August 1963

FEDERAL RESERVE BANK OF ST. LOUIS

Review

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Volume 45  •  Number 8
FEDERAL RESERVE BANK
OF ST. LOUIS
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BUSINESS ACTIVITY rose markedly during the first seven months of 1963. As the year began, the economy was continuing along a plateau. Early this year, however, activity quickened, and the expansion continued during the spring and early summer. Nevertheless, the proportion of unused resources has remained relatively high.

In many respects the rise in activity since January has been similar to the one which occurred during the first half of last year. In both cases, a major aspect of the pickup in the economy was heavy purchases of steel in view of a strike threat, and in each instance the greater economic action was preceded by a period of rapid monetary expansion. An adverse balance of payments continued to be an important economic factor influencing public policy.

**Economic Plateau—May 1962 to Jan. 1963**

From May 1962 to January 1963 there was a pause in economic activity. The total number employed remained virtually unchanged at about 68 million from early 1962 to early 1963, and aggregate personal income increased only moderately from May 1962 to early 1963. Industrial output remained essentially unchanged in the second half of 1962. The amount of unused resources, both human and physical, failed to decline from levels which were generally considered unsatisfactory.

The hesitation in the upward trend of business activity during the last eight months of 1962 was preceded by a period of moderate monetary contraction. From January to May of 1962 the public's stock of money (demand deposits plus currency) declined slightly. The decline in the money stock occurred despite an increase in total member bank reserves at a 3.0 per cent annual rate. The increase in reserves

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1For a discussion of economic developments in 1962 see "1962—A Year the Economy Marked Time" in the January 1963 issue of this Review.

2See "The Plateau in Business Activity" in the April 1963 issue of this Review.
Reserves of Member Banks

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21
20
18
17
16
15
0

was more than absorbed by a rapid growth in required reserves behind time deposits.\(^3\)

The decline in money continued until August of last year, after which the rates of increase of both reserves and money turned up sharply. From August to January reserves increased at an annual rate of 5.5 per cent and the money supply at a 6.0 per cent rate. Despite the monetary expansion, which increased the supply of funds, short-term interest rates rose slightly near the end of last year. Yields on three-month Treasury bills averaged about 2.80 per cent during the fall of 1962 and then increased to 2.90 per cent around mid-December. Most long-term rates held steady or declined in the latter part of the year.

The rise in short-term rates during a period of monetary expansion probably reflected a seasonal increase in the business community's demand for short-term funds (see article on page 10). In addition, there was a greater-than-seasonal rise in the Treasury's demand for funds. The cash deficit increased from an average annual rate of $2.4 billion (seasonally adjusted annual rate) in the second and third quarters to $8.4 billion in the final quarter of last year. The increase in the deficit was financed in part by short-term borrowings. These debt management operations exerted an upward pressure on short-term interest rates.

\(^3\)Member banks are required to hold a specific percentage of deposits as reserves (deposits at Reserve Banks or cash in vault); although time deposits and Treasury deposits are not considered as part of the money supply, they do require reserve backing. Total reserves, less reserves behind time and Treasury deposits, are a limiting factor in the amount of private demand deposits, the largest component of the money supply.

Economic Expansion Renewed

Business activity renewed its advance early this year with most measures of the economy's performance showing significant improvement from January to July. However, despite the renewed upturn, there has been little improvement in the rate of resource utilization.

Total output of goods and services in the economy, gross national product, rose from $565 billion (seasonally adjusted annual rate) in the fourth quarter of last year to $578 billion in the second quarter of this year. This increase, 4.6 per cent annual rate, represented largely a rise in real output, as price increases were relatively minor. The expansion in output reflected chiefly a sharp rise in business expenditures on plant, equipment, and inventories. As in the early part of 1962, the rise in investment was augmented by an inventory build-up which was carried out as a hedge against a possible steel strike. Consumer expenditures and Government purchases, the other major components of total spending, grew at about their longer run trend.

The strong demand for steel was a significant factor in a sharp rise in industrial output during the first four months of this year. Since April, output of factories, mines, and utilities has continued to rise, reflecting increased output in most areas of activity. From January to June industrial production increased at an annual rate of 12 per cent, with the index rising from 119 to 125 per cent of the 1957-59 average. Preliminary indications suggest that industrial production rose further from June to July.

Outlays for new construction have risen in recent months, following a January-to-April decline. An increase in expenditures for private residential con-
struction has been the major force behind the recent return of construction activity to late 1962-early 1963 levels.

