Growth in Money Slows

Since the increase in the Federal Reserve discount rate and the raising of interest rate ceilings permitted on time and savings deposits at commercial banks in late November, interest rates on short-term securities have risen, and there has been a slower rate of monetary expansion. At the same time, however, bank credit has risen at an accelerated rate.

Interest Rates Rise

Following the increase in the Federal Reserve discount rate from 3 3/4 per cent to 4 per cent, effective November 24 at the St. Louis bank, interest rates on money market instruments worked higher. Yields on 90-day Treasury bills rose from 3.61 per cent in the week ending November 20 to 3.83 per cent in the last week of 1964. Since then, yields have risen further, to about 4.00 per cent in early March. For several months prior to late November bill yields had moved within a narrow range around 3.50 per cent, the previous discount rate. The rise in bill yields during early 1965 is in contrast to a usual decline in yields at this season.

Other short-term interest rates have also risen since late November. Yields on six-month Treasury bills rose from 3.77 per cent to 4.02 per cent in early March, rates on finance company paper rose from 3.88 per cent to 4.25 per cent, and rates on prime bankers’ acceptances advanced from 3.75 per cent to 4.25 per cent.

Interest rates on longer term securities have been about unchanged in recent months. Following the rise in the discount rate, yields on long-term Government bonds rose from 4.11 per cent to 4.15 per cent in early December. Subsequently, they have been
about unchanged on balance. Yields on high-grade corporate bonds have changed little from the levels prior to late November.

**Monetary Expansion Moderates**

The money supply (demand deposits plus currency) has risen at a markedly slower rate since November than it had earlier. From November to the month ending February 15 money increased at a 0.9 per cent annual rate, compared with a 4.2 per cent rate during the previous 11 months. Since September 1962 (the last marked and sustained change in the rate of change), money has risen at a 3.9 per cent annual rate, and, since February 1961 (the beginning of the current economic expansion), at a 3.2 per cent rate.

![Money Supply Graph](image)

A continued rise in the volume of currency held by the public has accounted for the modest expansion in money since November; the demand deposit component has been nearly unchanged. For 11 months prior to November demand deposits rose at a 3.8 per cent annual rate.

Since the November increase in the maximum interest rates permitted on most types of time and savings deposits at commercial banks, the rate of expansion in time deposits has risen markedly, a 20 per cent annual rate compared with a 12 per cent rate during the previous 11 months. From November to mid-February large negotiable certificates of deposit at weekly reporting banks increased 7 per cent, and savings deposits, 2.5 per cent (data not seasonally adjusted). In the corresponding period a year ago savings deposits rose 1.3 per cent.

As a result of a marked rise in the rate of expansion in time deposits, the sum of money and time deposits has risen at a slightly faster rate since November than previously, a 9.1 per cent annual rate compared with a 7.7 per cent annual rate during most of 1964. Since 1951, money plus time deposits has increased at an average annual rate of 4.5 per cent.

In contrast to a slower rate of expansion in money since November, total reserves of member banks have risen at a faster rate. From November to the month ending February 15 total reserves rose at a 6.6 per cent annual rate, compared with a 4.3 per cent rate from the end of 1963 to November.

*(Continued on page 12)*
Currency and Demand Deposits

Introduction

The amount of currency in the hands of the public has risen at a 6.2 per cent annual rate since October 1962, while demand deposits held by the public have increased at a 3.6 per cent rate. Divergence in the growth rates of currency and demand deposits is not uncommon. This article is a tentative analysis of the rate of growth of each of these two components of money.¹

Evidence developed here indicates that the amount of currency held is associated with the pace of business activity. The total amount of demand deposits held is related to the volume of reserves available to the banking system, and changes in growth rates of demand deposits have usually led cyclical turning points. This difference may have implications for economic activity and monetary actions when rates of change of the two components of money deviate.

