less rapidly (Chart 4). Demand deposits at commercial banks have risen at rates only slightly greater than in the preceding 16

years. The decline in demand deposits as a portion of total liquid intermediation has neither slowed nor accelerated appreciably in recent years. However, in relation to the total of private bank deposits the demand deposit portion has declined sharply since 1961, from 58 per cent to 48 per cent.

Earning assets have grown markedly since 1961. From 1961 to 1965 earning assets of insured commercial banks rose from $201 billion to $286 billion or at a 9 per cent annual rate, more than double the rate of increase in the preceding 16 years. Holdings of U. S. Government obligations have declined slightly from 1961 to 1965 but have remained in the neighborhood of $60 billion (Chart 2). As in other periods of strong economic expansion, the rate of increase in bank holdings of earning assets other than U. S. Government debt has turned up markedly. This upward turn was most marked in business loans, in real estate loans, and in municipal securities.

Notwithstanding the acceleration in the shift in composition of bank liabilities, changes in the composition of assets in recent years have largely continued longer-run trends. As a per cent of earning assets, business loans have increased only slightly on balance since 1961.[4] Although the relative share of real estate and consumer loans has increased since 1961, the relative movement into these loan categories has followed about the same trend as since 1951 (Chart 3). The rise in municipals since 1961 is somewhat greater than in earlier years.

This cursory review indicates few significant departures since 1960 or 1961 from trends which have prevailed since the early 1950's. The prolonged rapid rise in time deposits during the past five years is virtually the only break in the apparent continuity with earlier postwar trends. Hence, it may be of interest to explore further the rise in time deposits in an attempt to identify those special factors which have been responsible for their departure from past trends.

Recent Time Deposit Developments

Time deposits at commercial banks may be divided into several classes. Among these are savings deposits and large-denomination certificates of deposit. Savings deposits are, for the most part, used by individuals as repositories for their savings; i.e., as thrift accounts. In contrast, the large certificates of deposit, because they are readily marketable, compete directly for short-term funds with such marketable short-term debt as Treasury bills, commercial paper, and acceptances. The remainder of commercial bank time deposits are a diverse lot.[5]

To the extent that savings deposits are a savings medium, it seems reasonable to expect that those factors which determine the public's flow of saving would be major determinants of movements in savings deposits at commercial banks. On the other hand, to the extent that C. D.'s may be regarded as short-term, highly marketable, liquid assets, variables which explain businesses' demand for liquidity might be expected to be major determinants of movements in C. D.'s (or similar investments) at commercial banks.[6]

In analyzing time deposit developments, it appears that the most recent change in trends occurred about mid-1960 (Chart 1); in analyzing changes in assets, the year 1961 seems to be an appropriate watershed. Since mid-1960 total time and savings deposits at insured commercial banks have increased $69 billion or at an annual rate of 15 per cent. In relation to total liquid intermediation, time and savings deposits at commercial banks increased from 25 per cent in 1960 to 32 per cent in 1965 (Chart 4).

Among time and savings deposit classes, time deposits other than savings have grown most rapidly (Chart 1). Since 1960 such deposits have risen at a 30 per cent annual rate, compared with a 13 per cent rate from 1945 to 1960. A major part of the increase since early 1961 has occurred in C. D.'s (Chart 1). Since April 1961 the increase in C. D.'s has accounted for more than one-third of the total increase in time and savings deposits.

As substitutes for other short-term marketable debt instruments, C. D.'s may be expected to rise rapidly whenever rates paid on them are higher than yields on other market instruments. As Chart 5 (page 6) shows, since the onset of the 1960-61 recession yields on time and savings deposits in general—and since early 1961,

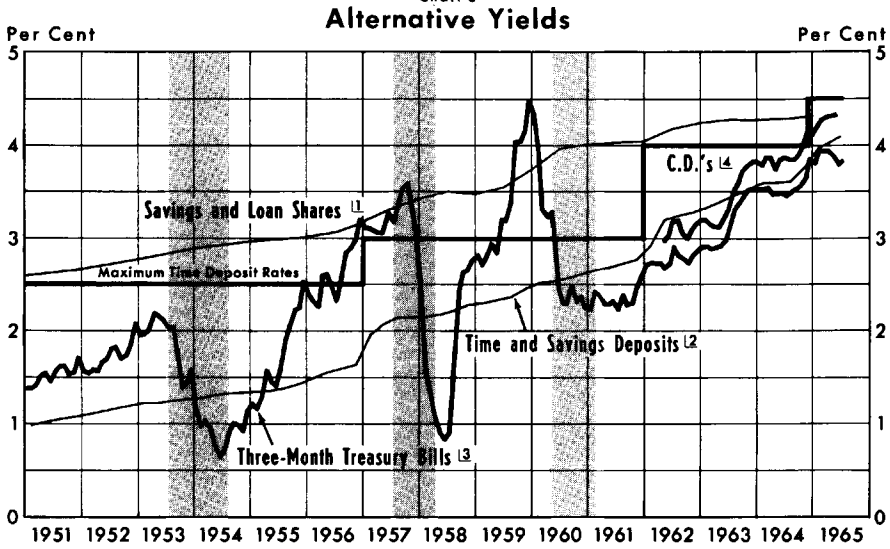
[4] Prior to 1959 loans to financial institutions were largely reported as business loans. Since 1959 loans to financial institutions have been reported separately, and in Chart 3 they are shown as part of "all other loans." Elimination of loans to financial institutions from the business loan category accounts to a small extent for the stability in this series.

