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. In contrast, they had risen at a 6 per cent rate in the preceding 15 years.

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. 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. 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-

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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.

Expanded 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.

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. The relative decline was principally in demand deposits; time deposits as a portion of total liquid intermediation declined only slightly.

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### Table II

<table>
<thead>
<tr>
<th>BANK LIABILITIES</th>
<th>(All insured commercial banks)</th>
<th>Compounded Annual Rates of Change</th>
</tr>
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<tbody>
<tr>
<td>Total deposits</td>
<td>1.8</td>
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<tr>
<td>Demand deposits</td>
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<td>2.2</td>
</tr>
<tr>
<td>Time deposits</td>
<td>5.3</td>
<td>8.0</td>
</tr>
</tbody>
</table>

| Total deposits    | 4.0       | 7.5       | 3.1       |
| Private deposits  | 4.0       | 7.9       | 4.2       |
| Demand deposits   | 4.0       | 7.9       | 4.2       |
| Time deposits     | 7.1       | 15.0      | 6.4       |

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

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 1961.¹ 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,

²Included 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.

⁶For 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).

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

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Recent Monetary and Fiscal Developments
More Stimulative

The nation's money stock rose rapidly from May to July, providing a moderate rise from last November. Fiscal developments recently assumed a more stimulative role in the economy than earlier in the year. Economic activity continued to advance through early summer, with rising levels of production accompanied by increases in average prices.

Monetary Developments

The money stock continued to rise moderately from last November; for the four weeks ending August 4, money was up at an 8.5 per cent annual rate from the four weeks ending June 9 and at a 3.3 per cent rate from the four weeks ending December 2, 1964. By comparison, the money stock increased at an average annual rate of 4.1 per cent from September 1962 to November 1964.

The increase of the money stock in recent months has been uneven. Money rose sharply from mid-May to July, after declining in late April and early May. These movements in money reflected in part large shifts of demand deposits between the U.S. Government (not included in the money stock) and private holders.

Time and savings deposits at weekly reporting banks (data not seasonally adjusted) increased at a 15 per cent annual rate from the four weeks ending March 31 to the four weeks ending July 28, compared with a 20 per cent rate since the four-week period ending December 2, 1964 and a 17 per cent rate since a year ago. Large marketable certificates of deposit have increased at a 33 per cent annual rate since the four-week period ending March 31, and savings deposits, at an 8.9 per cent rate. These increases compare with increases of 29 and 11 per cent, respectively, since a year ago.

Commercial bank loans and investments increased at a 9.6 per cent annual rate from March to July (estimated), compared with a 12.5 per cent rate during the preceding four months. Both loans and "other" securities (mainly municipals) have continued to rise rapidly, while banks have reduced further their holdings of U.S. Government securities.

A rapid expansion of bank loans and investments from November to July was facilitated in part by increased borrowing by member banks from the Federal Reserve and a reduction in bank holdings of excess reserves. Borrowing from the Federal Reserve averaged $517 million in the four weeks ending August 4, compared with a $388 million average for the four weeks ending December 2, 1964. Excess reserves of

Page 7
member banks averaged $357 million in the four weeks ending August 4, compared with $402 million in the four-week period ending December 2, 1964. Apparently, reductions in free reserves, i.e., excess reserves minus borrowings from the Federal Reserve, have reflected actions of banks in adjusting to strong demands for bank credit rather than changes in Federal Reserve policy.1

Yields on short-term Government securities have changed little in recent weeks after declining from February to mid-June. Yields on 90-day Treasury bills averaged 3.99 per cent in the last week of February, declined to around the 3.80 per cent level in June, and have since averaged slightly above 3.80 per cent.

Yields on long-term debt instruments have been virtually unchanged since late 1964. Long-term Government bonds yielded 4.15 per cent in July, about the same as last December.

**Fiscal Developments**

The U. S. Treasury ended the 1965 fiscal year on June 30 with a cash balance of $11.5 billion, $1 billion more than a year earlier. This cash balance reflected a larger than expected increase in tax receipts, especially in the second quarter of this year. The Government's consolidated cash budget showed a $0.4 billion surplus (seasonally adjusted annual rate) in the second quarter, compared with a deficit of $5.2 billion a year earlier.

Federal fiscal developments are expected to be more stimulative in the second half of 1965. Excise tax rates have been removed from many commodities and reduced on others, and social security benefits are expected to be increased. As a result, both cash and national income accounts budgets are expected to turn from small surpluses in the second quarter to deficits in the second half of the year. The full employment budget, which adjusts the national income accounts budget for cyclical variations in economic activity, is expected to show a surplus of about $1 billion, compared with $5 billion in the first half.2

**Recent Price Changes**

Wholesale and consumer prices continued to advance during the first half of the year, giving rise to some conjecture about the possibility of price inflation. Increases in the overall index of wholesale prices since January have been dominated by an upward surge in prices of farm products and processed foods. However, prices of industrial products have also risen. Consumer prices have continued to move upward, reflecting in part increasing food prices.