Annual rates of change of currency and demand deposits by months from December 1950 to January 1965 are presented in the chart on page 4.² Each series has been divided into a number of time periods, representing intervals in which no marked and sustained change in the rate of change was observed.³ The average annual rate of change for each period is shown by a bar superimposed on the chart and is posted in the accompanying tables.

The Course of Currency Since 1950

From December 1950 to August 1953 currency (including coin) in the hands of the public rose rapidly, at an annual rate of 4.2 per cent (see upper tier of chart on page 4 and Table I), compared with a 2.3 per cent average rate in the entire period since 1950. During this period, sales, as well as general economic activity, were rising. The rate of increase was, however, not so great for currency as for sales of nondurable goods and services (6.6 per cent rate).

Shortly after the beginning of the 1953-54 recession, the public began to reduce its holdings of currency and continued to reduce them until December 1954, several months after the recession had come to an end (see upper tier of chart). Since economic activity was contracting during most of this period, the transactions demand for currency also probably decreased.

Soon after the beginning of recovery in the fall of 1954, the public began to increase its holdings of currency. Currency outside banks rose at a moderate rate from the beginning of 1955 to July 1957. During this period over-all economic activity and spending were increasing, and it seems likely that the amount of currency demanded was rising. The rate of expansion in sales of nondurable goods and services was again more rapid than that of currency.

With the onset of recession in mid-1957 the public again ceased to increase its holdings of currency: in the early stages of the recession holdings remained almost constant, but in the later months the decline was pronounced. When the recession ended in the spring of 1958, the public immediately began to increase its currency holdings and continued to expand them during the economic recovery and expansion of late 1958 and early 1959.

From August 1959 to mid-1961 there was little net change in the volume of currency held by the public.

¹ Demand deposits considered here are those commonly included in the money supply; that is, demand deposits at all commercial banks other than those due to domestic commercial banks and the United States Government, less cash items in the process of collection and Federal Reserve float, plus foreign demand deposits at Federal Reserve Banks. Currency considered here is that commonly included in the money supply, namely both currency and coin outside the Treasury, the Federal Reserve System, and commercial banks.

² The rates of change were computed from seasonally adjusted data. To reduce the effects of random fluctuations, a three-month moving average, weighted 1-2-1, was applied to the data. For rates of change of currency and demand deposits combined, see this bank’s Review (September 1964) and its semi-monthly release, “Bank Reserves and Money.”

³ The selection of the periods is to some extent a matter of judgment, but it is believed that most analysts would arrive at substantially similar periods.
Components of the Money Supply

Annual Rates of Change

Table I

<table>
<thead>
<tr>
<th>Periods of No Marked and Sustained Change in the Rate of Change (Represented by Bars on Charts)</th>
<th>Annual Rate of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 1950 - Aug. 1953</td>
<td>4.2%</td>
</tr>
<tr>
<td>Aug. 1953 - Dec. 1954</td>
<td>-1.1</td>
</tr>
<tr>
<td>Dec. 1954 - July 1957</td>
<td>1.3</td>
</tr>
<tr>
<td>July 1957 - Mar. 1958</td>
<td>-0.5</td>
</tr>
<tr>
<td>Mar. 1958 - Aug. 1959</td>
<td>2.3</td>
</tr>
<tr>
<td>Aug. 1959 - June 1961</td>
<td>-0.4</td>
</tr>
<tr>
<td>June 1961 - Oct. 1962</td>
<td>3.6</td>
</tr>
<tr>
<td>Dec. 1950 - Jan. 1965</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Table II