Accompanying this year’s expansion, total employment has increased since February. Employment in mid-July was 69.2 million, an increase of 1.1 million workers over the February level. By comparison, during the period from February 1962 to early 1963 employment remained relatively stable. A significant portion of the increased employment occurred in manufacturing industries, particularly in durable goods. This rise in manufacturing employment reversed a downturn which lasted from mid-1962 to January.

Reflecting primarily the rise in employment, personal income has increased at an annual rate of 4 per cent since January. Despite this rise, total retail sales, at $20.3 billion in June, have been about unchanged since last November.

The rate of resource utilization showed little improvement during the first half of this year, despite the improvement in economic activity. The unemployment rate, 5.6 per cent in July, was about unchanged from the level which has prevailed for a year and a half. Manufacturing output as a per cent of capacity averaged 85 per cent during the first seven months of this year, roughly the same as in the comparable period a year ago.

**Comparison—Early 1963 and Early 1962**

The rise in activity thus far in 1963 has been similar in many respects to the business expansion in the early part of last year. Concern over the balance-of-payments situation was an important factor influencing economic policy in both years. Several of the same forces which may have influenced the upswing early last year may have influenced the spurt in activity so far this year. There have been some notable differences, however.

The threat of a steel strike stimulated steel output during the first five or six months of this year. Last year the threat of a strike also stimulated steel production early in the year. However, last year the threat of a strike ended in the spring, and steel output, which rose sharply in the first quarter, fell off rapidly during the second quarter and then remained relatively weak during the remainder of the year. The contract settlement reached in June of this year has resulted in some tapering off in steel production, but the full effects of the switch from inventory accumulation to inventory reduction are not yet known.

Prices have been relatively stable so far this year, as they have been for the past few years. The consumer price index has continued to creep up, rising from 105.8 (1957-59 = 100) in December 1962 to 106.6 in June of this year. During the corresponding period a year earlier the consumer price index rose from 104.5 to 105.3. Wholesale prices edged down during the first six months of 1963.

Certain monetary developments preceding the two upsurges in activity were quite similar. Reserves increased markedly in late 1962, and the money supply increased at an annual rate of 6.0 per cent from August 1962 to January 1963 after adjustment for seasonal variation. Likewise, from August 1961 to January 1962 reserves expanded sharply, and the money supply increased at a 5.0 per cent annual rate. Despite the expansion in the public's stock of money, short-term interest rates rose during the last few months of both 1961 and 1962.

Changes in member bank reserves during the first part of 1963 were also similar to those which occurred
in the corresponding period last year. Since December, total reserves have increased at an annual rate of 4.9 per cent. Much of this increase, however, has been absorbed by increases in reserves required to support Treasury deposits and time deposits. Consequently, reserves available for private demand deposits have risen only moderately. During the first seven months of 1962 total reserves increased at a rate of 3.5 per cent, and reserves available for private demand deposits declined slightly.

Banks have intensified the utilization of their reserves during the first seven months of 1963. This is evidenced by a decline in excess reserves from the late 1962 level. The lower excess reserves may have reflected the rise in interest rates, increasing the alternative cost of holding idle funds. Excess reserves averaged about $400 million in June and July of this year compared with an average of about $500 million in late 1962. A smaller decline in excess reserves occurred from late 1961 to the summer of 1962 (from $550 million to $500 million).

There have been several notable differences in monetary developments thus far in 1963 as compared with the like period in 1962. Borrowings of member banks from Reserve Banks rose during the first seven months of 1963. With higher levels of short-term market interest rates, borrowing from the Reserve Banks at the 3 per cent discount rate became a more attractive means of making short-term reserve adjustments. In early 1963 borrowings fluctuated around the $100 million level but increased to about $250 million in June and $325 million in July. There was no similar rise in borrowings from Reserve Banks in the first seven months of 1962 when market interest rates were somewhat lower.

The nation's stock of money has increased moderately this year, whereas in the comparable period of last year it was virtually unchanged. The money supply increased at an annual rate of 2.9 per cent during the first six and one-half months of this year compared with a 0.1 per cent rate in the comparable period of 1962. Total member bank reserves, an important factor influencing the ability of banks to expand credit and deposits, increased at about the same rate this year as last. The expansion of money was permitted by the decline in excess reserves. In addition, increases in time deposits absorbed more reserves last year than this year.

Yields on three-month Treasury bills have risen from about 2.90 per cent in late May to about 3.30 per cent in the week ending Aug. 2. Movements in long-term interest rates have been mixed, and on balance long-term rates have remained about unchanged. Last year short-term interest rates were relatively unchanged, with the three-month Treasury bill rate remaining at about 2.75 per cent during the first seven months of the year, while many long-term rates edged down. Normally, interest rates tend to fall during the first half of the year, reflecting a seasonal decline in the demand for funds.

