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# FEDERAL RESERVE BANK OF ST. LOUIS

# Review

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FEDERAL RESERVE BANK  
OF ST. LOUIS

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## 1966—*Year of Excessive Demands and Their Control*

NINETEEN SIXTY-SIX was the sixth consecutive year of expansion in spending and production. In each year since 1960 total demand for goods and services has risen rapidly enough to reduce the proportion of workers unemployed and the proportion of plant capacity unused. The year 1966 differed from the previous five, however, in several significant respects.

*Aggregate demand for goods and services was excessive* during most of the year. In the 1961-64 period demand rose sufficiently to bring the economy steadily closer to its potential output and, on the whole, in a moderate and orderly fashion, avoiding the creation of undue problems of resource allocation and inflationary pressures. During 1965 there was a much more rapid growth of total demand, accompanying the acceleration of activity in Viet Nam, but most of the rise was matched by an increase in output. During most of 1966 the rise in demand continued to be rapid and significantly outpaced the ability of the economy to produce.

*The year 1966 was one of inflation.* During the first four years of the business expansion, sales and production rose in parallel fashion, and overall prices changed little on balance. Beginning about mid-1965 total demand rose more vigorously than real output, and rises in price indexes became notable. In 1966 demand continued to rise rapidly, and, with the economy at virtual capacity, about half of the rise was translated into higher prices.

*Federal budget policy was more stimulative* to total demand in the last half of 1965 and in 1966 than it had been in over a

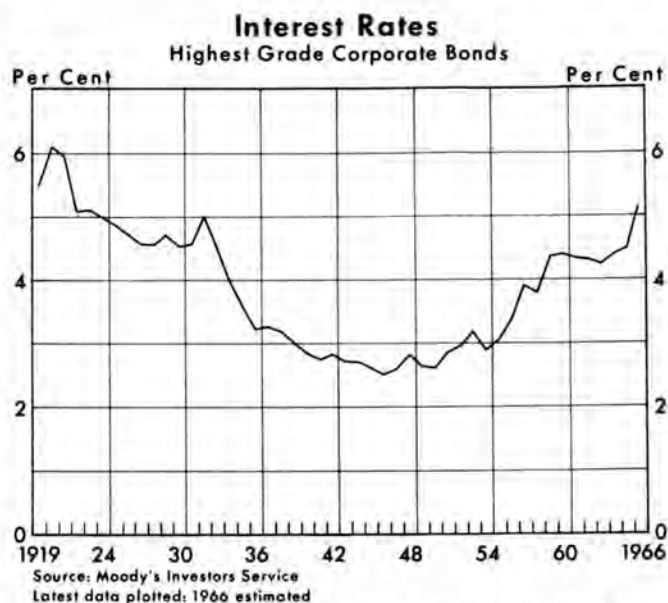
decade. From a relatively restrictive stance in 1960 budget policy became progressively more expansionary through tax cuts, additional welfare programs, and acceleration of the war in Viet Nam. Such developments are believed to have been major forces in the growth of total demand from an inadequate level in the early 1960's to the excessive level of 1966.

*Monetary trends changed markedly* during the year. In mid-1960, several months before the cyclical upturn, the money stock began rising moderately, at about a 3 per cent annual rate compared with an average 2 per cent rate in the previous decade, and continued to rise at this pace until mid-1964. From the summer of 1964 to the spring of 1965 money rose at an expansionary 4 per cent rate, and from the spring of 1965 to the spring of 1966 it went up at a very stimulative 6 per cent rate. This marked expansion was probably a significant factor in the strong rise in total demand during 1965 and 1966. From April through November money declined on balance, acting as a restraining force on total demand in the last half of 1966.

*Interest rates rose rapidly* from mid-1965 to the spring of 1966 and then spurted yet more rapidly until September, reaching the highest levels in over thirty years. Higher yields were reflected in a decline of bond prices and exerted a depressing influence on the value of common stocks, real estate, and other capital assets. The rise in rates resulted primarily from a huge demand for funds accompanying Federal budget policy and the strong demand for goods and services. Since yields on market securities rose much more than interest rates offered by banks and savings and loan associations, a greater share of the public's funds than in many years flowed directly from savers to investors without passing through an intermediary.

*The nation's balance of payments with other countries deteriorated* in some major respects but improved in others. On the one hand, the strong domestic demands for goods and services, the higher prices in this country, and the shortage of some items domestically caused a jump in our imports and a marked reduction in our trade surplus. On the other hand, the higher interest rates in this country were helpful in reducing the net outflow of capital and money market funds from the United States. For a fuller analysis and some background on the balance-of-payments problems, see "1966 Balance of Payments in Perspective," on page 17 of this Review.

*In late 1966 there were indications that the increase in total demand was moderating.* Spending was less buoyant, credit demands were less vigorous, and interest rates receded from the peaks reached in the early



fall. The abrupt shift in the thrust of monetary variables, which turned from expansion to restraint in the spring of 1966, may have been a major restraining force on total demand later in the year.

Total demand serves as a convenient theme for analyzing economic conditions. All of the above developments, together with many others, were related to the excessive total demands for goods and services during 1966. This article examines: 1) public policy factors affecting the demands, 2) the resulting demands for goods and services and the accompanying rises in production, employment, and prices, 3) credit and interest rate developments, and 4) some economic trends, prospects, and choices developing in late 1966.

## Public Policy Factors Affecting Total Demand

The two chief factors influencing the course of spending are fiscal and monetary developments. Some analysts see fiscal policy as dominant, while others view monetary policy as more effective. Direct Government spending and taxing are commonly thought to play more important roles in determining total demand than their size might indicate for two reasons: 1) Government spending and taxing are based largely on political, military, and welfare considerations and are not directly a function of current or expected income, and 2) a one dollar change in Government spending or taxing will generally lead to more than a one dollar change in total spending because of the effects on disposable incomes of consumers and businesses, which, in turn, influence their spending.

Monetary actions may have as great or greater impact on economic activity. Changes in the stock of

money held by individuals and businesses relative to their desire to hold it as an asset influence spending. Linkages between money and spending may be through such variables as interest rates, credit availability, and liquidity.

### Fiscal Developments

Since mid-1965 the U.S. Government, through its current taxing and spending programs, has exercised a strongly stimulative influence on total demand for goods and services. The overall relation between tax rates and the provision for expenditures has been the most stimulative in over a decade. At the same time, total tax receipts of the Government have been rising rapidly, largely because of the growth in private incomes. As a result, the total impact of the Federal budget, including the effect of the so-called automatic stabilizers, has been less stimulative than current programs alone would indicate.

Recent Federal Government fiscal developments may be examined in the light of alternative ways of measuring receipts and expenditures of the Federal Government.<sup>1</sup> There are four budgets of the Government in common usage. The administrative budget is the basic planning document of the Government. The cash budget measures the cash flow between the Government and the rest of the economy. The national income accounts budget summarizes the receipts and expenditures of the Federal Government sector as an integrated part of the recorded activities (i.e., the national income accounts) of all sectors of the economy.



<sup>1</sup>For a fuller discussion of various budget measures, see Keith M. Carlson, "Budget Policy in a High-Employment Economy," in the April 1966 issue of this Review.

The high-employment budget is an estimate of the national income accounts budget which would prevail at a specified rate of resource use.