[5] Included are certificates of deposits in relatively small denominations and "time deposits open account." The certificates of deposit may be held for a variety of reasons: some—for example those of $1000 or less—may serve a purpose similar to savings accounts, and other—chiefly the larger ones—may serve relatively small business firms as a temporary repository for funds. "Time deposits open account" include principally Christmas Club Savings, accounts accumulated for the payment of personal loans, interbank deposits, deposits of the U. S. Government, and other business accounts. In the series presented in this article, interbank deposits and deposits of the U. S. Government have been omitted.

[6] For more extensive discussion see "Movements in Time and Savings Deposits, 1951-1962" and "Recent Trends in Time Deposits" in the March 1963 and July 1964 issues of this *Review*.

on C. D.'s (secondary market data are not available before May 1962)—have remained consistently above yields on Treasury bills. In earlier periods of rising business activity yields on Treasury bills rose above rates paid on time deposits (Chart 5).

Chart 5
Alternative Yields



1 Data from 1950 thru 1955 are end of year. Beginning June 30, 1956, data are plotted semi-annually.
2 Quarterly averages, all commercial banks.
3 Monthly averages of daily figures.
4 Monthly averages of weekly figures, secondary market rates for negotiable time certificates of deposit with a maturity of three months.
Source: Board of Governors of the Federal Reserve System, Federal Home Loan Bank Board, and Salomon Brothers & Hutzler
Shaded areas represent periods of business recession.

Why banks have been both willing and able during the expansion since 1961 to maintain time deposit rates higher than yields on competitive market instruments—whereas in other periods of strong business activity they did not—is problematic. There is a view that Regulation Q had previously held rates down. While this may have been the case in 1956 and again in 1959, it is not clear as a general proposition that Regulation Q placed an effective limitation on the rates commercial banks were in fact paying; during most of the period under consideration ample room remained under the ceiling for upward rate adjustments.[7]

Time deposits other than savings and large negotiable C. D.'s have risen markedly in 1964 and 1965. After growing at a 10 per cent annual rate from April 1961 to December 1963, these "other" time deposits increased 21 per cent at weekly reporting banks in 1964. Since the end of 1964 the rate of increase of these "other" time deposits has risen sharply, to a 33 per cent annual rate. The reasons for the rapid increase in the rate of growth in these "other" time deposits are not readily evident. By comparison, C. D.'s rose 31 per cent in 1964 and in 1965 have risen at a 42 per cent annual rate.

Since 1960, as in the preceding 15 years, savings deposits have increased in a steady, glacier-like fashion. Savings at insured commercial banks rose at an annual rate of 10 per cent from 1960 to 1965 and at a 9 per cent rate since 1961. Thus, commercial bank savings deposits trends do not appear to have changed significantly in 20 years.

Conclusion

Time and savings deposits at commercial banks have increased rapidly since mid-1960. The rise in the rate of time deposit growth reflects largely a sharp increase in negotiable certificates of deposit, a component of time deposits which competes with other short-term market instruments for liquid funds. The C. D. has been attractive to the investor because commercial banks have been both willing and able to maintain C. D. rates above other prevailing short-term market rates. In earlier periods of business expansion banks did not raise rates on time deposits in step with rising market rates.

Even though bank expansion has been rapid since 1960-61, the commercial banks have not grown so rapidly as other forms of liquid financial intermediation. In 1961 deposits at commercial banks accounted for 64 per cent of total liquid intermediation, and in 1965, 61 per cent. The rate of relative decline of the banks was less than previously.

