MONEY, SPENDING, AND ECONOMIC ACTIVITY

This broad topic of discussion enables us to do several things: First, we can consider some problems of immediate importance to you and the nation. Second, I can tell you something of official deliberations relative to national monetary policy. Third, it gives me an opportunity to obtain your reaction to some of our ideas at the Federal Reserve Bank of St. Louis relative to economic stabilization policies and procedures.

Demand for Goods and Services

Introductory to a discussion of current economic conditions, I shall comment on the money supply and the national budget. These factors apparently contribute to the volume of spending or total demand for goods and services.

Money

Throughout history, the quantity of money in circulation has been associated with the level of prices. The Roman Emperor, Marcus Aurelius, in the Second Century A.D. increased the quantity of money in circulation by raising the copper content of silver coins, and severe inflation followed.

New gold discoveries have been associated with rising prices in a number of cases. Germany, following World War I, attempted to service its wartime debt by printing excessive quantities of currency. By 1920 prices had skyrocketed to 15 times their wartime peak. On the downward side, our great depression of the 1930's is associated with a reduction in the stock of money.

In the simple agricultural economies predominant in most nations prior to about 1850, changes in the money supply and price level probably had little effect on overall economic activity. It did, however, alter the wealth relationships between debtors and creditors. Money supply increases and rising prices improve the lot of debtors at the expense of creditors. A declining money supply and lower prices increase the wealth of creditors at the expense of those in debt. Employment and total output, however, was probably not greatly affected in these early non-commercial economies by either inflations or deflations. Firms were relatively small, a large portion of the people were self-employed, and the major proportion of a community's output was used in the home or locally.

During the current century, however, we have begun to recognize that money plays a more important part in economic activity. Greater specialization of production, both at the national and international levels, has increased the importance of exchanging goods and services. Thus, the part played by our medium of exchange, money, has been enlarged. As evidence of this rising importance of money, I have a chart which indicates the rate of change in the money supply and the associated economic contraction and expansion periods from 1914 to 1964.

The experience of the past fifty years with respect to changes in the money supply, money plus time deposits, and time deposits alone is presented in Chart I. The top tier shows month-to-month changes in the money supply expressed in annual rates. The middle and bottom tiers present similar data for time deposits and for money plus time deposits. Most of my discussion today will focus on the money supply only. The shaded vertical bars on the charts denote periods of economic contraction as determined by the National Bureau of Economic Research. The light areas conversely denote periods of economic expansion.

The time series shown have been examined for periods of uniform rates of change - that is, periods during which there were no marked and sustained changes in the rates of change. These periods are represented by the horizontal bars on the chart.

Experience during the past 50 years indicates that marked and sustained changes in the rates of growth in either money or money plus time deposits have usually been followed by cyclical turning points (note top and bottom tier of chart). This would seem to indicate that increases and decreases in the money supply have not been matched by corresponding increases and decreases in the demand for money. Thus, the evidence is quite strong that changes in the supply of money have contributed to significant corresponding economic expansions and contractions.

The growth rates of money have generally declined prior to business cycle peaks and have risen before cycle troughs. This shows up most vividly in the major contractions. For example, the 1920-21, 1929-33, and 1937-38 economic contractions show major changes in rate of growth of money supply during the directional changes in economic activity. A comparison of the top tier of the chart with the bottom tier shows that, except for periods of economic reconversion after World War I and World War II, the average rate of change of money declined prior to eight of the nine business cycle peaks while the average rate of growth of money plus time deposits decreased preceding seven of the nine peaks.

The precise way in which money affects economic activity is the subject of much discussion. One group of analysts believes that the major impact of a change in the rate of growth in the money supply is quite direct. They contend that the public is willing to hold a given amount of money at a given level of income and wealth. If the supply of money is increased, however, the public has more money than it desires to hold, and given the levels of income and wealth, spending will increase. Idle labor and other resources will thus be put to work if they are not already fully utilized. If resource use is approaching capacity, the increased money supply will, however, have its primary impact on prices. In other words, if everyone who wants to work is already employed, an increase in the stock of money will have little impact on real output.

In the case of a contraction in the money supply, this group believes that people will have less money than they want to hold, therefore, they will reduce spending in an attempt to gain control of larger amounts, thus reducing demand for goods and services. Employment and other resource use will also tend to decline.

Another group of analysts believes that money has its major impact on the economy through changing interest rates. They point out that an increase in the money supply tends to reduce interest rates, making investment more profitable. As investment in real capital rises, employment rises and use of other resources are more fully utilized, thus boosting total economic activity. Conversely, an increase in interest rates tends to inhibit investment and reduce economic activity.

Although there remains some doubt as to precisely how money affects economic activity, most analysts believe that money is important and the body of evidence as indicated by the chart is impressive in pointing up the association of money with economic activity.

Fiscal Operations

Fiscal operations of the U. S. Government are also generally believed to have an important impact on spending and aggregate demand. Government spending in excess of intake (taxes) tends to increase total spending and is considered expansionary. On the other hand, Government spending at lower levels than the tax intake tends to dampen aggregate demand and contract economic activity.

Impact of Current Monetary and Fiscal Operations on Total Demand

At this point it seems appropriate to review recent monetary and fiscal actions and make some judgments as to their impact on total demand in recent months.

Monetary Developments

Monetary actions have been very expansionary since mid-1965 (Chart II). Money supply growth accelerated from what was already a rapid rate of expansion.

The nation's money supply (demand deposits plus currency) has grown at a 7 per cent annual rate since June. This was the fastest rate of expansion for a seven-month period in thirteen years. Money increased at a 4 per cent rate from September 1962 to June 1965 and at a 1.5 per cent rate from 1953 to 1962.

Historically, sustained periods of strong monetary growth as indicated earlier have been accompanied, with a lag, by a rise in spending. Since the economy is now fairly taut, an exceptionally rapid increase in spending could follow the recent high rate of monetary growth. In this case monetary growth might result more in price rises than in expansion of real output.