On an *administrative budget* basis, the deficit rose from \$4.6 billion in calendar 1965 to an estimated \$8.9 billion in 1966 (see table on pages 12 and 13). This budget is the basic planning document of the Government but has serious shortcomings as a measure of impact on the economy (as noted below in the discussion of other budgets). Expenditures are estimated at \$119 billion in 1966, up 17 per cent from \$101 billion in 1965. Spending for national defense, reflecting the acceleration of war in Viet Nam, rose from about \$53 billion in 1965 to an estimated \$65 billion in 1966. Other outlays increased from \$49 billion to roughly \$54 billion, reflecting pay increases to Government employees and other price increases and new welfare programs. Net budget receipts increased from \$97 billion in 1965 to an estimated \$110 billion in 1966, or 14 per cent, as incomes and profits rose, excise tax rates were increased, and tax collections were accelerated in a move toward a pay-as-you-go system.

The *consolidated cash budget* also indicated a greater net Government deficit in 1966 than in 1965, rising from \$4.5 billion to an estimated \$7.5 billion. The cash budget, which includes the activities of Government trust funds, provides a broader measure than the administrative budget of the cash flow between the Government and other sectors of the economy. Cash receipts of the Government rose from \$123 billion in 1965 to an estimated \$145 billion in 1966, 17 per cent. Higher social security tax rates were a factor causing the greater rise in receipts on a cash basis than on an administrative basis. Cash payments to the public went up 19 per cent, from \$128 billion in 1965 to an estimated \$152 billion in 1966. Medicare payments and more liberal social security benefits as well as the greater outlays included in the administrative budget were chief causes of the increase.

The *national income accounts budget* is a broad measure relating the Federal Government sector to the consumer, business, state and local government, and international sectors of the national income and product accounts. It reflects the impact of current changes in tax rates and provisions for expenditure by the Government as well as the built-in stabilizing effects of existing laws as applied to changing economic developments.<sup>2</sup>

<sup>2</sup>Differences of opinion exist as to whether it is better to include or exclude the effect of automatic stabilizers in analyzing fiscal policy. There is an extensive literature on the value of the automatic stabilizers. However, since the impact of these stabilizers is chiefly determined by developments in the private



On the national income accounts basis, the budget has shown a surplus at an average annual rate of about \$0.4 billion during the past 18 months. This was less stimulative than in the period 1961-64, when the deficit averaged a rate of \$2.5 billion. This measure of Government action, which indicates about the same stance in 1966 as in 1965, is generally thought to be a better indication of the relationship of the Government to total spending than either the administrative or cash budget. The national income accounts budget is designed to include only factors which have a direct impact on the flow of current income. This is accomplished by such devices as excluding transactions in existing assets and accruing tax receipts. The somewhat greater restriction indicated by this budget for 1965 and 1966 than for the preceding four-year period resulted in large part from the impact on Government tax receipts of the rise in economic activity and incomes—the chief automatic stabilizer. In view of the high level of economic activity and the excessive rate of increase in total spending, the budget appropriately should have registered a larger surplus in the last 18 months if it were to act as a restraining force on total spending.

The *high-employment budget* indicates the influence of changes in tax rates and in provisions for Government expenditures upon the national income

accounts budget and abstracts from the major built-in stabilizer effects. It is thus a better measure of changes in fiscal policy.

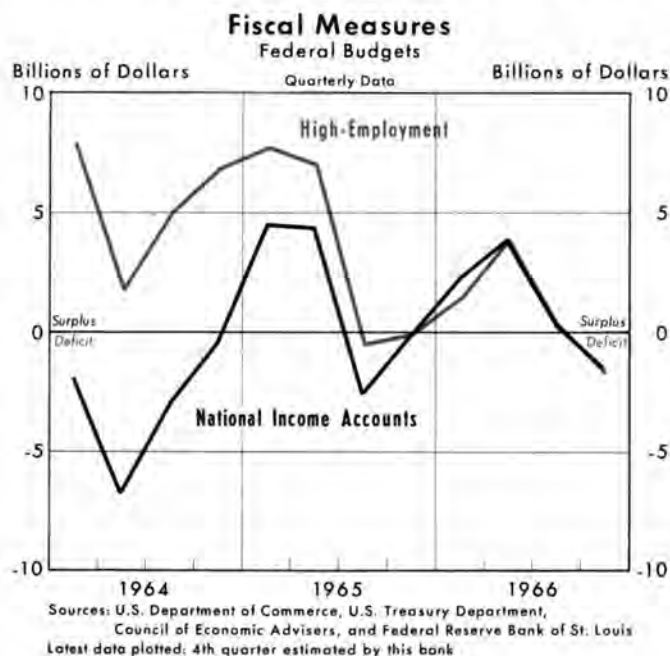
On a high-employment budget basis the Government operated at a surplus of about \$0.5 billion annual rate in the 18 months from mid-1965 to the end of 1966. This was the smallest surplus, and therefore the most stimulative, in over a decade. Figures presented in this budget are hypothetical, but relative levels are believed to provide the best single measure of the relative impact on the economy of current Government fiscal actions. The high-employment budget differs from the national income accounts budget primarily by eliminating the effect of changes in economic activity on Government receipts. It measures the impact of changes in tax laws and legal provision for expenditure, at an assumed rate of use of resources, rather than actual tax receipts and expenditures.

Government tax and expenditure policies as measured by the high-employment budget were a substantial drag on total spending in 1960, were moderately and on the whole increasingly stimulative from early 1961 to early 1965, and became very stimulative in late 1965. The marked shift in the posture of the Government since 1960 resulted from the investment tax credit and liberalized depreciation guidelines in 1962, tax cuts in 1964 and 1965, increasing expenditures for the Viet Nam conflict, and greater outlays on welfare programs.

Government actions were probably even more stimulative in late 1965 and early 1966 than indicated by the high-employment budget. Government outlays are recorded in this budget when goods are delivered; yet the economic impact begins soon after orders are placed. The defense build-up was accelerating rapidly because of the war in Viet Nam. Contracts were let in great volume, production increased markedly, and employment rose, but deliveries of goods were relatively small in the early months of the build-up.<sup>3</sup>

Government debt-management operations were also expansionary during 1966. Because of the legal maximum interest rate of 4¼ per cent on new issues with maturities of over five years, the Treasury was forced to finance with relatively short-term issues, adding to the liquid assets of the public. Average maturity of the publicly held Federal debt declined from 63 months in 1965 to less than 59 months in the January-October 1966 period.

<sup>3</sup>A detailed analysis of this effect was presented by Murray Wiedenbaum in a paper entitled "The Federal Budget and the Outlook for Defense Spending" at the University of Michigan Economic Outlook Conference on November 18, 1966.



sectors, others believe that these movements may be misleading. The differences of opinion are similar to those of deciding whether to use interest rates and free reserves (which are influenced by both the monetary authorities and demands for credit in the rest of the economy) or to use aggregate reserves and money (which are controlled by the monetary authorities) in measuring monetary actions.

Economic analysis during the past two or three decades has generally indicated that fiscal policy is the major public policy influence on total demand. Judged by this view, public policy has been extremely stimulative during the past 18 months. Recent economic analysis has put increasing emphasis on monetary policy as a major determinant of total demand.

### Monetary Developments

Monetary expansion was rapid from mid-1964 to the spring of 1966 and then came to an end. Both member bank reserves and the money stock, which had been rising sharply, showed net declines from April to November. Typically, changes in these monetary variables have had their greatest impact on economic activity after a brief time lag.

Monetary developments are measured variously by changes in the stock of money, interest rates, bank credit, and other measures. For the sake of simplicity and because it is a widely used policy indicator, particular attention is given here to changes in the stock of money.