<table>
<thead>
<tr>
<th>Periods of No Marked and Sustained Change in the Rate of Change (Represented by Bars on Charts)</th>
<th>Demand Deposits</th>
<th>Reserves Available for Private Demand Deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 1950 - Nov. 1952</td>
<td>5.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Nov. 1952 - Apr. 1954</td>
<td>0.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Apr. 1954 - May 1955</td>
<td>5.5</td>
<td>3.7</td>
</tr>
<tr>
<td>May 1955 - Apr. 1957</td>
<td>0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Apr. 1957 - Jan. 1958</td>
<td>-1.8</td>
<td>-1.8</td>
</tr>
<tr>
<td>Jan. 1958 - July 1959</td>
<td>4.9</td>
<td>3.2</td>
</tr>
<tr>
<td>July 1959 - July 1960</td>
<td>-3.1</td>
<td>-2.8</td>
</tr>
<tr>
<td>July 1960 - Jan. 1965</td>
<td>2.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Dec. 1950 - Jan. 1965</td>
<td>2.3</td>
<td>1.4</td>
</tr>
</tbody>
</table>

1 Adjusted for changes in reserve requirements.

During the autumn of 1959 the country underwent a major strike in the steel industry, which caused an interruption in economic activity. A few months after the settlement of the strike the economic recession of 1960-61 commenced. Over-all economic activity changed only slightly from mid-1959 to mid-1961, and it is likely that the amount of currency demanded was nearly unchanged.

Since June 1961, and particularly since late 1962, the public's holdings of currency have increased markedly. The rise in currency began several months after the upturn in economic activity. From June 1961 to October 1962 the currency expansion was at an annual rate of 3.6 per cent. Since October 1962, the increase has been 6.2 per cent per year. This remarkable rate of increase of currency may be largely explained by the rapid increase of sales of nondurable goods. Although there has been a very rapid rate of increase of coin in circulation, most of the dollar increase has been in currency.
The Course of Demand Deposits Since 1950

Demand deposits have risen at the same average rate as currency since 1950, 2.3 per cent per year. The increase in demand deposits, however, has followed a different pattern from the rise in currency.

Demand deposits rose rapidly during 1951 and most of 1952, at an average annual rate of 5.0 per cent (see lower tier of chart on page 4 and Table II). However, after November 1952, several months before economic activity began to decline, the rate of increase in demand deposits slowed considerably, to 0.8 per cent per year.

From April 1954, in the midst of the recession, to May 1955 demand deposits increased at a rapid 5.5 per cent annual rate (see lower tier of chart and Table II). During this period (in August 1954) economic activity began to increase. Between early 1955 and April 1957 demand deposits rose only moderately. These deposits began to decline in May 1957, and a downturn in economic activity came in July.

In January 1958, again in the midst of a recession and three months in advance of the economic upturn in April, demand deposits began to rise rapidly. This rise continued through the recovery period of late 1958 and the first half of 1959. Beginning in July 1959 demand deposits again declined, and a recession followed. Almost immediately after the onset of the recession in the late spring of 1960, demand deposits started to rise. Economic activity began expanding in early 1961. Except for a period in 1962 demand deposits have expanded at a rate higher than the 14-year average since July 1960.

Movements in demand deposits since 1950 have been associated with changes in reserves available for private demand deposits (Table II). Reserves set the upper limit to bank credit expansion, and returns available on loans and investments provide an incentive to banks to minimize excess reserves. Changes in bank credit cause changes in demand deposits. Differences between changes in reserves available for private demand deposits and changes in deposits reflect primarily shifts of reserves between member banks with different reserve requirements, changes in non-member bank deposits, and changes in member bank holdings of excess reserves.4

Conclusions

The varying growth rates of currency in circulation since 1950 have reflected primarily changes in the demand for a hand-to-hand medium of exchange.5 When sales which typically utilize currency have risen, currency in circulation has usually increased, and, when such sales have declined, currency has normally declined. The supply of reserves to the banking system and the supply of demand deposits have had little direct influence on the volume of currency outstanding.6

On the other hand, the rates of growth of demand deposits have been related to changes in member bank reserves available for demand deposits. The desire by individuals and businesses for demand deposits either to hold or to spend has probably had only a slight impact on the total volume of demand deposits.7

Since 1950, changes in the rate of growth in currency have tended to be coincident with movements in economic activity or to lag slightly behind them. Over the same period, changes in the growth rate of demand deposits have usually led changes in economic activity by several months.