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4For a discussion of the behavior of excess reserves see "Excess Reserves" in the April issue of this Bank's Review.

5In mid-July the discount rate was raised to 3.5 per cent (see article on pages 6 and 7 for further information).
In late May and early June of last year stock prices fell sharply. Such a decline in stock prices, which reduces the wealth and liquidity of investors and increases uncertainty, may have dampened spending decisions. This, along with a declining money supply, may have contributed to the leveling off in activity during the second half of last year. Neither of these developments has occurred in 1963. Stock prices are currently below earlier levels, but the decline has been much milder and more orderly than a year ago. Although the rate of monetary expansion has subsided since January, growth in the money supply has continued at about its long-run trend. If the rate of increase of the money supply turns up later this year as it has during the fall of the previous three years, the amount of monetary expansion during 1963 will have been greater than in other recent years.

**Maximum Rates on Time Deposits Increased**

**MEMBER BANKS** are now permitted to pay up to 4 per cent on time deposits with maturities from 90 days to one year. Previous to July 17 when the Board of Governors raised the maximum rate by changing Regulation Q, the permissible rate ceilings had been 3½ per cent on time deposits with maturities of six months to one year, and 2¼ per cent on those of 90 days to six months' duration. The rate ceiling on deposits having a maturity of one year or longer was not changed and remains at 4 per cent. The revision in Regulation Q was designed to enhance the ability of domestic commercial banks to attract and retain deposits of short maturity.

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**DISCOUNT**

The DISCOUNT RATE, the rate charged member banks that borrow from the Reserve Banks, was raised from 3 per cent to 3½ per cent (effective July 17) by seven Federal Reserve Banks, including the Federal Reserve Bank of St. Louis. The other five Reserve Banks made similar increases in their rates later in the month. The Board of Directors of each Reserve Bank, subject to the approval of the Board of Governors in Washington, sets this interest rate on loans made to member banks within its district. The discount rate had remained at 3 per cent since mid-1960, the longest period of no change since the end of World War II.

Member banks borrow from the Federal Reserve Banks as a temporary means of maintaining required reserves (i.e., deposits at the Federal Reserve Banks1). Banks must by law keep a prescribed proportion of their deposits as reserves.2 Since reserves and deposits may undergo sharp fluctuations, banks occasionally need to seek additional reserves to avoid deficiencies. In July, borrowings from Federal Reserve Banks averaged about 2 per cent of total member bank reserves.

The Federal Reserve System, by affecting the amount of reserves of member banks, can influence the volume of bank loans and investments, bank deposits, and the nation's money supply.3 A change in the interest rate charged on loans to member banks is one method the System uses to affect the amount of bank reserves.4 Major objectives of the System in changing the rate of monetary expansion include

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1 Cash in vault is also counted as reserves.
2 At the present time, reserve requirements are 16½ per cent of net demand deposits at reserve city banks, 12 per cent of net demand deposits at other member banks, and 4 per cent of time deposits at all member banks.
4 The System can also add to reserves directly by purchasing securities in the market and paying for them with reserves and can reduce reserves by selling securities. Also, the System can set within limits the amount of reserves member banks are required to keep behind deposits.
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economic growth, high utilization of resources, reasonable price stability, and a viable balance of payments.

Since individual member banks have several methods of obtaining temporary reserve funds, the relationship of the discount rate to other money market rates is an important factor influencing the volume of borrowing from Reserve Banks. Two other ways an individual bank may obtain reserves are to borrow them from other commercial banks and to sell short-term securities. Costs are a major consideration in selecting among the alternatives.

Increases in the discount rate have frequently accompanied rises in other money market rates. Such discount rate increases have served to reduce the relative attractiveness of borrowing from Reserve Banks. Since late 1961, other market rates, as evidenced by the three-month Treasury bill rate, have been inching higher (see Chart 1). In early July, before the discount rate was raised, the bill rate was above the discount rate. From July 17, when the discount rate was raised, to August 2 the bill rate averaged .28 percentage points below the discount rate. By comparison, from late 1960 to early 1963 the bill rate averaged .45 percentage points below the discount rate. Over the past decade it has averaged .28 percentage points below the discount rate.

In recent months there has been some increase in member bank borrowing from Reserve Banks, but the amount of borrowings has remained considerably below that of some earlier periods (Chart 2). Bank borrowing from Reserve Banks increased from an average of about $100 million last year to about $325 million in July. The greater volume of discounting probably reflected both an increased attractiveness of borrowing from the Federal Reserve as a mode of temporary reserve adjustment and a strong demand for bank loans as business expanded.