The money stock (demand deposits and currency) has decreased at an annual rate of 1.5 per cent since last spring after increasing 6 per cent in the preceding year and at a 4 per cent rate from mid-1964 to April 1965. From mid-1960 to mid-1964 money rose at a 3 per cent rate, and in the 1950's, at a 2 per cent rate.

#### "A Note on Interpreting Monetary Variables"

As the nation's central bank, the Federal Reserve System has responsibility for managing the monetary system in a way that helps achieve the broad goals of economic policy. While the general nature of the role of the Federal Reserve in monetary management is not difficult to explain, it is difficult to explain the specifics of how that role should be performed: for example, how monetary policy should be designed, how the variables to be influenced should be selected, and how the results should be measured. One fundamental and practical problem involved is the presentation, use, and measurement of basic statistical information.

In the lead article of its November *Economic Review*, the Federal Reserve Bank of Cleveland discusses the problems involved in measuring and interpreting monetary variables. A copy of the November 1966 issue may be obtained free of charge by writing to the Research Department, Federal Reserve Bank of Cleveland, Cleveland, Ohio 44101.



The sharp expansion in the money stock from mid-1964 to early 1966 was probably a significant factor in the rapid rise of spending during 1965 and early 1966. To the extent that actual cash balances exceed desired cash balances, upward pressures are placed on spending. Evidence indicates that changes in the rate of spending have usually followed marked and sustained changes in the rate of growth of the money stock after a few months' lag.<sup>4</sup> The decline in money since April has probably exerted a restraining influence on aggregate demand in late 1966.

The demand deposit component of money has declined at a 3 per cent annual rate since spring following a 5 per cent rate rise from mid-1964 to spring 1966. By contrast, the currency component has increased at a 4 per cent rate since spring compared with a 6 per cent rate in the preceding period. The amount of currency held is probably related to the volume of transactions which typically utilize currency. Changes in the rate of growth of currency have tended to coincide with movements in total spending or to lag slightly behind them. Rates of growth of demand deposits have been related to changes in member bank reserves available for private demand deposits. Marked and sustained changes in the growth rates of demand deposits have usually preceded changes in economic activity.<sup>5</sup>

Changes in the money stock have reflected in large measure changes in member bank reserves. Member bank reserves (adjusted for changes in reserve requirements) declined at about a 2 per cent annual rate from April to November this year. Reserves, which are composed of deposits with Reserve Banks

<sup>4</sup>See "Money Supply and Time Deposits, 1914-1964," in the September 1964 issue of this *Review*.

<sup>5</sup>See "Currency and Demand Deposits," in this *Review*, March 1965.

and cash in bank vaults, are the major determinant of the level of demand deposits. From April 1965 to April 1966 bank reserves rose about 5 per cent. By comparison, reserves increased at a 4 per cent rate from 1960 to 1965 and at an average rate of about 2 per cent per year in the 1950's.



The rapid expansion of reserves from mid-1964 to the spring of 1966 resulted from Federal Reserve System net purchases of Government securities totaling \$6 billion and an increase of \$400 million in member bank borrowing from Reserve Banks. Partially offsetting factors were a movement of currency into circulation and net sales of gold by the U.S. Treasury. The decline in effective reserves since last spring has reflected both a rise in reserve requirements on time deposits and a slower rate of net purchase of Government securities by the System.

Reserves available to support private demand deposits (total reserves less reserves required for deposits not counted as part of the money supply) have decreased at a 3 per cent rate since spring after increasing 5 per cent in the preceding year. These reserves rose at a 1.5 per cent rate from 1960 to 1965, about the same as in the 1950's. Movements in private demand deposits and the money stock are usually more closely associated with these reserves than with total reserves.

Time deposits in commercial banks rose at a 10 per cent annual rate from November 1965 to August this year and since have shown little net change. By comparison, these deposits increased at a 15 per cent rate

from 1960 to 1965 and at a 7 per cent rate from 1951 to 1960.

Growth of each of the three major components of commercial bank time deposits has followed a different course in 1966. Recent trends are most exactly known for the large banks which report weekly. These banks hold about \$88 billion of total time deposits of \$157 billion. Divergence of trends of different kinds of time deposits has probably been greater at these large banks than at other banks.

At these large banks passbook savings deposits, which now amount to about \$47 billion, have declined at an 8 per cent annual rate since last December after rising 11 per cent during 1965. The chief cause of the changed trend was that with higher interest rates on competing instruments banks found more difficulty in attracting and holding passbook accounts at the Federal Reserve's Regulation Q rate ceiling of 4 per cent.

Large CD's (certificates of deposit), which rose 12 per cent in the year ended in August and had increased about a third each year for several earlier years, have since declined at a sharp 50 per cent rate to about \$15 billion in early December. The Regulation Q maximum of 5½ per cent on these funds has made it increasingly difficult for banks to hold them.

Smaller, consumer-type CD's at the large banks have risen 51 per cent since a year ago compared with a 20 per cent rate earlier in 1965. Recently these deposits have amounted to about \$26 billion. The recent rapid growth rate of these deposits reflected increased bank aggressiveness in seeking these funds for which regulations permitted payment of effectively competitive interest rates. Since September of this year, when the maximum rate on these CD's was lowered from 5½ per cent to 5 per cent, the amount outstanding has changed little on balance.

Money stock plus time deposits at all commercial banks declined somewhat from September to November after growing at a 4 per cent rate from June to September, at a 9 per cent rate from March 1965 to June 1966, and at an 8 per cent rate from 1961 to 1965. In the 1950's this broader measure of money went up at an average 3.4 per cent rate.

A particular net stimulative or restrictive effect on the economy may be obtained with various mixes of monetary and fiscal policies. During most of 1966 the particular combination of policies prevailing was one of relatively expansive fiscal developments and relatively restrictive monetary actions. This mix required larger borrowing by the Federal Government and a lesser growth in money than a mix with more restrictive fiscal action and less restrictive monetary action



## FEDERAL RESERVE SYSTEM ACTIONS DURING 1966

### Federal Reserve Credit<sup>1</sup>

	Annual Rates of Change	
	Dec. 1965- Apr. 1966	Apr. 1966- Nov. 1966
Federal Reserve Credit <sup>2</sup>	+9.3%	+3.2%
Federal Reserve Holdings of U.S. Government Securities	+8.0	+3.4
Total Reserves of Member Banks	+6.9	-2.3
Reserves Available for Private Demand Deposits	+4.1	-3.1

### Discount Rate

In effect January 1, 1966	4½%
In effect December 20, 1966	4½

### Reserve Requirements

	Per Cent of Deposits				
	Demand Deposits		Time Deposits All Member Banks		
	Reserve City Banks	All Other Member Banks	Savings Deposits	Other Time Deposits Up to \$5 Million	In Excess of \$5 Million
In effect January 1, 1966	16½	12	4	4	4
July 14, <sup>3</sup> 21, <sup>4</sup> 1966					5
September 8, <sup>3</sup> 15, <sup>4</sup> 1966					6
In effect December 20, 1966	16½	12	4	4	6

### Margin Requirements on Stocks

In effect January 1, 1966	70%
In effect December 20, 1966	70

### Maximum Interest Rates Payable on Time and Savings Deposits

	Savings Deposits	Other Time Deposits 30 Days or More Maturity	
		Under \$100,000	\$100,000 or More
In effect January 1, 1966	4%	5½%	5½%
September 26, 1966	4	5	5½
In effect December 20, 1966	4	5	5½

### Loan Policy

On September 1, 1966 the Presidents of the Federal Reserve Banks sent a letter to all member banks regarding growth in overall bank credit, the increase in business loans, and administration of Federal Reserve credit assistance to member banks through the System's discount facilities. Excerpts from the letter are as follows:

"... credit financed business spending has tended towards unsustainable levels and has added appreciably to current inflationary pressures . . . [This] expansion is being financed in part by liquidation of other banking assets and by curtailment of other lending in ways that could contribute to disorderly conditions in other credit markets . . . Member banks will be expected to cooperate in the System's efforts to hold down the rate of business loan expansion . . . and to use the discount facilities of the Reserve Banks in a manner consistent with these efforts . . ."