The increase in money in the past half year has been facilitated by an expansion in the volume of bank reserves. The growth of reserves that member banks have available to support private demand deposits, the largest component of the money supply, has advanced at a 6 per cent annual rate since mid-1965. This recent rate compares with a 2.0 per cent rate from September 1962 to mid-1965 and a 1.3 per cent rate from 1951 to 1962. A major factor in the recent gain of reserves was net Federal Reserve purchases of Government securities.

The Fiscal Situation

The Government's spending and taxing actions in the last half of 1965 were the most stimulative in many years (Charts III and IV). Both the cash budget and the national income and accounts budget show substantial deficits. Expansionary steps during 1965 include excise tax cuts, increased social security outlays, expanded domestic social welfare programs, and higher than anticipated outlays necessitated by the escalation of activity in Vietnam.

An expansionary fiscal situation is also in prospect for this year. Rising Government expenditures may more than offset the recent tax increases. Increased social security taxes, reinstated excise taxes on automobiles and telephone service, and built-in increases in income tax receipts will provide some additional revenue. On balance, however, the Government's fiscal actions are expected to provide a stronger stimulus to the economy in 1966 than in the latter half of 1965.

Fiscal actions are somewhat less flexible than monetary actions. The latter can be altered quickly. It is commonly thought that Government expenditures, especially those concerned with national defense, are not easily adapted to the goals of economic stabilization policy. In other words, such expenditures generally take top priority once foreign policy decisions have been made. Changes in tax rates are perhaps the primary way by which fiscal operations can be adjusted to the economic environment. However, since tax changes must be enacted by Congress, they may be subject to a considerable "legislative" and "administrative" lag between need and execution.

Spending and Production

Judgments relative to the adequacy of total demand are made partially on the basis of recent trends in spending and production. Since last summer a broadly based rise in aggregate demand, encouraged by expansionary policy developments, has resulted in a large increase in output. While current dollar GNP rose at an 8.7 per cent annual rate from the second to the fourth quarter of 1965, real GNP rose at a 7 per cent rate (Chart V). Total demand has been so great that resource markets have tightened, and prices, including interest rates, have risen.

The jump in the nation's real output of goods and services at a 6 per cent annual rate from the second to the fourth quarter of 1965 compares with a 4.3 per cent rate from 1960 to 1964 and a 2.4 per cent rate from 1953 to 1960.

Prices

Prices may be considered the measuring stock that indicates the divergence between spending and real production. If spending rises at a faster rate than output of goods and services, prices will rise. On the other hand, if spending declines, resource use and prices will trend downward.

Part of the strong increase in demand for goods and services since last summer has spilled over into price rises, indicating that the nation's resources for production are approaching full utilization. The increase in U. S. wholesale prices during the last year and a half has been a marked departure from stability experienced from 1958 to mid-1964 (Chart VI). Wholesale prices started to rise in mid-1964 and increased at a 2.4 per cent annual rate to September 1965. Since then these prices have risen at about a 4 per cent annual rate. The rise in the price indexes since mid-1964 has been broadly based and has been paced by sharp rises in prices of sensitive industrial materials and of agricultural commodities.

Consumer prices have gone up at a 2.8 per cent annual rate since August compared with a 1.4 per cent rate of increase from 1953 to 1964.

Employment

Employment is commonly used as a measure of the level of resource use. The strong increase in output in recent months was made possible in part by marked increases in employment (Chart VII). Payroll employment rose at a 5.2 per cent annual rate from June to January compared with an average 1.8 per cent from 1960 to 1964. Total employment rose at a 3.9 per cent rate from June to January compared with a 1.4 per cent rate from 1960 to 1964.

Demand for Credit

Also indicative of the over-all strength of the economy are the rates of advance of bank credit (Chart VIII) and interest rates. Corporations have turned increasingly to outside sources for investment funds. Total bank credit less Government securities has increased at the amazingly high rate of 13.4 per cent during the past 3.5 years. Recent data show no indication of a slackened pace in the rate of credit increase. State and local governments have continued to borrow heavily. Federal budget developments have recently increased the Government's demand for funds. These rising credit demands have put pressure on banks and capital markets.

The vigorous buying in the U. S. economy has put upward pressure on interest rates (Chart IX). Higher interest rates have resulted despite a large volume of saving and the rapid monetary expansion.

Conclusion

In conclusion, sharp rises in money and banking reserves, and an expansive fiscal situation, have helped to amplify a strong rise in economic activity which began in early 1961.

The increase in spending as measured by the dollar value of goods and services has increased substantially, and in recent quarters the rate of gain has been unusually high.

Real output of goods and services has increased rapidly in recent months but at a somewhat slower rate than the rate of spending.

Part of the strong demand for goods and services has thus spilled over into price increases. Since September wholesale prices have risen at a 4.7 per cent annual rate.

Further indication of the tightening market on the supply side was the strong upward push in employment. Payroll employment rose at a 6.8 per cent annual rate from September to January, and by year's end the unemployment rate had declined to 4.1 per cent, its lowest rate in almost a decade.

Translated to terms of monetary policy and interest rates, current conditions may be analyzed on the basis of three possibilities. Given a prospective expansive fiscal program, a large part of the burden of maintaining balanced growth appears to rest currently on monetary policy. If further restrictive actions become necessary, given the great demand for credit, interest rates may be pushed somewhat higher in equating such demand with available supplies.