The volume of most liquid assets, such as balances in savings institutions, is determined by the holder once interest rates and other terms are established. Each individual invests the amount of his wealth that he wishes in these balances, and, until incomes, interest rates, or other conditions change, he is in equilibrium.8 Logic and the historical comparisons pre-

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4For a discussion of movements in excess reserves, see the Review of the Federal Reserve Bank of St. Louis, April 1963.

5Fluctuations in the growth rate of currency were greater in the 1929-50 period, but examination indicates that they also confirm the hypothesis that currency movements are related to transactions demand. Unusual situations in 1931 (when large numbers of banks were failing), around the “banking holiday” of 1933, and during World War II also had effects on the public’s desires for currency and its stock of currency. An analysis of the demand for currency is provided by Phillip Cagan in “The Demand for Currency Relative to the Total Money Supply,” Journal of Political Economy, August 1958, pp. 303-328.

6Currency has risen during periods when bank reserves and demand deposits have both increased and decreased, and currency has declined when bank reserves and demand deposits have both expanded and contracted. To the extent that changes in bank reserves have an influence on economic activity, they may have an indirect (and lagged) influence on the volume of currency outstanding.

7The transactions demand for demand deposits might be expected to rise with the volume of transactions conducted and to fall when these transactions decline, whereas demand deposits have risen most rapidly in late recessions and have risen more slowly (and declined) as economic expansion progresses. The desire for deposits to hold might be expected to rise relative to other goods in recessions and to fall during business expansions, but demand deposits have risen rapidly and fallen (or risen slowly) in both periods.

8Similarly, through movements in market interest rates the volume of short-term Government securities issued by the Treasury provides holders the amount that they desire.
sented above indicate that currency in circulation is also adjusted closely to the demand of the public.

The aggregate volume of demand deposits, however, does not respond automatically to changes in the public's desire for them. Movements in these deposits reflect chiefly changes in reserves available to banks. Hence, the public may temporarily hold more or less of their wealth in these balances than they prefer under existing interest rates and other conditions. These disequilibrium positions may be a factor in stimulating or dampening economic activity as individuals increase or decrease their spending or investing in an effort to adjust their cash balances to desired levels. Hence, demand deposits may be a key monetary variable in our economic system, distinct in nature from currency and other liquid assets.

9 The following is suggested as the way in which an individual and the entire public might hold more demand deposits than desired under current conditions.

A sale or a loan adds to the cash balances of the seller (borrower) and reduces those of the buyer (lender). The seller may temporarily have larger cash balances than he generally considers appropriate to hold and smaller inventories, but the buyer may have smaller balances and larger inventories. Aggregate money holdings have not changed, and attempts by each to return to desired asset distribution positions by changing the course of future transactions tend to be offsetting.

However, when a security is sold to or funds are borrowed from the banking system, demand deposits rise without an offsetting decline in some other individual's account, increasing the total volume of deposits. Conversely, a sale of an asset or a reduction in loans by the banking system reduces total deposits. Attempts by those who have temporarily bolstered or depleted their cash balances in dealings with banks to return these balances to normal levels by increases or decreases in spending or investing are not matched by others with reverse positions. These changes in spending also transfer the net disequilibrium to others. The stimulation to spending from unduly large cash balances or the dampening effect on spending of unduly small balances may continue until incomes, interest rates, and other conditions change, causing desired balances to rise or fall to the level of actual balances.

Changes in bank reserves affect the incentive of banks to buy or sell assets and to make loans, and changes in these reserves may not always be related to the public's current demand for cash balances to hold.