<sup>1</sup>Adjusted for reserve requirement changes.

<sup>2</sup>Federal reserve credit excluding float and a few minor items.

<sup>3</sup>Effective date for reserve city banks.

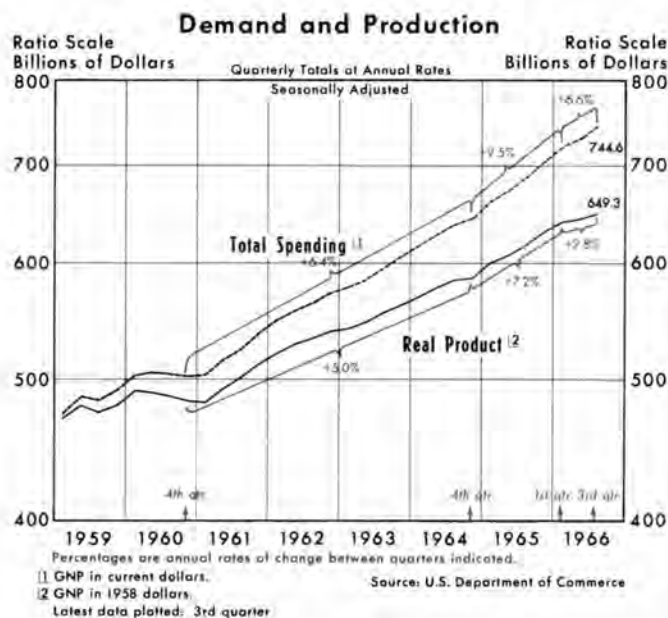
<sup>4</sup>Effective date for all other member banks.

and tended to place upward pressure on interest rates. The higher rates were of some benefit in keeping the country's balance of payments from deteriorating since they reduced the incentive to seek higher rates abroad. On the other hand, higher interest rates adversely affect some sectors of the economy, such as housing.

## Demand, Production, and Prices

### Demand

The demand for goods and services was very strong in 1966, although it declined moderately from the exceptionally high 1965 rate. Total dollar spending, which had risen at a very rapid 9 per cent annual rate from late 1964 to early 1966, grew at a somewhat more moderate 7 per cent rate from the first to the third quarter of 1966. These rates of increase in spending were substantially above the estimated 4 per cent rate of growth of productive potential. The stimulative fiscal actions during 1965 and 1966 and the rapid monetary expansion from the summer of 1964 to the spring of 1966 contributed to the large demand for goods and services of the past two years.



The growth pattern of spending changed markedly during 1966. Private investment, which had risen at a 15 per cent annual rate from the third quarter of 1964 to the second quarter of 1966, declined in the third quarter of 1966. Outlays on housing declined from \$27.8 billion in 1965 to an annual rate of \$24.8 billion in the third quarter of 1966. Since housing is consumed over a relatively long period, current spending on new construction can be curtailed without greatly reducing the amount of housing services available. Since interest cost is usually a major portion of

the total expense of owning a home, higher interest rates increase the effective price of house services more than the price of consumer goods in general. Consequently, the amount of housing demanded declines greatly.

Inventory buying continued large in the first half of 1966 but added little to increased total demand. Net purchases of business inventories during the first half of 1966 (\$10.6 billion rate) remained close to the fourth quarter 1965 rate (\$10.4 billion). Inventory purchases rose rapidly in 1965 from \$4.7 billion in 1964, reflecting both the greater flow of goods in the private economy and the build-up of war goods for Viet Nam. In the third quarter of 1966 inventory buying declined slightly, to a \$9.9 billion rate. Factors in the slowdown may have been the higher costs of credit, unavailability of some items, and the greater delivery of war goods to the Defense Department relative to production of these items.

Business spending on plant and equipment, in contrast to inventory investment, continued to rise during 1966. These outlays increased at an estimated 15 per cent rate in the first three quarters of 1966 compared with an average 9 per cent rate in the previous five years. Profit anticipations were optimistic, and demands for defense goods were great. Interest costs, although up nominally, did not impose much restraint on demand since growing inflationary pressures led to expectations that repayments would be made in cheaper dollars.

Government expenditures jumped at an average 14 per cent annual rate during the first three quarters of 1966 compared with growth at about a 9 per cent rate from late 1964 to late 1965 and a 5 per cent rate from 1962 to 1964. Defense outlays accounted for most of the gain, but welfare programs of the Federal Government and spending by state and local governments continued to rise.

Consumer outlays, which rose at about a 9 per cent rate from late 1964 to early 1966, increased at a 6.4 per cent rate in the second and third quarters of 1966. The slower rate was caused primarily by a decline in durable goods purchased during the second quarter as automobile sales decreased, reflecting higher excise taxes, greater withholdings for personal income taxes, and discussions of automobile safety. Nevertheless, personal income, a measure of purchasing power, has continued to rise at about an 8 per cent rate in 1966.

### Production and Employment

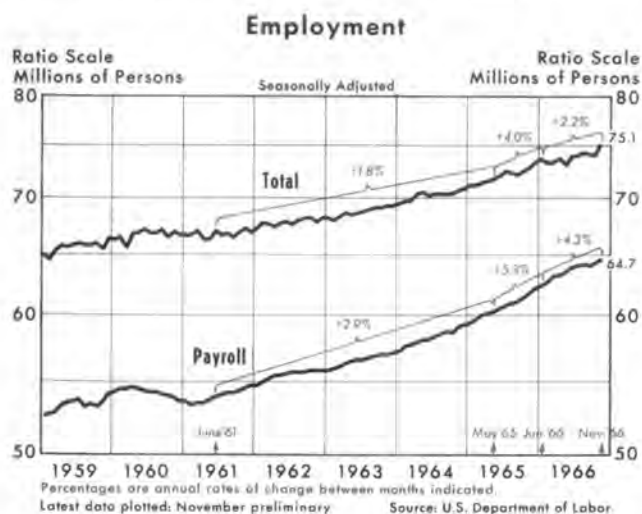
Growth in real output of the economy slowed in 1966, trending downward from a 7 per cent growth



during 1965 to a 6 per cent rate in the first quarter of 1966 and a 3 per cent rate in the second and third quarters. By comparison, output rose at an average rate of 5 per cent from late 1960 to late 1964. Productive potential is estimated to increase about 4 per cent a year.

The reduced rate of growth in production during 1966 resulted in large part from resource limitations and from problems of readjustment as the economy ran into bottlenecks and shifted to greater military effort. Total demands for goods and services were strong, and spending rose about twice as fast as production, causing prices to rise. Many plants were at virtual capacity, and shortages of skilled workers were widespread. When a high rate of resource use is achieved in the economy, the rate of increase of total real product necessarily falls back to about the rate of growth of productive potential.