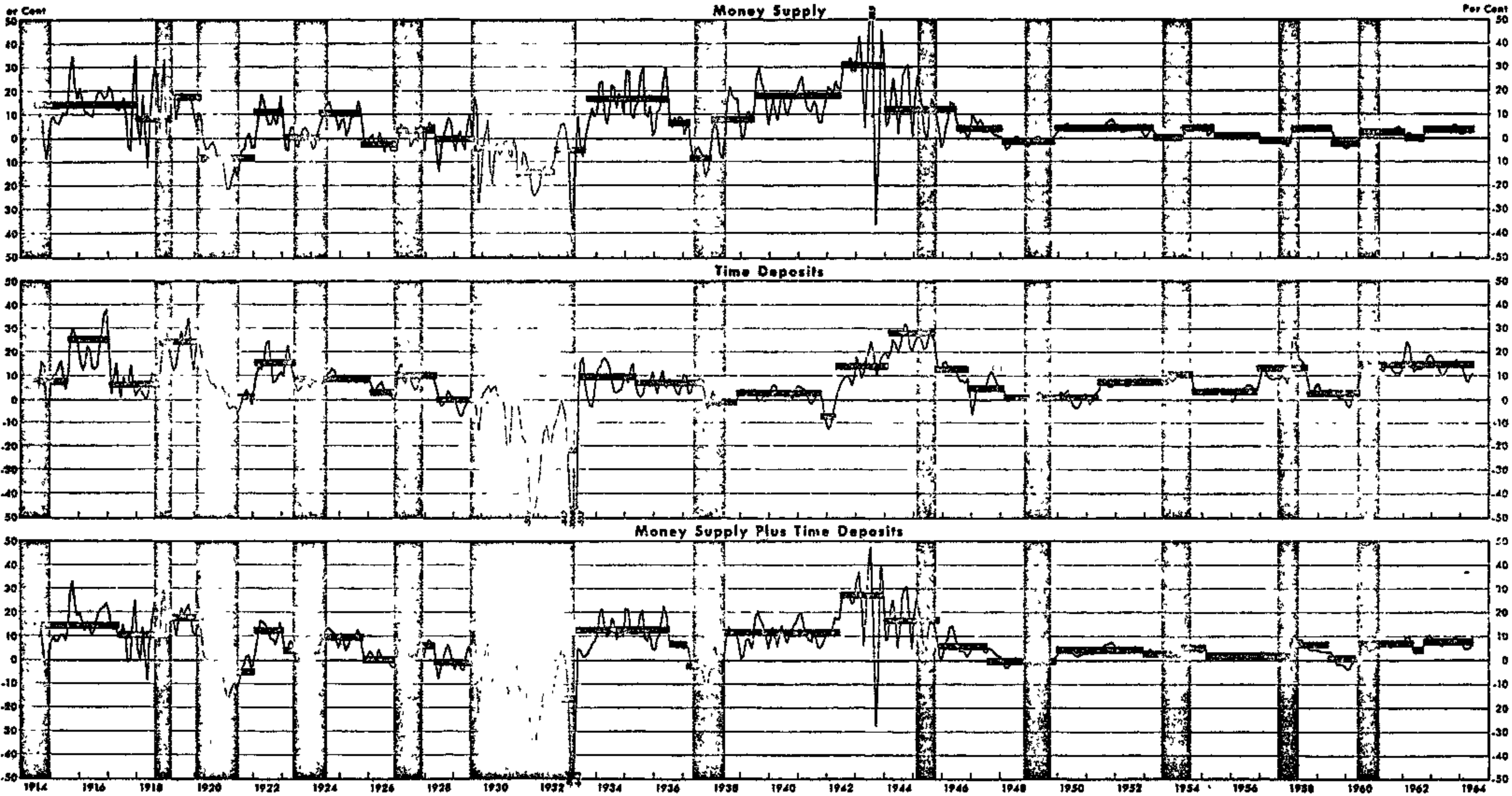
If current policies prove sufficient to curb demand at reasonably stable price levels, little change in rates would appear probable.

On the other hand, if demand should decline substantially, which appears unlikely at the moment, a more expansive monetary policy would tend to reduce rates. A more expansive fiscal policy would tend to put upward pressure on rates.

These observations must be further tempered by whatever developments take place regarding Federal expenditures and taxes.

Money Supply and Time Deposits, 1914-1964

Annual Rates of Change



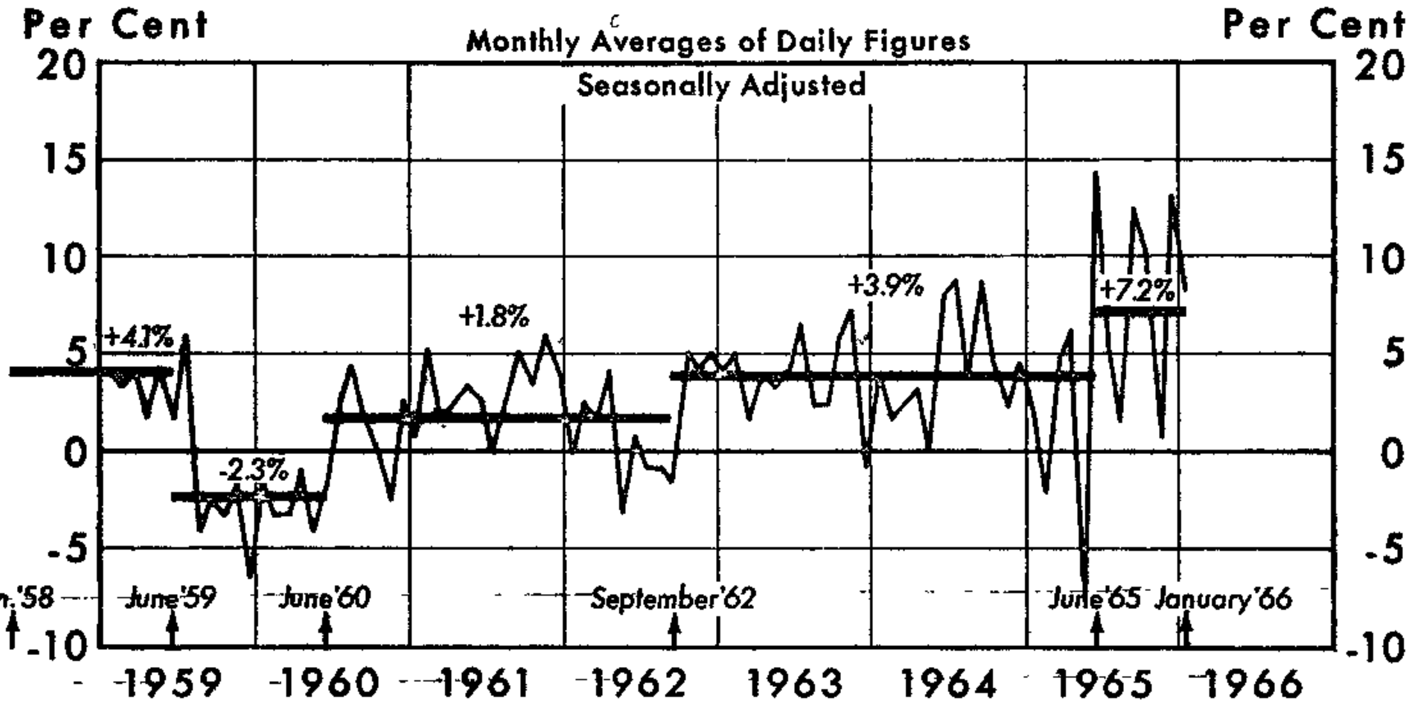
Three-month moving averages of annual rates of change, weighted 1-2-1, computed from seasonally adjusted data. Bars indicate average rates for periods of no marked and sustained change in the rates of change (data in Tables II to IV).
Vertical shaded areas indicate periods of business recessions (data in Table I).