![Wholesale and Consumer Price Indexes](chart)

**Wholesale prices.** Wholesale prices rose further in June, continuing the rise which began last summer. By comparison, these prices were virtually stable from 1959 until mid-1964. The index for June was up at a 3.0 per cent annual rate from August 1964 and at a 4.3 per cent rate from January. Weekly data for July indicate that average wholesale prices have changed little from June levels.

Prices of foods and farm products have risen markedly since last summer. Average prices for these commodities, which are weighted about 25 per cent in the overall index, increased at an annual rate of 7.0 per cent from August 1964 to June of this year. Increases since January have reflected reduced livestock marketings and delays in harvesting vegetables.

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2 See the testimony of Gardner Ackley, Chairman of the Council of Economic Advisers, before the Subcommittee on Fiscal Policy of the Joint Economic Committee, July 20, 1965.
Prices of foods and farm products tend to be dominated by changes in supply, reflecting variations in the weather or swings in livestock production cycles. Consequently, changes in prices caused by these factors do not necessarily indicate or portend price inflation of the type that is the result of excess total demand relative to the economy's productive capacity.

Wholesale industrial prices have been edging up since last summer, although not so rapidly as prices of foods and farm products. Industrial prices rose at a 1.5 per cent annual rate from August 1964 to June 1965 and at a 1.2 per cent rate since January. Price increases for metals and machinery accounted for most of the advance in the last five months.

From early 1959 to mid-1964 industrial prices showed no net increase, fluctuating between 100.4 and 101.7 per cent of the 1957-59 average. Such a record of stability during a period of expanding economic activity is significant when placed in the historical perspective of sharp increases in wholesale prices during the 1949-53 and 1954-57 expansions.

Seasonal variation may be considered when analyzing price movements during periods of less than a year. Increases in wholesale prices since the first of the year assume greater significance when compared with movements in previous years. In each of the last four years wholesale prices declined from January to June, so the recent advance of the index probably understates the extent of increase when seasonal variation is considered. Wholesale industrial prices increased at a 1.2 per cent annual rate from January to June compared with an 0.8 per cent average rate of decline during the first half of the preceding four years.

Consumer prices. Consumer prices rose at a 2.6 per cent annual rate from January to June, somewhat faster than the long-term rate of 1.4 per cent from 1951 to 1964. The recent advance reflected rising prices of foodstuffs. Food prices in June were up at a 7.9 per cent annual rate from January. Nonfood commodity prices were up at a 0.5 per cent rate from last January, and services, at a 2.1 per cent rate. Prices of nonfood commodities rose less than in previous years during the first six months, while prices of services increased at about the same rate.

Other Business Developments

Business activity has continued to advance in recent months at about the same pace as since mid-1963. Preliminary estimates indicate that the nation's output of real goods and services (in constant 1964 dollars) increased by a 3.7 per cent annual rate from the first to the second quarter. The second quarter level of output was 4.4 per cent above a year earlier and up at a 4.9 per cent average rate over the past two years.

Gross National Product

The second quarter advance of gross national product was broadly based. Consumer spending, government purchases, and net exports all increased from the first to the second quarter. Total private investment, however, was essentially unchanged: construction increased; purchases of producers' durable equipment and inventory accumulation declined. Businesses added to their inventories at a $5.7 billion annual rate, after a $6.8 billion increase the first quarter and an average annual rate of increase of $3.7 billion per quarter in 1964.

(Continued on page 12)
Spending in Five District Cities

Introduction

GROSS SPENDING HAS ADVANCED rapidly in four of the five largest nonmetropolitan cities in the Central Mississippi Valley since the beginning of the current national business expansion in early 1961. Spending in Greenville, Mississippi, Jackson, Tennessee, and Owensboro and Paducah, Kentucky, has increased at about a 9 per cent annual rate, compared with an 11 per cent average rate of increase for the nation. In Quincy, Illinois, spending has risen at about half the national rate (see table).

**BANK DEBITS**

<table>
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<tr>
<th></th>
<th>Seasonally Adjusted Annual Rates of Increase</th>
<th>First Quarter 1961 to Second Quarter 1965</th>
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<tr>
<td>Quincy, Illinois</td>
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<td>Greenville, Mississippi</td>
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<tr>
<td>Paducah, Kentucky</td>
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<td>Jackson, Tennessee</td>
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<td>United States*</td>
<td>11.2</td>
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*224 centers, excluding New York.

Different patterns of growth are apparent among the five cities. Spending in Quincy, Owensboro, and Greenville increased rapidly from early 1961 to the fall of 1963 and has since expanded at a slower rate. In Jackson the pattern has been the reverse, with growth more rapid since mid-1963 than earlier. Spending in Paducah has risen at about a 9 per cent annual rate throughout the period from 1961 to date.