Total employment, after growing at about a 4 per cent annual rate in the last half of 1965, rose at about a 2 per cent rate in the first 11 months of 1966. This shift is accounted for by the exhaustion of the supply of employable labor and the flow of manpower into the armed forces. From 1961 to 1965 the 2 per cent rate of increase of employment was much greater than the 1.3 per cent rate of growth of population of working-force age (18 to 64 years). In 1966 the gain in employment approximated the 1.6 per cent growth of this population group. Since the number of men in the labor force has recently increased little, growth of employment has been dependent in large measure on entrance of women into the labor force.



Unemployment was at a relatively low level during the year. Over 98 per cent of the married men looking for work had jobs in the first 11 months of 1966 compared with 97.6 per cent in 1965 and 95.4 per cent in

1961. A large portion of married men out of work in 1966 could be accounted for by seasonal unemployment, those changing jobs, and those without skills or aptitudes marketable at prevailing wage rates.

Total unemployment was about 4 per cent of the labor force in the first 11 months of 1966 compared with 4.6 per cent in 1965 and 6.7 per cent in 1961. The paradox of about one in twenty-five of those wanting a job being idle at a time of strong labor demand may be partially explained by minimum wage laws. Unemployment was greatest among those without skills or experience and with little education, particularly those in the 14 to 18 age group. The value of the product of many of these workers is less than the legal minimum wage, and incentives are great for firms to avoid engaging in activities for which these workers are fitted or to replace such workers through automation.

## Prices

Inflationary pressures erupted during 1966. More than half of the rise in total spending was translated into higher prices and less than half was matched by increases in goods and services. By comparison, in the previous year about 20 per cent of the rise in spending resulted in higher prices, and 80 per cent was matched by additional output.

Higher prices reflected primarily demands for goods and services exceeding the economy's ability to produce with the given supply of land, labor, capital, and technology. Price rises tended to be sharpest in areas where goods and services were in shortest supply relative to demand. The transfer of resources from private production to build war supplies in late 1965 and in 1966 was accomplished primarily by bidding up wages and other prices.

Prices of consumer goods moved up sharply. From late 1965 to October 1966 average consumer prices rose at a 3.7 per cent annual rate after going up at a 1.3 per cent rate from 1958 to the fall of 1965. The acceleration of price increases may have been even greater than implied by these figures. In the earlier period, quality improvements may not have been taken adequately into account, and the fixed market-basket approach did not allow for gains to consumers from substitute commodities. More recently, with strong demands for goods and with shortages developing, discounts have been eliminated, and there have been deteriorations in quality which may not have been recognized in computing the index.

Prices of most consumer items rose. Food prices went up at a sharp 5.4 per cent rate in the first 10



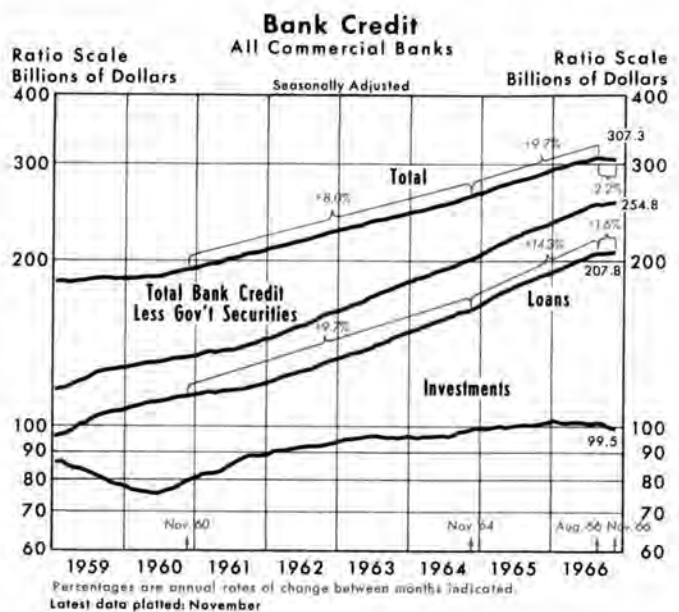
months of 1966. Fees and charges for consumer services (excluding rent) also increased at a 5.4 per cent rate. Rent and prices of nondurable goods other than food increased less rapidly. Prices of durable goods crept up slightly.

Wholesale quotations rose 3 per cent from the fall of 1965 to the fall of 1966. By comparison, these prices increased at a 2.3 per cent annual rate from mid-1964 to the fall of 1965 after being stable from 1958 to mid-1964. Wholesale prices of farm products and processed foods rose about 5 per cent from the fall of 1965 to the fall of 1966, reflecting limitations of production, exhaustion of stocks, large demands for shipment abroad, and high personal incomes. Industrial prices rose 2.3 per cent.

### Credit and Interest Rates

Accompanying the strong demand for goods and services, a substantial volume of credit was extended in 1966. With incomes high and rising during 1965 and 1966, the amount of private saving was large, and monetary expansion was very rapid during much of this period. The demand for funds was even stronger in response to optimistic business expectations and requirements of governments. The demand for credit apparently decreased somewhat after early September, and the flow of funds contracted.

Commercial bank credit rose at a 10 per cent annual rate from November 1964 to August 1966 compared with an 8 per cent rate in the economic upswing from late 1960 to late 1964 and a 4 per cent average rate in the late 1950's. From August to November this year such credit declined at a 2 per cent rate.



Strength centered particularly in business loans, which increased 18 per cent from August 1965 to August 1966. From August to November these loans increased at only a 7 per cent annual rate. Banks purchased municipal securities at a 12 per cent rate from September 1965 to June 1966; from June to November these holdings were reduced at a 1 per cent rate. Bank real estate loans increased at a 13 per cent rate from January 1965 to March 1966 and then at a reduced 8 per cent rate from March to November. The rate of increase of bank loans to consumers declined from 14 per cent in the year ending in April 1966 to 8 per cent in the April-September period and then to 4 per cent from September to November.

The rate of increase of consumer instalment credit outstanding both at commercial banks and elsewhere has declined significantly since a year ago. After increasing at a rate of 12 or 13 per cent a year in 1964 and 1965, this credit grew at an 11 per cent rate from December 1965 to March 1966, at a 10 per cent rate from March to August, and at a 7 per cent rate from August to October.

The decline in the rate of increase of total instalment credit reflected primarily a considerably more marked decline in the rate of increase of automobile credit. After growing about 12 per cent in 1964 and 15 per cent in 1965, this credit expanded at a 10 per cent annual rate from December 1965 to March 1966, at a 7 per cent rate from March to September, and at a 5 per cent rate from September to October.

Interest rates rose markedly during the last half of 1965 and the first four months of 1966. After April the rate of increase accelerated, and by early fall most

rates reached their highest levels since the 1920's. The rise reflected a sharper increase in the demand for credit than in the available supplies from saving and bank credit creation. The sharp upward movement in interest rates from April to September accompanied the initial period of monetary contraction.

From September 1966 to early December interest rates declined moderately. The decline in rates after September may reflect a decline in the fundamental demand schedule for loan funds. Alternatively, some of the rapid increase of the summer may have been primarily speculative because of inordinate expectations of still higher rates, and the October declines may have been of a technical nature. Responding to the high level of rates in the fall compared with the first half of the year, the declines of credit extensions may have reflected a decline in the amount of funds demanded rather than in the demand schedule.

Yields on highest grade corporate bonds, which had averaged 4.35 per cent in the 1961-64 period and had risen to 4.50 per cent by mid-1965, rose to 4.96 per cent in April this year and then to 5.49 per cent in September. Rates on Government bonds and on high-grade municipal bonds moved in a roughly parallel fashion.