Assuming that demand deposits are a key monetary variable, what practical purpose would be served by utilizing them for monetary analysis rather than the entire money supply (including currency)? Changes in the rates of change in the money supply and in the demand deposit component have occurred at roughly the same times and in nearly equal magnitudes, because demand deposits account for about four-fifths of the total. However, demand deposits have been more sensitive to changes in bank reserves than the entire money supply. Around the crucial cyclical turning points slight differences between growth rates in the money supply and in the demand deposit component have occurred. Then too, even if the implications for policy have been about the same in the past using either series, this may not hold for the future.

NORMAN N. BOWSHER

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Recent International Developments

The U. S. Balance of Payments in 1964

PRELIMINARY FIGURES for the fourth quarter U. S. balance of payments show a deficit at a rate of $5.8 billion per annum, bringing the deficit for the year to $3.0 billion (Chart 1). Although this figure represents a slight decline from the $3.3 billion deficit in 1963 and is the lowest since 1957, the year's deficit was nearly twice as great as expected by many observers a year ago.

U. S. private capital transactions were mainly responsible for the lack of greater decline in the deficit from 1963 to 1964. A $2.0 billion increase in these outflows offset most of the $1.8 billion increase in the surplus on goods and services transactions and $0.6 billion decrease in net U. S. Government expenditures abroad in 1964. In the fourth quarter total U. S. private capital outflows rose to an annual rate of $7.7 billion, nearly $2.0 billion greater than the rate for the previous three quarters.

Temporary factors may have accounted for a large part of the increased capital movement abroad. New issues of foreign securities in the United States, which had been withheld pending passage of the interest equalization tax, rose sharply in the fourth quarter, after the tax was enacted and its provisions were known with certainty. Also, associated with year-end adjustments by foreign banks, there may have been a relatively high level of short-term outflows which would be reversed in January.

For the entire year, however, there were marked increases in certain types of capital movements which do not seem attributable to temporary influences. Direct investment by American firms in their branches and affiliates abroad was $2.2 billion in 1964 compared with $1.8 billion in 1963, continuing a rising trend which began in 1958. Long-term bank loans to foreigners rose by about $1.0 billion in 1964, nearly double the 1963 increase. Transactions in foreign securities resulted in net outflows of $0.7 billion, three-fourths of which occurred in the fourth quarter. Total short-term outflows were $2.1 billion during 1964, three times the outflow during 1963. Short-term bank credit to foreigners increased more than $1.1 billion, and U. S. nonfinancial corporations increased their foreign short-term claims by about $0.6 billion, thus accounting for more than $1.7 billion out of the $2.1 billion.

U. S. Capital Movements, 1960-64

The deficit in the U. S. balance of payments since 1957 has been substantial, averaging slightly more than $3.5 billion per annum. However, the types of transactions contributing to net payments abroad have shifted greatly. In 1958-59 the average annual surplus on goods and services transactions was $1.2 billion, compared with nearly $8 billion last year. Beginning in 1960, increasing yearly outflows of U. S. capital have been a significant adverse element in our
A breakdown of capital outflows by type and area is presented in Table I. Short-term outflows were particularly large in 1960, 1961, and 1964, in large part caused by greater availability and lower cost of credit in the United States relative to foreign countries (Chart 3). Both U. S. bank credit extended to foreigners and the purchase by U. S. residents of liquid investments abroad tend to rise under such circumstances. In 1964 short-term bank credit rose about $1.2 billion, and U. S. liquid funds invested abroad increased about half that amount. Japan has received 40 per cent of U. S. short-term capital since 1960.

Direct foreign investment by U. S. firms has shown a steady upward movement since 1958. Investment in Western Europe has accounted for 52 per cent of total direct investment since 1960. In 1964 the total outflow was $2.2 billion, and the proportion invested in Western Europe was nearly 60 per cent.

Net purchases of foreign securities—stock and bonds—by U. S. residents rose steadily until mid-1963, when the proposed interest equalization tax discouraged new foreign issues in the United States. However, in the fourth quarter of 1964, the first after enactment of the IET, new issues, mostly Canadian, rose substantially. Over the last five years net purchases of Canadian securities have amounted to over 40 per cent of the total.