Commercial bank assets have grown markedly since 1961, as banks have rapidly increased their holdings of earning assets other than U. S. Government debt. The rapid rate of growth of bank assets other than Treasury securities may be interpreted as a result of the growth of deposits or as a result of attractive investment opportunities and a cause of a bank scramble for deposits. According to the first of these views, the rapid increase in bank holdings of mortgages, municipal debt, and some other asset categories results from the rise in time deposits. As interest costs have increased, banks have needed to move into higher yielding assets. Others have taken a view that the causation runs from changed assets to changed

(Continued on page 12)

[7] For a discussion of this problem see Lawrence S. Ritter, *Regulation Q: Issues and Alternatives,* A Study Prepared for the Trustees of the Banking Research Fund, Association of Reserve City Bankers (Chicago: Association of Reserve City Bankers, April 1965).

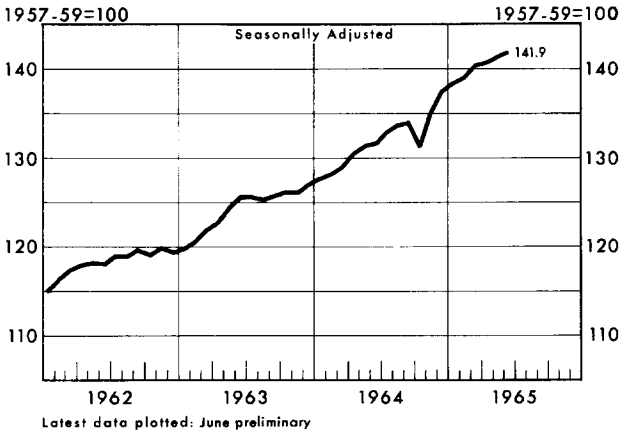
Trends in Commercial Banking, 1945-1965—*(Continued from page 6)*

deposits. The rapid growth of assets may reflect the changed milieu of profit opportunities; given the opportunity for profit, banks have bid funds away from the open market and other financial institutions. In this view, an expansion of bank credit may be no more stimulative to total demand for goods and services, to production, and to prices than other forms of expansion of credit or debt in connection with the saving-investment process. While it may be true that, other things equal, the greater the expansion of bank credit the more stimulative, this is not necessarily true if the expansion in bank credit represents a diversion of funds from other forms of intermediation. Accordingly, any particular rate of increase in a magnitude called "total bank credit" may not be especially significant in the economic process.

Recent Monetary and Fiscal Developments More Stimulative—*(Continued from page 9)*

Industrial production increased further in June, continuing an advance from high levels of production in the first quarter. Industrial production increased at a 4.0 per cent annual rate from March to June, 7.8 per cent since June 1964, and at a 6.5 per cent average rate since two years ago.

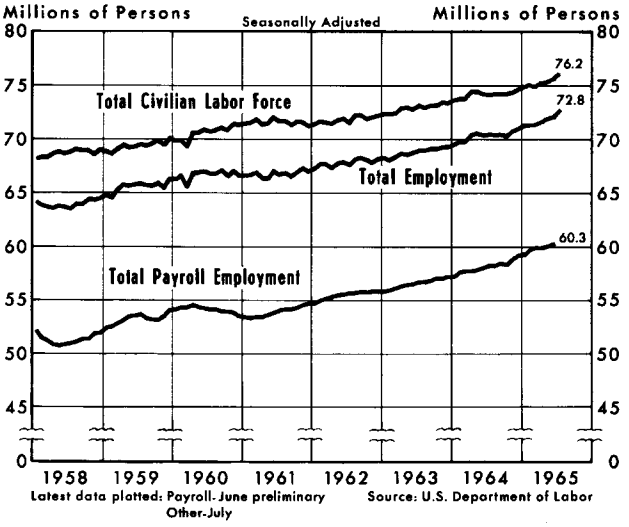
Industrial Production



Employment conditions remained strong in recent months, reflecting high levels of production. Payroll employment in June was up 3.8 per cent over a year earlier and at an average rate of 3.3 per cent over two years ago. Total employment has expanded 3.2 per cent since a year ago. It is estimated that the population of approximate working age (18-64) has increased 1.8 per cent in the last year.

The average workweek in manufacturing was 41.0 hours in June, less than the 41.4 hours in the first quarter, but more than the 40.6 hours in June 1964.

Status of the National Labor Force



SELECTED BUSINESS INDICATORS

Annual Rates of Change
Seasonally Adjusted

	To June 1965 from			
	March 1965	January 1965	June 1964	June 1963
Payroll employment	2.1	3.9	3.8	3.3
Industrial production	4.0	6.1	7.8	6.5
Retail sales	8.6	4.1	7.0	6.9
Personal income	7.9	6.4	7.1	6.6
Consumer prices*	4.0	2.6	1.9	1.6
Wholesale prices*	5.9	4.3	2.8	1.3

*Not seasonally adjusted.