Prepared by Research Department
Federal Reserve Bank of St. Louis

Data prior to 1947 from *A Monetary History of the United States 1867-1960*, Milton Friedman and Anna Jacobson Schwartz, a study by the National Bureau of Economic Research (Princeton: Princeton University Press, 1963), Table A 1.
Data for 1947 and after from the Board of Governors of the Federal Reserve System.

Money Supply

Compounded Annual Rates of Change



Bars on chart are periods of no marked and sustained changes in the rates of change.
Percentages are annual rates of change between months indicated.

Latest data plotted: January preliminary

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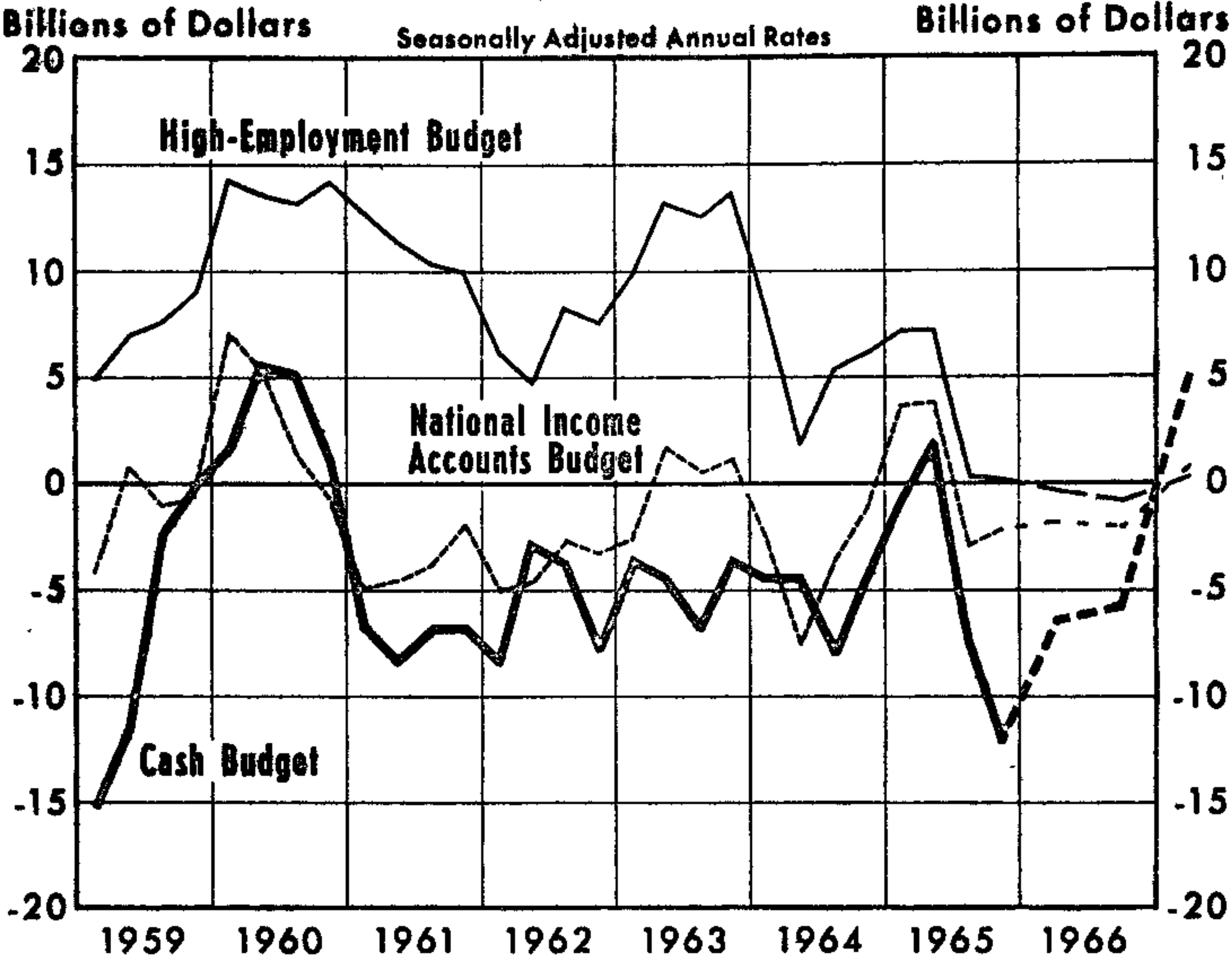
U.S. Government Fiscal Operations