In the short-term market, yields on three-month Treasury bills worked up from 2.35 per cent in 1961 to 3.80 per cent in June 1965, to 4.61 in April 1966, and to 5.36 per cent in September. Quotations on prime 4- to 6-month commercial paper followed a similar course.



The higher interest rates were reflected in price declines for many capital assets. A rise in rates means lower prices on existing bonds and preferred stocks. A rise in rates also tends to push down the present value of a given expected return from real estate and common stocks.

Interest rates on market instruments rose more rapidly in 1965 and 1966 than did rates paid by financial intermediaries. Market yields quickly reflect changed demand and supply conditions, while rates paid by commercial banks on time deposits and dividends paid on savings and loan shares are much more rigid. Frequent moves in the latter rates are practically impossible. Since reduction of institutional rates offends customers, there is a reluctance to raise rates until it becomes clear that the higher level might be maintained for a period. Financial intermediaries have a further reluctance to increase their interest costs because new rates apply to previously obtained funds as well as to new funds and resources of an intermediary are invested in previously purchased lower yielding assets.

Supervisory authorities have used their influence to resist higher rates on funds supplied to intermediaries, fearing deterioration of lending and investing standards or responding to a public opinion that increases in such rates encourage higher general market interest rates. Maximum rates which commercial banks have been permitted to pay under Regulation Q have exercised a restraint on aggressive banks. In early September Regulation Q controls were tightened, limitations on rates paid by savings and loan associations



# FEDERAL GOVERNMENT BUDGETS

Billions of Dollars

Seasonally Adjusted Annual Rates

Quarters	RECEIPTS				EXPENDITURES				SURPLUS (deficit)			
	Administrative Budget <sup>1</sup>	Cash Budget	National Income Accounts Budget	High-Employment Budget	Administrative Budget <sup>1</sup>	Cash Budget	National Income Accounts Budget	High-Employment Budget	Administrative Budget <sup>1</sup>	Cash Budget	National Income Accounts Budget	High-Employment Budget
<b>1964</b>												
1	96.4	117.2	115.3	124.5	95.6	122.4	117.2	116.6	- 0.8	- 5.2	- 1.9	- 7.9
2	100.0	114.4	112.3	120.3	99.6	119.2	119.1	118.5	- 0.4	- 4.8	- 6.7	- 1.8
3	80.8	113.6	115.4	122.9	95.6	120.0	118.4	118.0	- 14.8	- 6.4	- 3.0	- 4.9
4	77.6	115.2	117.2	124.1	96.8	119.2	117.7	117.3	- 19.2	4.0	- 0.5	- 6.8
<b>1965</b>												
1	97.2	118.9	124.0	126.9	91.6	120.7	119.6	119.2	- 5.6	- 1.8	- 4.5	- 7.7
2	117.2	130.6	125.0	127.3	102.0	129.6	120.6	120.3	- 15.2	- 1.0	- 4.4	- 7.0
3	88.8	122.4	123.8	125.6	102.8	128.4	126.3	126.1	- 14.0	- 6.0	- 2.5	- 0.5
4	84.0	122.8	126.9	126.9	109.2	132.4	127.0	127.0	- 25.2	- 9.6	- 0.2	- 0.1
<b>1966</b>												
1	104.4	134.8	136.0	135.2	108.8	147.6	133.7	133.8	- 4.4	12.8	2.3	- 1.4
2	141.6	158.4	141.0	140.9	107.2	143.2	137.1	137.1	- 34.4	- 15.2	- 3.9	- 3.8
3	101.6	145.3	145.4	145.4	132.8	160.2	145.1	145.1	- 31.2	- 14.8	0.3	- 0.3
4 e	92.8	141.1	148.5	148.5	127.2	158.5	150.0	150.0	- 34.4	- 17.4	- 1.5	- 1.5
<b>Calendar Years</b>												
1964	88.7	115.0	115.1	123.0	96.9	120.3	118.1	117.6	- 8.2	- 5.2	- 3.0	- 5.4
1965	96.8	123.4	124.9	126.7	101.4	127.9	123.4	123.2	- 4.6	- 4.5	- 1.6	- 3.5
1966 e	110.1	144.9	142.7	142.5	119.0	152.4	141.5	141.5	- 8.9	- 7.5	- 1.3	- 1.0
<b>Fiscal Years (ended June 30)</b>												
1964	89.5	115.5	115.5	124.8	97.7	120.3	116.9	115.7	- 8.2	- 4.8	- 1.4	- 9.1
1965	93.1	119.7	120.6	125.3	96.5	122.4	118.3	118.7	- 3.4	- 2.7	- 2.3	- 6.6
1966	104.6	134.4	131.9	132.2	106.9	137.6	131.0	131.0	- 2.3	- 3.2	- 0.9	- 1.2

e - Estimated

<sup>1</sup> Not seasonally adjusted.

Sources: U.S. Department of Commerce, U.S. Treasury Department, Council of Economic Advisers, and Federal Reserve Bank of St. Louis.

were formalized while liberalized, and more formal restraints were placed on mutual savings banks.

An exceptionally small share of the total flow of funds went through financial intermediaries in 1966. In 1964 and 1965, 44 per cent of the net sources of credit in the economy flowed through time and savings accounts of deposit-type financial institutions. In the first quarter of 1966 these institutions received 30 per cent of available funds, and in the second and third quarters they received 26 per cent. With market rates higher than interest rates paid by banks, savings and loan associations, and other intermediaries, there was an incentive for suppliers of funds to place them in stocks, bonds, commercial paper, and direct loans. This diversion tended to favor the larger suppliers of funds and the large borrowers, notably the U. S. Government, large state and municipal borrowers, and major businesses, which obtain funds in a national market. Smaller savers generally received lower rates than large suppliers, while less well-known borrowers, who must usually rely on local financial institutions, had fewer funds for which to compete.

### Economic Trends Late in the Year Demand

Available evidence indicates that the demand for goods and services may have moderated during the summer and fall. Total spending rose from the first to the third quarter at a 6.6 per cent annual rate, down from the 9.5 per cent rate of the preceding five quarters (see chart, p. 8). Whether, in view of resource bottlenecks and problems of shifting to more military production, there has been adequate reduction in the excessive demand of late 1965 and early 1966 remains to be seen.

Growth of several elements of total demand for goods and services has slackened considerably. The rate of growth of retail sales has declined from 13 per cent in the last half of 1965 to 5 per cent during the first half of 1966 and has since shown little net change. The increase in net business outlays for inventories, which was at a \$12 billion annual rate from the first to the second quarter, slowed to a \$10 billion rate from the second to the third quarter. Expenditures on new homes, which were about unchanged from the first to the second quarter, fell at an annual rate of \$5 billion from the second quarter to October. Large offsets to these declines have been provided by increasing Government outlays and by more business spending on equipment. Personal income, a measure of purchasing power, has been rising at about an 8 per cent rate in recent months.

### Real Output

The rate of growth in real output has also declined. Total output, measured in constant dollars, increased 7 per cent in 1965, at a 6 per cent annual rate in the first quarter of 1966, and at a 3 per cent rate from the first to the third quarter. Industrial production, which had risen at an 11 per cent rate from September 1965 to June 1966 and at a 7 per cent rate from June to August, increased very slowly in the autumn. Achievement of essentially full employment, development of bottlenecks, and problems of substantial shifts from civilian to military production have necessitated some reduction in the rate of real growth. A softening of demand also may have developed. Steel was produced at a slightly slower pace in the July-October period than in the previous four months. Construction put in place, after reaching a peak during the first four months of the year, has since fallen significantly.