In this article gross spending in a city is measured by bank debits, i.e., charges against the checking account balances of individuals, businesses, and state and local governments. Debits series, widely accepted as measures of local business activity, are used on the assumption that an expansion of business activity is accompanied by an increase in the volume of spending and that a contraction in business activity is associated with a decrease in the flow of spending. Since most money payments are made by check, recording debits is a convenient way to estimate the volume of spending and hence the level of business activity.

**Debits in Five Cities**

The accompanying charts show the movement of bank debits during the past 30 months in the five largest nonmetropolitan cities of the Central Mississippi Valley and in 224 centers throughout the United States, excluding New York. A three-month moving average has been used to smooth monthly fluctuations.

In Quincy debits have advanced at only a 2.1 per cent annual rate since third quarter 1963, after rising at an 8 per cent annual rate from early 1961 to mid-1963. Employment figures confirm the recent slower rate of economic growth in Quincy.

In the last two years check payments in Owensboro have increased at a 5 per cent rate, about one-half of the rate nationally. From first quarter 1961 to the fall of 1963 debits expanded at a 12 per cent annual rate, with growth especially rapid in the first half of 1963.

Debits growth in Greenville has been markedly different in recent months from growth in the early phase of the current expansion. Since July 1963 check payments have fluctuated widely but have shown little net gain. Total employment in June 1965 also remained at about the mid-1963 level. From early 1961 to third quarter 1963, by contrast, debits in Greenville expanded at a 14 per cent annual rate, compared with an 11 per cent rate for the nation.

In Paducah debits have expanded at a 9 per cent annual rate since early 1961. Paducah is the only one of the five areas in which debits growth has been steady during the first six months of 1965.

Spending in Jackson has advanced rapidly since mid-1963, following a two-year period of slower growth. Debits increased sharply from October 1964 to February 1965 and have fluctuated near the February level since then.

**The Reliability of Debits as an Economic Indicator**

Bank debits have been used here as a measure of general business activity for these five cities. As a business indicator debits have several strengths and limitations which should be recognized.

Debits are broad in their coverage of economic developments, whereas employment, retail sales, and industrial use of electric power each measure only one aspect of business activity. This is a major advantage. Another feature of debits figures is quick availability—usually just a few days after the close of the month. Because debits data are available over a fairly long period of time, both business cycle and trend analysis are possible.
For those engaged in local research, perhaps the most important attribute of debits is availability on a uniform basis for a large number of reporting centers in the United States. For some areas they are the chief readily available indicator of economic activity.

There are several factors which limit the usefulness of debits as a business indicator. In contrast to gross national product and indexes of industrial production which measure value added at each stage of production, debits measure the total value of goods at each production stage. The total volume of debits, consequently, is several times larger than the total value of goods and services produced. The number of times each dollar of final output is recorded as a debit depends on the number of stages through which materials pass in the process of production. As the economy grows more specialized, debits increase without an increase in production, because there are more stages between the purchase of raw materials and the sale of final products. On the other hand, increased diversification within a firm or mergers of companies that formerly conducted business transactions with each other cause debits to contract without a change in output.

A shift in the ratio of check transactions to total cash transactions also affects the volume of debits, although there is no corresponding movement in economic activity.

Some individuals and businesses bank outside their local area. Large business accounts in particular are often concentrated in major financial centers rather than in the communities in which the business is located. This factor tends to limit the usefulness of debits as a local economic indicator.

For purposes of economic analysis, a major shortcoming is that debits include financial transactions which do not represent additions to output. An increase in the rate of turnover of stocks, bonds, and real estate can cause debits to rise, even though production is not increased. A rise in the general level of prices has the same effect.

Can any conclusions be drawn about the reliability of debits as an indicator of business activity? Nationally, changes in debits (excluding those for New York) have closely paralleled changes in gross national product. A close relationship has also been found between changes in debits and personal income on a state basis. On the local level there is no single widely accepted measure of business activity with which to compare debits. Consequently, debits for specific local areas should be used cautiously and in conjunction with other local economic data when such are available.
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.

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

<table>
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<th>Millions of Persons</th>
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<td>1965</td>
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SELECTED BUSINESS INDICATORS

Annual Rates of Change

<table>
<thead>
<tr>
<th>To June 1965 from</th>
<th>Seasonally Adjusted</th>
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<tbody>
<tr>
<td>March 1965</td>
<td>2.1</td>
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<td>January 1965</td>
<td>3.9</td>
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<tr>
<td>June 1964</td>
<td>2.8</td>
</tr>
<tr>
<td>June 1963</td>
<td>3.3</td>
</tr>
<tr>
<td>Payroll employment</td>
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<tr>
<td>Industrial production</td>
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<tr>
<td>Retail sales</td>
<td>8.6</td>
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<tr>
<td>Personal income</td>
<td>7.9</td>
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<tr>
<td>Consumer prices</td>
<td>4.0</td>
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<tr>
<td>Wholesale prices</td>
<td>5.9</td>
</tr>
</tbody>
</table>

*Not seasonally adjusted.