(+)Surplus; (-)Deficit

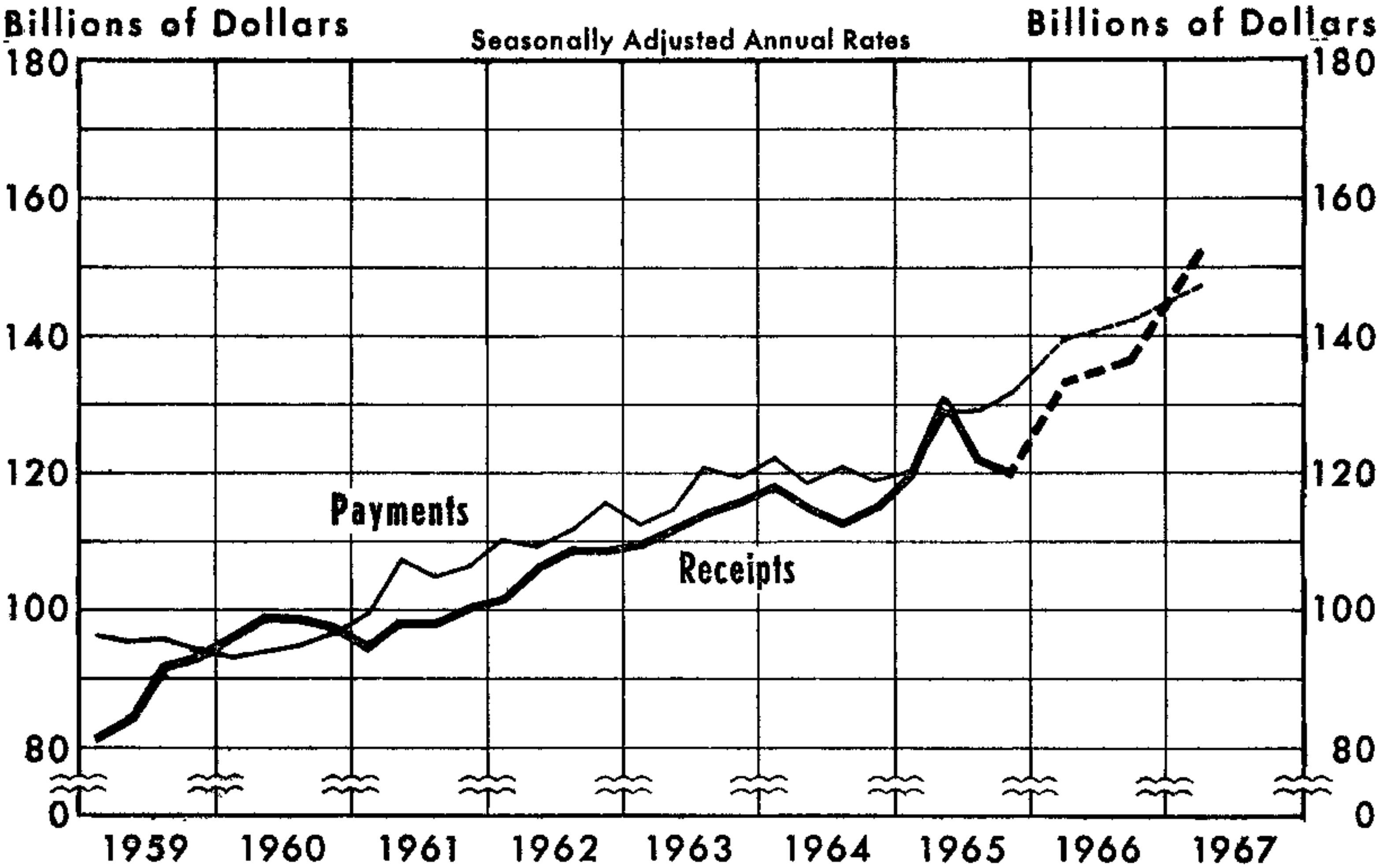


Sources: U.S. Treasury Department, Council of Economic Advisers, Board of Governors of the Federal Reserve System, and Department of Commerce

1st and 2nd half 1966 and 1st half 1967 estimated by Federal Reserve Bank of St. Louis