Other long-term capital outflows—primarily net increases of long-term bank credit—were relatively stable until the latter half of 1963, when foreign long-term credit demands were met by bank loans rather than by security issues, which were discouraged by the IET. Also, since mid-1963, there has been a widening of the differential between most foreign and U. S. long-term interest rates (Chart 4). Since 1960, Western Europe has borrowed nearly half of the $2.7 billion total U. S. funds of this category lent to foreigners.
Developments Abroad

Continued high levels of economic activity in most major foreign countries in 1963 and 1964 were accompanied by inflationary price and wage developments. As a result, programs of monetary and fiscal restraint were inaugurated which contributed to raising foreign interest rates over the last year and a half. The money supply in most of these major foreign economies grew less rapidly in 1964 than in 1963 (Table II).

### Table II

<table>
<thead>
<tr>
<th>Country</th>
<th>1962</th>
<th>1963</th>
<th>1964</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>7.2%</td>
<td>9.7%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>7.6</td>
<td>9.2</td>
<td>8.0</td>
</tr>
<tr>
<td>France</td>
<td>18.1</td>
<td>14.7</td>
<td>7.6</td>
</tr>
<tr>
<td>Italy</td>
<td>18.6</td>
<td>13.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Germany</td>
<td>6.5</td>
<td>7.4</td>
<td>8.7</td>
</tr>
<tr>
<td>Switzerland</td>
<td>11.2</td>
<td>7.2</td>
<td>5.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.9</td>
<td>5.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Japan</td>
<td>17.1</td>
<td>33.7</td>
<td>12.9</td>
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<tr>
<td>United States</td>
<td>3.1</td>
<td>7.2</td>
<td>9.0</td>
</tr>
<tr>
<td>Canada</td>
<td>1.4</td>
<td>3.8</td>
<td>4.0</td>
</tr>
</tbody>
</table>

1 December - November.

2 December - September.

Source: IMF

**France**

The French stabilization policy which began in September 1963 has been moderately successful in restraining inflationary developments. In the first ten months of 1964 consumer prices rose 2.4 per cent, and wages, 5.2 per cent, compared with 4.1 per cent and 7.0 per cent for the similar 1963 period. The trade deficit of $800 million in 1964 was $170 million higher than in 1963, but a surplus in the total balance of payments, largely derived from continuing capital inflows and net surpluses earned by the overseas Franc area, brought about an $800 million increase in official French reserves for the year.

The pace of business expansion was greatly lessened. Industrial production rose about 2 per cent in the first half but showed no gain during the rest of the year. Unemployment fluctuated at a very low level, declining during 1963 and the first quarter of 1964, and rising slightly during the succeeding two quarters.
Both monetary and fiscal policy were relatively restrictive during 1964. The money supply, which grew nearly 15 per cent in 1963, increased at an annual rate of 8 per cent during January-November 1964. The government cash budget in 1964 was nearly in balance after a deficit of 8.3 billion francs in 1963. In October and again in December commercial bank reserve requirements were reduced to avert tightness in the money market. In January minimum bank lending rates were lowered by the monetary authorities. Overall bank credit is to be permitted to grow 10 per cent for the year ending in September 1965, the same limit that was imposed during the previous year.

**Germany**

Of all the major European economies, Germany showed the greatest increase in total output in 1964. Real GNP in 1964 was 6 per cent higher than in 1963, and industrial output, about 7.0 per cent higher. During the early part of the year high levels of foreign demand provided a stimulus for expansion, but export growth moderated in the last half largely due to restrictive policies implemented by other European countries. In the last half of the year an increase in investment and consumer demand helped maintain a high level of total spending.