In addition to bringing the discount rate into a more nearly normal relationship with other market rates, the rise in the discount rate tends to put some upward pressure on other short-term interest rates. Higher interest rates in the United States may help keep short-term funds in this country, and hence, may lessen the country’s adverse balance of payments. The rise in the discount rate may place upward pressure on other money market rates in several ways. The higher discount rate tends to make it more advantageous for member banks seeking temporary reserve funds to obtain them by selling securities rather than by borrowing from Reserve Banks. Sales so made have a holstering effect on short-term interest rates. In addition, with the cost of borrowing new reserves from Reserve Banks being higher than the cost of obtaining existing reserves from some other holder, the volume of bank credit may rise at a slower rate than it otherwise would.
Prices of farm real estate continued to advance in the year ending March 1, 1963, according to the United States Department of Agriculture. Land values, averaging about $131 per acre for the nation on March 1, were 4.5 per cent higher than a year earlier and 2 per cent above the November 1962 level.

During the recent twelve-month period, the South- eastern and South Central States had the largest average per cent gains in land values. Texas, Oklahoma, Arkansas, and Florida each had increases of 9 per cent or more. Increases in the Central Mississippi Valley averaged 5 per cent, as gains for individual states in the area ranged from 3 per cent in Missouri to 9 per cent in Arkansas.

Average farm real estate values reached a pre- World War II peak of $69 per acre in 1920. Following this peak they declined sharply to a low of $31 per acre in 1934, and remained in the $31-34 range until the current uptrend began in the early 1940's. Farm real estate prices have risen generally throughout the period since 1940. The average value of farm land rose from $32 per acre in 1940 to $131 in 1963, a fourfold increase. Compounded annually, the gain for the period averaged 6.4 per cent. Since 1960, the rate of gain has diminished, perhaps reflecting the approach of land prices to their former position relative to net farm income.

Whether or not farm land values have moved to unsustainably high levels is a question of major importance. Trends in such values are watched with interest by farmers, farm landlords, farm mortgage holders, and others in the nonfarm sector of the community.

A number of measures which may be useful in studying farm real estate values are shown in Charts 1 and 2. It is not intended that any of these measures offer proof as to the future course of farm land values. On the other hand, one might expect land values to reflect to some degree net farm income as well as certain other economic series; hence, changes in net farm income or in such other series might be useful in analyzing changes in farm real estate values.

It should be recognized that factors other than net farm income in the nation probably have an impact on farm land values. Mechanization may contribute to the bidding up of farm land. If a farmer can cultivate additional acres with the same machinery, he can probably afford to pay a higher price for the additional land than would be justified for his original acreage. The numerous tracts purchased for such enlargements may have pushed farm land prices upward. Such size increases may not have any effect on net farm income for the nation if the number of farms declines. Industrial sites, residential subdivisions, new highways, streets, and parks annually take some land out of farms around the perimeter of many towns and cities of the nation. Owners in the paths of such projects have capital for use to purchase other land. In addition, demands which develop from higher incomes throughout the economy probably have a considerable impact on farm land values.

Farm operators' net income, which represents a return to the operators' labor, management, and capital, declined sharply through the late 1920's and early
The value of farm real estate, like other forms of capital, is based in large measure both on expected annual earnings and increments in value.

The rate of increase in land values has declined in each successive five-year period since 1940-45 except the 1955-60 period. In the three years since 1960, the rate of gain has been substantially less than for any other period (see table). If such value increments continue to deteriorate or disappear altogether, it may make a substantial difference in the amount prospective purchasers are willing to pay for farms.

### Increases in Farm Real Estate Values, United States, for Selected Periods

<table>
<thead>
<tr>
<th>Periods</th>
<th>Average annual rates compounded (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940-63</td>
<td>6.4</td>
</tr>
<tr>
<td>1940-45</td>
<td>8.3</td>
</tr>
<tr>
<td>1945-50</td>
<td>6.6</td>
</tr>
<tr>
<td>1950-55</td>
<td>5.6</td>
</tr>
<tr>
<td>1955-60</td>
<td>6.5</td>
</tr>
<tr>
<td>1960-63</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Source: Computed from USDA data.