### Prices

The slowing in the pace of spending also may have been reflected in price developments, though inflationary pressures remain. Since August wholesale prices have declined, after rising at about a 4 per cent rate earlier in the year. The industrial price component has risen only slightly since July, after rising at a 3.4 per cent rate during the previous seven months. Prices of farm products and processed foods fell from August to November but remained about 3 per cent higher than a year earlier. Consumer prices have continued to rise at the disturbing 4 per cent pace which has prevailed since the fall of 1965.

### Other Developments

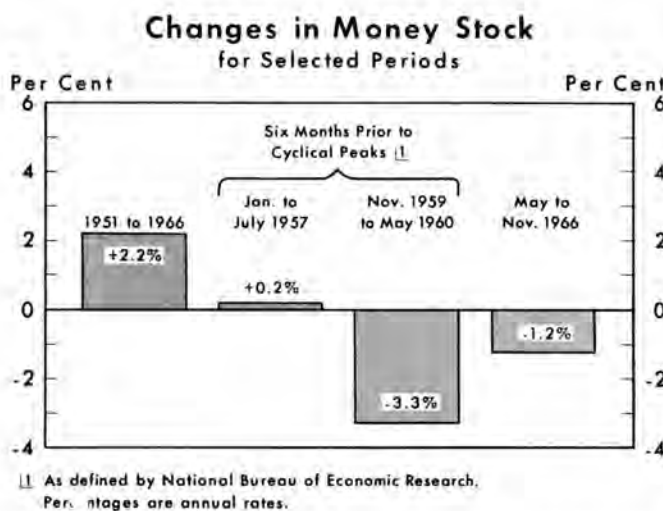
The amounts of credit demanded and possibly the fundamental demands have lessened since early fall. Extensions of loans and net purchases of securities by

financial intermediaries have slowed. In part this has reflected the lack of success of deposit-type institutions in attracting savings and the inability of banks to expand credit, caused by the decline in reserves. Since early fall there are indications that direct financing also has been less.

Some interest rates, after rising to peak levels in early September, declined moderately during the fall despite a lack of monetary expansion in the period. Yields on highest grade corporate bonds declined from 5.49 per cent in September to 5.37 per cent in early December. Three-month Treasury bill rates decreased from 5.36 per cent to 5.10 per cent during the same period.

### Causal Factors

The pronounced shift in monetary trends beginning last spring may have exercised some restraint on the excessive demands for goods and services. Both bank reserves and money, which had been rising before April at the fastest rate in over a decade, have since been contracting. Usually such a marked and sustained change in the course of bank reserves and money has been followed after a brief lag by a significant slowing in spending.



Federal fiscal influence, on the other hand, has evidently continued to be expansive in late 1966. Total Government outlays have been expanding significantly, and both the national income accounts measure of total fiscal impact and the high-employment measure of current Government actions have continued to indicate stimulation. There were some evidences, however, supplementing the formal budget measures, that the Government may have been a little less stimulative in late 1966 than in the previous year. New orders for war materials were probably not rising so rap-

idly relative to deliveries as in the earlier period. Late in the year the 7 per cent investment tax credit and accelerated depreciation benefits were withdrawn, making private investment somewhat less attractive. In November the Treasury replaced maturing securities with five-year obligations, reducing somewhat the liquidity of the public. At the beginning of 1967 another increase in social security tax rates is scheduled.

The nature of our productive process may have contributed to a slowing of aggregate demands for goods late in the year. During 1965 and early 1966, as demands for goods of the producers of final products expanded, derived demands on the suppliers of these concerns rose even more sharply. The suppliers not only had to produce materials for the products which were ultimately sold but also to provide the final producers with inventories and other investment goods to expand. When many final producers reached capacity operations in 1966, they had to slow their rate of expansion even though final demand continued in excess of capacity. The slower growth in real output of final producers meant an actual reduction in both dollar and effective demands for materials from some suppliers.

### Outlook

At the beginning of 1966 economic stabilization required containing excessive demands for goods and services, thereby moderating inflationary pressures. In the early months of the year, the problem was aggravated by rising contracts and expenditures for the Viet Nam conflict and a reluctance either to reduce social programs or to increase tax rates. Monetary actions also were stimulative, partly because the huge demands for funds caused rapid expansion of commercial bank demand deposits even at rising levels of interest rates.

In the fourth quarter of the year the major task may have shifted from one directed primarily to restraining exuberance to one of maintaining an optimum growth in total demand. By late 1966 total demand had lost some of its strength, and concern was being expressed over whether adequate expansion of total demand and of real product would be continued in 1967.

The problem of achieving appropriate total demand in 1967 is complicated by cost-push inflationary pressures which are strong at the end of 1966 and which could be easily reinforced by excessively expansive fiscal and monetary actions. Even if total demand is one which in the long run might be considered op-



timal, many prices are likely to increase seriously in 1967 because of the excessive total demand and price increases of the past year. Prices do not always rise immediately in response to demand-pull forces; some have been held back because of guideposts, and others have been restrained because of contracts (including wage contracts). Many wage rates and other prices are expected to be marked up in 1967 because of the excesses of 1966; these increases will place cost-push pressures on other prices, and it is unlikely that there will be enough offsetting price declines to prevent undesirable general price increases.

At year-end it appears that the combination of monetary and fiscal developments may not have to be so restrictive in the coming year as it has been since the

spring of 1966. Total demands for goods and services have probably slowed, and a further reduction might cause an unwarranted contraction of employment and real product.

The mix of policy actions must also be selected. If lower interest rates are judged desirable in order to stimulate areas such as housing and other private investment and to foster real growth in the private economy, emphasis might be placed on a combination of restrictive fiscal policies with expansive monetary actions. If large declines in interest rates are believed undesirable because of a likelihood of increased outflows of funds from the country, reliance might be placed on a policy mix with relatively stimulative fiscal actions and quite limited monetary expansion.



# 1966 Balance of Payments in Perspective

**D**EVELOPMENTS in the domestic economy exerted a dominant influence on the U. S. balance of payments during 1966. Under the influence of high total demand pressures, merchandise imports rose 20 per cent from the third quarter of 1965 to the third quarter of 1966, while merchandise exports increased 9 per cent in the same period. The overall balance-of-payments deficit on a liquidity basis was \$0.9 billion in the first three quarters of 1966, a slight improvement over the \$1.0 billion deficit for the same period in 1965 and a considerable improvement over the \$1.4 billion deficit in the first three quarters of 1964.

The United States has experienced chronic balance-of-payments deficits averaging close to \$3 billion a year since 1958.<sup>1</sup> Until recently, the deficit was considered to be structural, i.e., due to a secular shift in relative economic positions of the United States vis-a-vis Western Europe. Lately, business cycle conditions in the United States have played an important role in the continuance of the deficit. Although there has been some improvement in the balance of payments in 1965 and 1966, the officially optimistic projections of balance-of-payments equilibrium, i.e., a deficit or surplus of not more than \$250 million, made on the basis of the various government actions taken in 1965 have not been realized. However, if the cyclical domestic inflationary pressure can be successfully contained by restrictive monetary and fiscal policy, a major corrective force for eliminating the balance-of-payments deficit may be provided.