The trade surplus fell from $1.0 billion in the first half of 1964 to $525 million in the second half. Measures taken early in the year to reduce the capital inflows resulted in a net outflow for the year of nearly $600 million. For the year the total balance-of-payments deficit was $450 million, compared with a surplus of $775 million for 1963.

Wage and price increases continued during 1964. Consumer prices rose nearly 2 per cent, about as much as the increase in 1963. Wages increased 7.1 per cent in the first half of the year, compared to 6.8 per cent for all of 1963. Increasingly tighter labor market conditions and recently negotiated labor contracts suggest that wage increases might accelerate somewhat this year.

In January 1965 income taxes were cut, and the central bank discount rate was raised from 3 to 3½ per cent, the first increase since 1960. Earlier, the German authorities had been reluctant to change the discount rate, since higher rates tended to attract capital inflows. During most of 1964 German long-term interest rates were about two percentage points higher than the U. S. rates. These relatively high rates were made less attractive to foreign capital early in the year by the imposition of a 25 per cent withholding tax on interest accruing to foreign holders of German bonds.

**Italy**

By the third quarter of 1964 there was evidence that anti-inflationary policies in Italy had been partially effective. Improvement in the balance of payments began in the first quarter and continued through the year. For 1964 a surplus of $700 million was attained in contrast to a deficit of $8,100 million for 1963. For the year exports rose by about 16 per cent, and imports declined slightly. Wage and price increases, on the other hand, continued apparently unabated. For the first 11 months of 1964 consumer prices rose 6.6 per cent, and wages, 14.0 per cent, compared with increases during 1963 of 7.1 per cent and 12.4 per cent.

Industrial output fell steadily from the first to the third quarter; for the entire year 1964 it is estimated that production averaged about 2 per cent less than a year earlier. Since August, steps have been taken to raise demand and output. Central bank credit has been made more available to commercial banks. The proposed budget for 1965 estimates that government spending will increase by 14 per cent. Special taxes on automobile purchases, imposed in February, were removed in November.

**Japan**

The Japanese economy in 1964 continued to expand at about the same rate as in 1963. Fourth quarter industrial production averaged 12 per cent above the same quarter of 1963. Deterioration in the balance of payments, which led to relatively restrictive monetary measures throughout 1964, was halted during the year. The average monthly trade deficit was reduced from over $500 million to less than $200 million from the first to the third quarter, but a pickup in imports increased the fourth quarter deficit moderately. Official reserves, which declined from $2.1 billion in December 1963 to $1.9 billion in October 1964, rose to $2.0 billion at yearend.

Wages and prices continued to increase in 1964, at rates only slightly less than in 1963. For the first 10 months of 1964 wages rose 7.1 per cent, and prices, 6.2 per cent, compared with 8.6 per cent and 6.6 per cent for the same 1963 period.

The money supply rose at an annual rate of 13 per cent during the nine months ended September 1964, compared with 34 per cent during the preceding year. In September a step towards greater monetary ease was taken when advance import deposit requirements were lowered. In December commercial bank reserve requirements were lowered, and the Bank of Japan's
discount rate was lowered in January of this year from 6.57 per cent to 6.21 per cent.

**United Kingdom**

On balance, the performance of the British economy during 1964 was disappointing. High levels of domestic demand carried over from the previous year and led to increasing inflationary developments as the year progressed. From January to November wages increased 3.3 per cent, and consumer prices, 4.5 per cent; for the same period of 1963 wages rose 2.6 per cent, and prices, 1.8 per cent. The money supply rose in the first 11 months of 1964 at an annual rate of 6.3 per cent, compared with a 5 per cent annual rate which has prevailed since mid-1962.

Production during 1964 remained on a high plateau until the last two months of the year. Similarly, unemployment reached the low rate of 1.5 per cent early in 1964, and this rate was maintained throughout the year. The balance of payments, which had begun to run a deficit in the latter half of 1963, worsened throughout 1964, climaxing in the sterling crisis of November. Trade developments were a primary factor explaining the trend in the over-all payments. Exports, which had risen 7.2 per cent in 1963, increased by only 4.5 per cent during 1964. Imports rose sharply in 1964, by 14.8 per cent, compared with 7.4 per cent during 1963.