Like trends in other capital values, the outlook for farm land prices is impossible to predict. The extended period of upward movement during the past thirty years has probably created expectations for an upward trend to continue. On the other hand, downtrends in farm land values occurred following World War I, and freedom from such occurrences in future years is not assured. Farm land prices currently are at about the same level relative to net farm income as prevailed on the average in the 1920-29 period.
Changing Seasonal Patterns:

Interest Rates, Credit, and Money

There is substantial seasonal variation in the demand for short-term credit. Credit demands tend to decline early in the year and then to rise during the latter months of the year. The greater demands for credit in the latter part of the year are satisfied in two ways: by an increase in the quantity of credit (which directly satisfies credit demands), and/or by an increase in the cost of credit (which tends to reduce the amount of credit demanded).

During the period from mid-1957 to mid-1960 there were pronounced declines both in bank loans and investments and in interest rates during the early months of the year, and sharp increases during the latter months of the year (see black lines on Charts 1 and 2). That is, during this period changing seasonal demands for credit were matched both by changes in the quantity of bank credit and by changes in the cost of credit.

In contrast, although there is no reason to suppose that there has been a change in the intrayearly pattern of demand for credit, during the period since mid-1960 movements in interest rates have been reduced substantially (see red line on Chart 1). That is, changing seasonal demands for credit have resulted in only very moderate changes in its cost. Instead, the movement has widened in the quantity of bank credit outstanding (see red line on Chart 2). This more pronounced movement in bank credit was made possible by an increased intrayearly variation in the volume of reserves of commercial banks.

Changes in bank credit are reflected to a considerable degree in changes in the money supply (demand deposits plus currency). Because of the greater seasonal fluctuation in bank loans and investments outstanding, there have been greater seasonal movements in money. The seasonal movement in the money supply has had greater amplitude since mid-1960 than in the earlier period (compare black line with red line on Chart 3).

1 For a discussion of seasonal demands for money and bank credit, and of the relationship between these seasonal movements and open market operations of the Federal Reserve System, see “That Time of the Year,” in the July issue of the Monthly Review of the Federal Reserve Bank of Atlanta.
The money supply and bank credit series are generally presented as having been "seasonally adjusted" (for example, see the money supply charts on pages 2 and 5). To the extent that there has in fact been a change in seasonal patterns, and to the extent that the seasonal adjustment procedures have not yet fully captured this change, the intrayear pattern of movement of the seasonally adjusted series is distorted. The quantity of money supply and bank credit during the early months of the year are less than if the new seasonal pattern were accounted for fully. During the latter months of the year these stocks tend to be magnified.

Experience during the first half of this year illustrates the different impressions which can be gained from using different time periods as a basis for computing seasonal adjustment factors. The raw figures for the money supply declined from $151.6 billion last December to $148.2 billion in June this year. Using the generally accepted seasonal adjustment (based on 1947-62 data), the money supply rose at an annual rate of 2.6 per cent over this period. Adjusted for "seasonal" with factors computed from mid-1957 to mid-1960 data, the money supply rose at an annual rate of 2.4 per cent from December 1962 to June 1963. Adjusted for the "seasonal" pattern which has prevailed since mid-1960, the money supply increased at a rate of 5.7 per cent over the same six months.
Local Business Activity Has Increased

ECONOMIC ACTIVITY in the metropolitan areas of the Central Mississippi Valley has increased since the end of last year. This rise in activity followed a period of slight contraction during the latter part of 1962.

The charts show that, except for occasional sharp divergences, the region’s economy has followed national business developments.

Employment has increased about 2 per cent in these areas since late 1962. Industrial use of electric power has risen sharply, with gains registered in all seven metropolitan areas. Following a lull early in the year, department store sales, bank debits, and business loans have shown improvement.

Farming conditions in the Central Mississippi Valley have been good. The corn and soybean crops are developing ahead of schedule; cotton prospects are favorable, and rice and tobacco crops are better than average. Prices of major district farm commodities have averaged about the same this year as last. While beef cattle and hog prices declined rapidly in the first quarter, they have now recovered.

1The metropolitan areas included in this analysis are St. Louis, Louisville, Memphis, Little Rock, Evansville, Springfield (Missouri), and Fort Smith.

2Economic developments during 1962 were discussed in “1962 Economic Developments in the Eighth Federal Reserve District,” this Review, February 1963. Also see “Economic Improvement in Major Metropolitan Areas of the District,” this Review, May 1963.

CHARTS and TABLES of economic data for each of the seven metropolitan areas in the Central Mississippi Valley are published monthly in a report of this bank entitled SELECTED ECONOMIC INDICATORS. This report is available upon request to the Research Department, Federal Reserve Bank of St. Louis, P. O. Box 442, St. Louis, Missouri 63166.