Prepared by Federal Reserve Bank of St. Louis

Consolidated Cash Budget

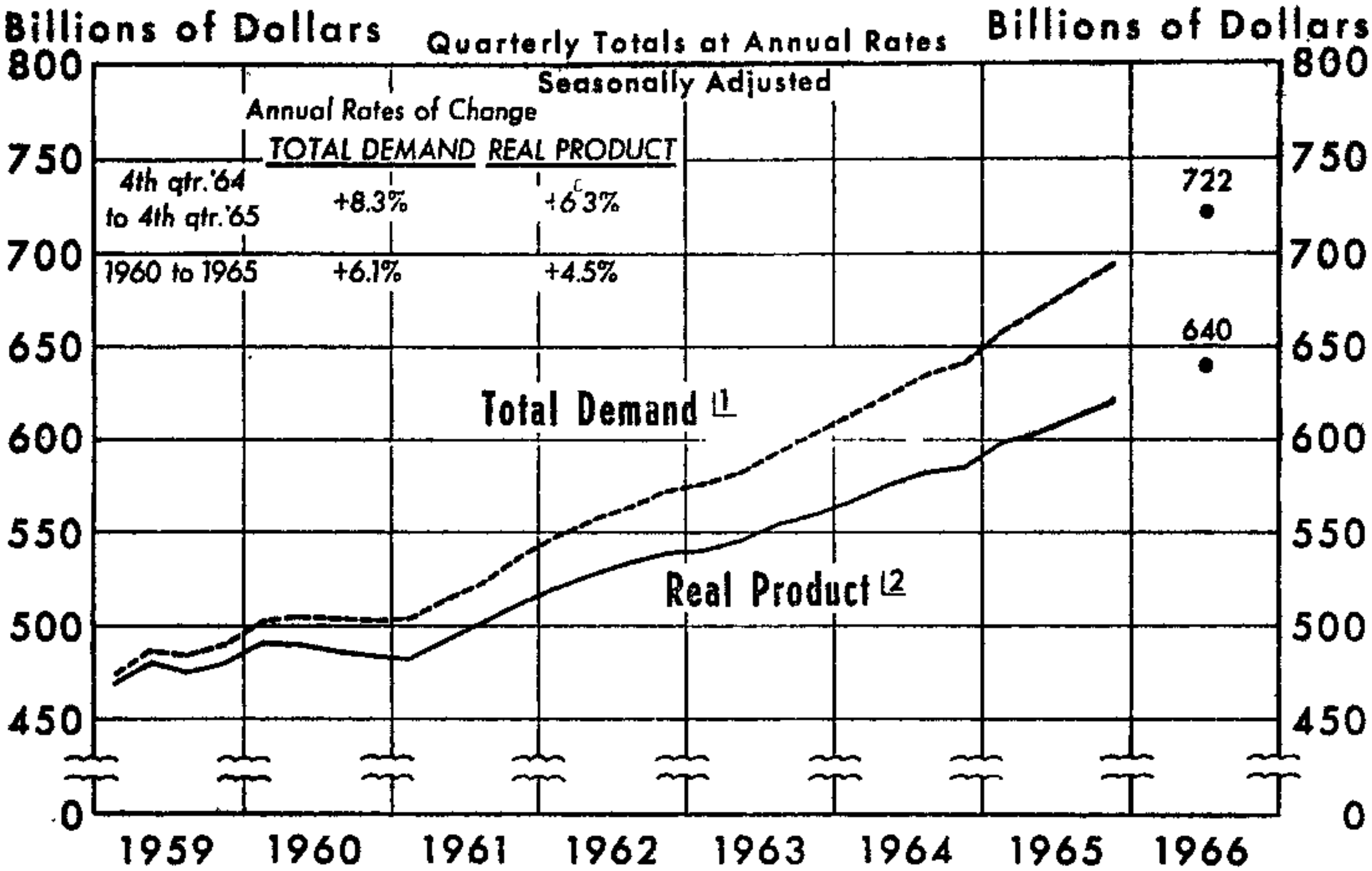


Latest data plotted: 1st and 2nd half 1966 and 1st half 1967 estimated by Federal Reserve Bank of St. Louis

Sources: Bureau of the Budget and U.S. Department of Commerce

Prepared by Federal Reserve Bank of St. Louis

Spending and Production



Source: U.S. Department of Commerce
Source of 1966 estimate: The 1966 Annual Report of the Council of Economic Advisers
Latest data plotted: 4th quarter preliminary

[1] GNP in current dollars.
[2] GNP in 1958 dollars.

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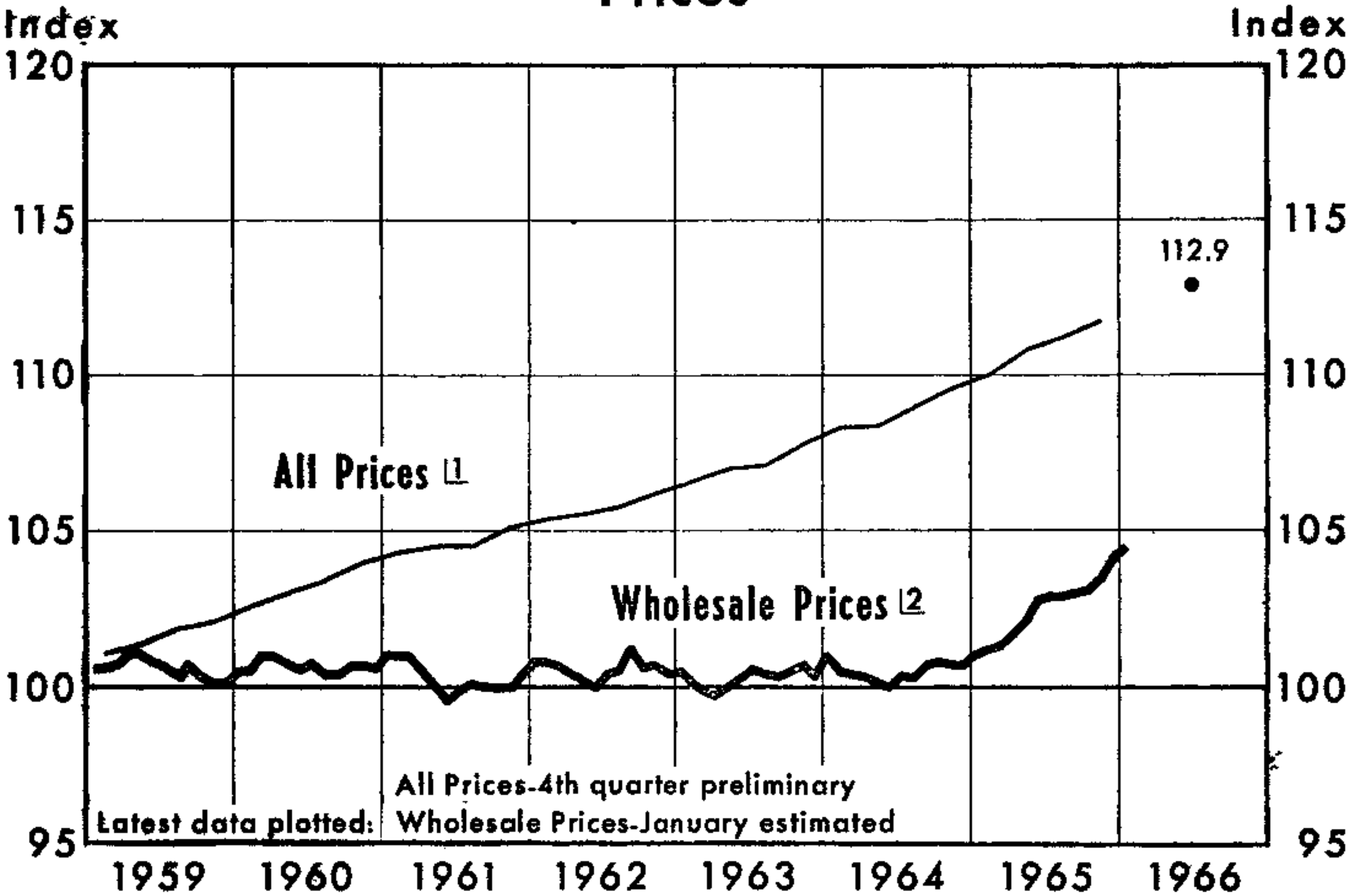
Prices



[1] 1958=100 (GNP deflator)