The government elected in October took steps to alleviate the balance-of-payments deterioration. A special import surcharge of 15 per cent on a wide range of manufactured imports was imposed, and an average tax rebate of 1½ per cent on exports was granted. A special budget was designed to have minor disinflationary effects but introduced uncertainty regarding future taxation of corporate income and capital gains. By late November considerable speculation about the future value of sterling led to a great outflow of funds from London, causing major reserve losses as the Bank of England supported the pound. The Bank rate was finally raised from 5 to 7 per cent on November 23, and two days later the Bank received $3.0 billion in financial assistance from a group of 11 major central banks, the Bank for International Settlements, and the Export-Import Bank. In addition, Britain made a $1.0 billion drawing on the International Monetary Fund.

Further restrictive measures were taken in December. The Bank of England announced a selective credit squeeze designed to favor export financing and to discourage lower priority financing. By mid-January, when the December trade returns were published, there was some evidence that improvement in the balance of payments had occurred. Exports rose appreciably and imports fell somewhat; the trade deficit was £67 million, compared to an average of £109 million for the preceding three months. Part of this improvement was lost in January, when the deficit rose to £83 million. In February the government announced that the import surcharge would be reduced to 10 per cent, effective in late April.
Growth in Money Slows—Continued from page 2

Virtually all of the expansion in total reserves since November has been absorbed by increases in reserves required to support nonmonetary deposits (Government demand deposits, net interbank deposits, and time deposits). Consequently, reserves available for monetary deposits (private demand deposits) have been about unchanged since November, compared with a 2.1 per cent rate of expansion during most of 1964. Since there were virtually no changes from November to the month ending February 15 in member bank holdings of excess reserves or in the distribution of deposits among banks with different reserve requirements, the demand deposit component of money also was about unchanged.

**Bank Credit Expansion Continues at a High Rate**

Total commercial bank credit (loans and investments) expansion has accelerated since November, reflecting a strong demand for credit, the higher rate of expansion in member bank total reserves, and the accelerated pace of time deposit accumulation. Bank credit has risen at a 9.8 per cent rate since November. By comparison, it rose at a 7.8 per cent rate from the end of 1963 to November and at an average annual rate of 5.7 per cent since 1951.

Since November, bank loans have risen at a 15 per cent annual rate, compared with an 11 per cent rate of expansion during the previous 11 months. The expansion of business loans has been particularly strong since November, a 23 per cent annual rate compared with a 10 per cent rate during most of last year.

Some factors contributing to the recent pickup in business loan expansion are rising business activity, inventory accumulation occasioned by the dock strike and the anticipated steel strike, and foreign loans. The rate of expansion in bank holdings of investments has declined from a 2.5 per cent rate during the first 11 months of 1964 to a 1.4 per cent rate since November.

**Business Activity Continues to Rise**

Business activity continued strong in January and February. Production and sales rose from September to January, while average prices increased slightly. Preliminary data indicate that production and sales continued to advance in February.

Industrial production rose at an annual rate of 8.3 per cent from September to January, compared with an increase of 7.8 per cent since January 1964. Output of durable goods rose at a 12.4 per cent rate during the September to January period, and production of nondurables increased at a 5.8 per cent rate.

Retail sales in January were slightly less than in December but were up at a 1.7 per cent annual rate from September. Sales of new automobiles increased substantially from December to January.

Prices have moved upward slightly in recent months. Consumer prices rose at a 1.4 per cent annual rate from September to January, the same as the average annual rate of increase since 1951. Wholesale prices increased at an annual rate of 0.9 per cent during the September to January period, with increases in prices of industrial commodities more than offsetting declines in farm product prices. Preliminary data for February indicate that wholesale prices held steady from January.