[2] 1957-59=100

Sources: U.S. Department of Commerce and U.S. Department of Labor

Source of 1966 estimate: The 1966 Annual Report of the Council of Economic Advisers

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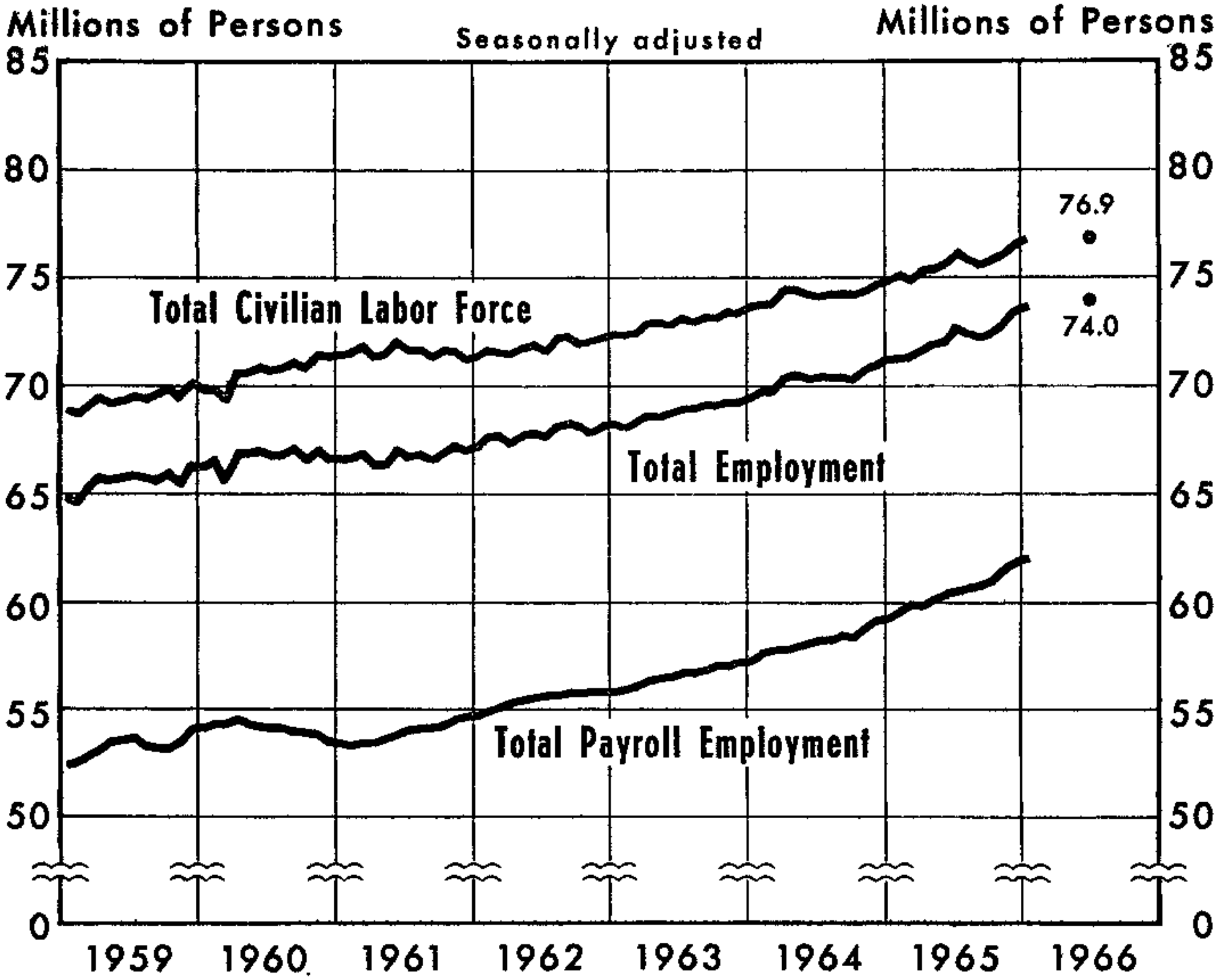
Status of the National Labor Force



Source: U.S. Department of Labor
Latest data plotted: January estimated

Source of 1966 estimate: The 1966 Annual Report of the Council of Economic Advisers

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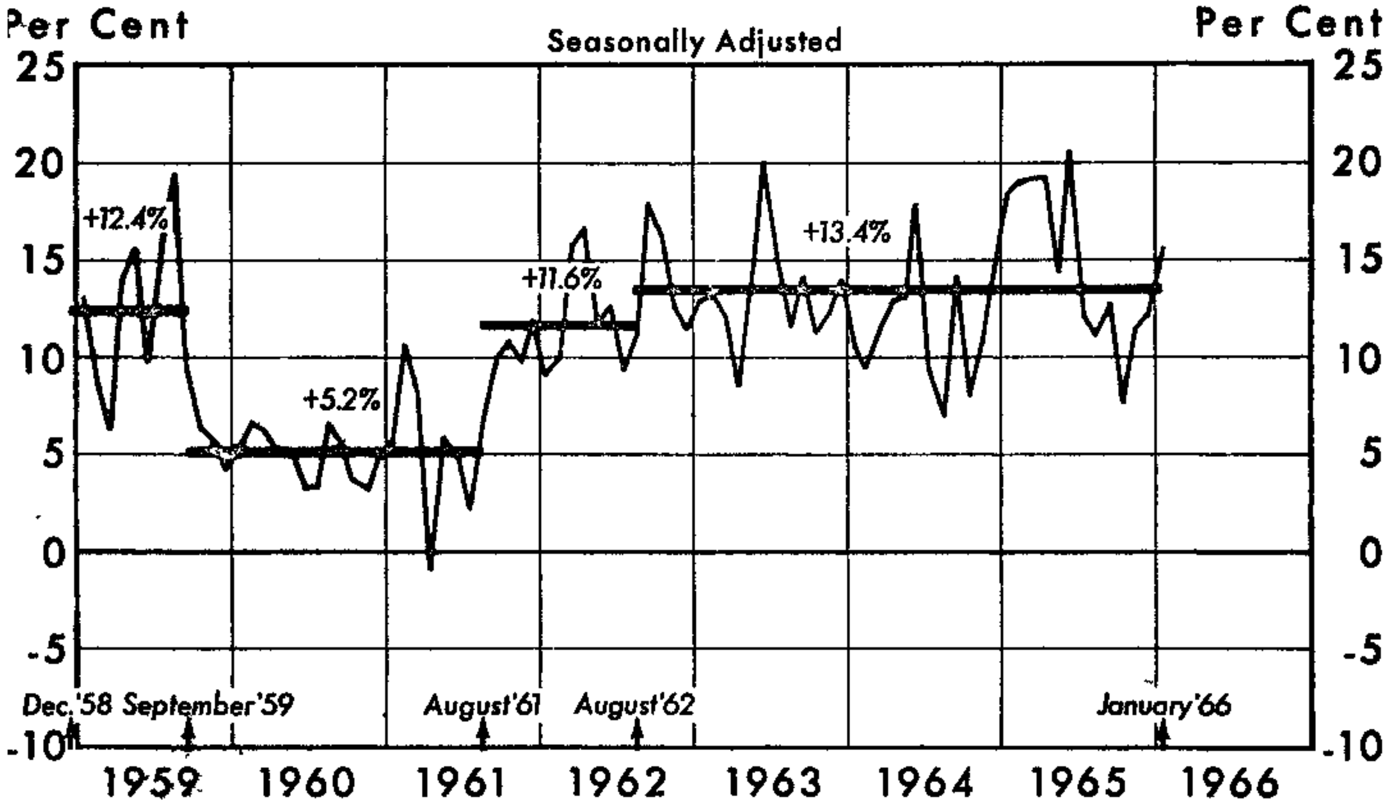
Total Bank Credit Less Government Securities

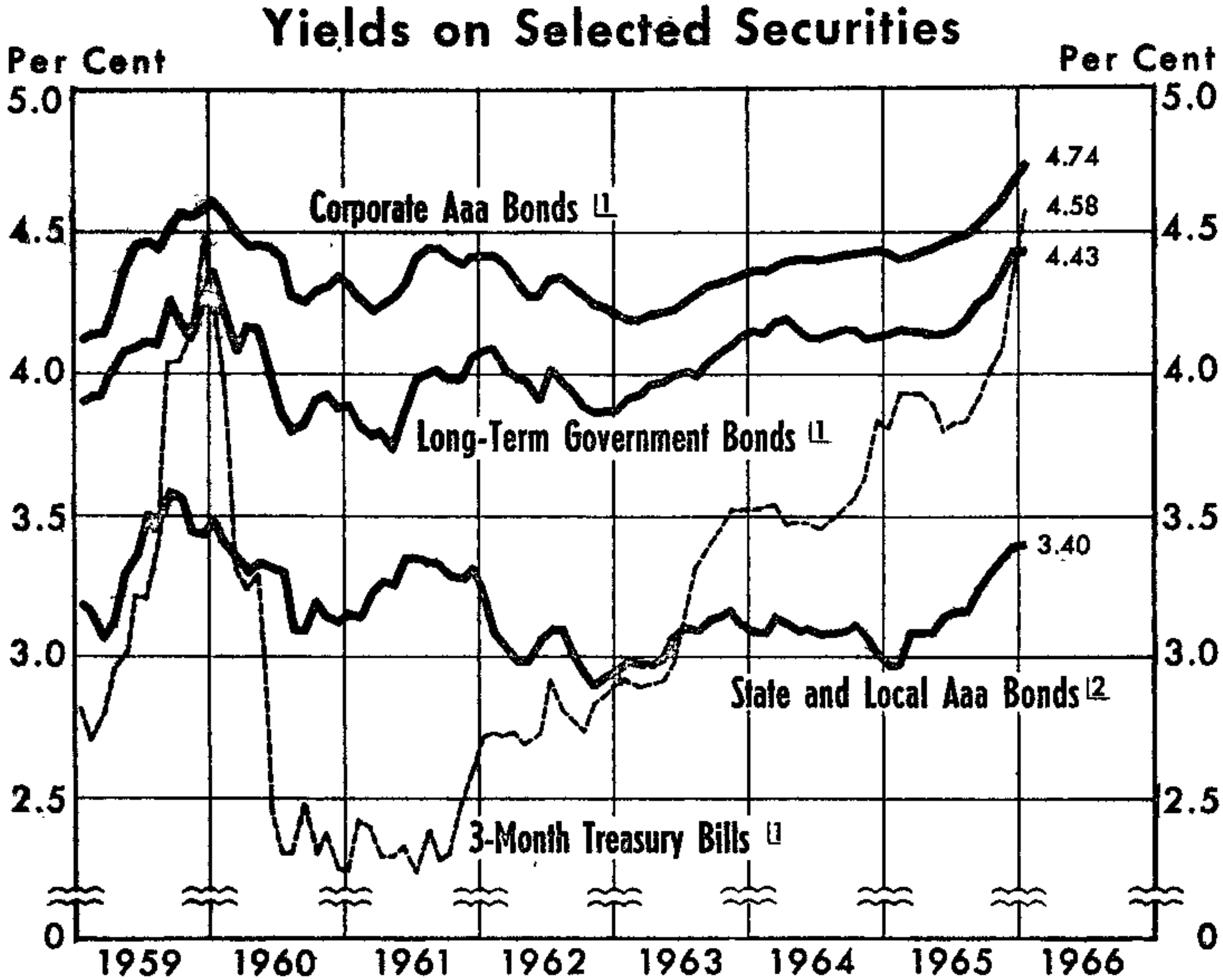
Compounded Annual Rates of Change



Bars on chart are periods of no marked and sustained changes in the rates of change.
Percentages are annual rates of change between months indicated.

Latest data plotted: January

Prepared by Federal Reserve Bank of St. Louis



[1] Monthly averages of daily figures.
[2] Monthly averages of Thursday figures.
Latest data plotted: January

Sources: Board of Governors of the Federal Reserve System and Moody's Investors Service

Prepared by Federal Reserve Bank of St. Louis