<sup>1</sup>The measurement of the balance of payments is essentially a double entry bookkeeping procedure, and therefore the definition of a deficit depends upon which items are considered capital items and which items are considered financing items. Thus, there is a variety of ways of defining the deficit or surplus. This definitional problem is compounded when the country's currency is also held by foreigners (as is the case with the dollar), either by private persons to finance trade or by official institutions as international reserves. The definition of the balance-of-payments deficit used here is measured by decreases in U.S. gold and foreign currency holdings plus increases in holdings of liquid dollar assets by foreigners (called "balance of payments on liquidity basis"). The other measure of the balance of payments is the official settlements basis. The major difference between the two is that increased holdings of liquid dollar assets by private foreigners are excluded from the latter measure of the deficit.

## *Review*

The postwar history of the U. S. balance of payments can be divided conveniently into three time periods: 1946-57, when the United States dominated the Free World economic scene; 1958-64, when the relative economic position of the United States vis-a-vis Europe weakened; and 1965-66, when domestic inflation in this country has been an important factor bearing upon the balance of payments.

From 1946 to 1957 the United States appeared to have an overwhelming economic advantage, and concern was expressed about a chronic international shortage of dollars. In this setting this country assumed a wide range of economic, political, and military responsibilities to reconstruct and defend Western Europe, requiring large spending abroad. We were able to do this and still maintain equilibrium in the balance of payments because of the tremendous and largely unsatisfied foreign demand for American products and dollar balances. Any increase in the amount of dollars in the hands of foreigners was matched by an equal increase in the ability of foreigners to satisfy part of this demand for American products or dollars. The demand for American goods and dollar balances was even greater than the quantity supplied by all of the aid and other programs, and as a result an average of \$231 million in gold was sold to the United States annually to acquire additional dollar balances (see table, Row 9).

In the second period, from 1958 to 1964, Western Europe had recovered her prewar economic position and had entered a period of rapid growth under the umbrella of the Common Market (EEC). With international convertibility of its currencies the Common Market also became a safe as well as an attractive place for U. S. investment. As a result, there was a substantial increase in U. S. capital outflow (table, Row 5). But while the economic position of Europe became more favorable, the economic, political, and military obligations which the United States had assumed in the earlier period were still largely maintained. This is reflected in the continued large deficit

# U. S. BALANCE OF PAYMENTS

1946 - 1966

Billions of Dollars

Annual Averages

	1946-57	1958-64	1965	1966 <sup>1</sup>
1. Trade balance .....	+ 4.3	+ 4.4	+ 4.8	+ 3.5
Merchandise exports .....	+ 13.9	+ 20.0	+ 26.3	+ 29.3
Merchandise imports .....	- 9.6	- 15.6	- 21.5	- 25.8
2. Service balance .....	+ 0.2	+ 0.1	+ 2.2	+ 1.8
Receipts .....	+ 4.6	+ 8.8	+ 12.7	
Expenditures .....	- 4.4	- 8.7	- 10.5	
3. Transfer payments <sup>2</sup> .....	- 3.2	- 2.6	- 2.8	- 3.0
4. Balance on current account (1+2+3) .....	+ 1.3	+ 1.9	+ 4.2	+ 2.3
5. Private capital (net) .....	- 1.3	- 3.3	- 3.5	
Long-term capital .....	- 1.1	- 2.4	- 4.4	
Short-term capital .....	- 0.2	- 0.9	+ 0.9	
6. Government transactions (net) <sup>3</sup> .....	- 1.0	- 1.1	- 1.6	- 1.6
7. Errors and omissions .....	+ 0.6	- 0.5	- 0.4	
8. Balance on liquidity basis (4+5+6+7) .....	- 0.3	- 3.0	- 1.4	- 1.2
9. Change in gold stock <sup>4,5</sup> .....	+ 0.2	- 1.1	- 1.7	- 0.5 <sup>6</sup>

<sup>1</sup> Estimated by Federal Reserve Bank of St. Louis.

<sup>2</sup> Includes both public and private transfer payments to private foreigners.

<sup>3</sup> Includes net Government grants to foreign official institutions and capital outflows; excludes transfer payments (e.g., social security) to private foreigners and military spending abroad. The latter is included in the service balance.

<sup>4</sup> Includes changes in gold stock due to U.S. subscriptions to the International Monetary Fund (IMF).

<sup>5</sup> Actual data for first three quarters 1966.

Note: Figures may not add due to rounding.

Source: U.S. Department of Commerce.

in the Government sector of the balance of payments (table, Row 6). The Europeans did assume increased international responsibilities, especially in aid to underdeveloped countries, but the amount was small in terms of Europe's economic potential.

After 1957 the U. S. military and economic grants of dollars to foreigners plus the dollars received from U. S. imports and long-term capital spending abroad was not matched by a corresponding increase in the demand for American products and dollars. Products were available from other sources which, at the going exchange rates, were cheaper or available more quickly than competing American products. Consequently, the large supply of dollars which flowed into private and official institutions in Europe was in excess of European demand for dollar balances to hold and the surplus holdings were used to purchase an average \$1.1 billion per year in gold from the United States.<sup>2</sup>

<sup>2</sup> Only foreign central banks and other official institutions are eligible to purchase gold from U.S. Government stocks. In most cases foreign private persons can sell their holdings of dollars to their central bank for local currency. This, in effect, means that all foreign holdings of dollars represent a potential

The third period was 1965-66. During the last two years the United States balance of payments has been affected adversely by emergence of high domestic total demand relative to supply and increasing prices. The trade surplus (exports minus imports), which had averaged \$5.3 billion from 1960 to 1964, declined to \$4.8 billion in 1965, a \$4.0 billion annual rate in the first half of 1966, and a \$2.9 billion rate in the third quarter. The trade surplus for all of 1966 is estimated at \$3.5 billion, the smallest since 1959. This phenomenon is due to the recent acceleration in our imports, which was largely effected by growth in total demand in this country. The current account surplus will decline even more sharply, from \$4.2 billion in 1965 to an estimated \$2.3 billion in 1966, largely because of the increased foreign exchange cost of Viet Nam.

The close relationship of imports and total demand from 1959 to 1966 is indicated in Figure 1. The annual per cent changes in imports are shown in relation to the annual per cent changes in total demand. Variation in total demand explains 95 per cent of the variation in U. S. imports.<sup>3</sup> This is not surprising since it is reasonable to expect that the growth in demand for foreign products should be roughly in line with the growth in total demand for all products. Indeed, as the years 1959, 1965, and 1966 indicate, when the economy is operating close to capacity and total demand is growing at rates close to 8 per cent, there is a more than proportionate growth in imports.

claim on the U.S. gold stock. However, this is not as dangerous as it may look because most foreign private holdings of dollars are for working balances to finance international trade. So in the absence of a major shift in trade patterns or preferences, the foreign private holdings of dollars should be considered rather stable.

<sup>3</sup> Using a standard statistical test (least squares regression) of the relation between imports and total demand gives the following results:

$$\text{Per cent change in imports} = -18.5 + 4.2 (\text{Per cent change in total demand}) \quad r^2 = .95$$

This illustrates that, if the growth in total demand in the United States is zero for one year, U.S. imports will decline by 18.5 per cent in that year:

$$[-18.5 + 4.2(0) = -18.5]$$

A 4.4 per cent growth in total demand will lead to a zero growth in imports:

$$[-18.5 + 4.2(4.4) = 0]$$

For each 1 per cent growth in total demand in excess of 4.4 per cent, imports will grow by 4.2 per cent:

$$[-18.5 + 4.2(5.4) = 4.2]$$

$$[-18.5 + 4.2(6.4) = 8.4]$$

In spite of the good statistical fit, because observations are from only the most recent business cycle, these particular values of the relationship should not be taken as holding for all business cycles. However, the basic structure of the relationship between total demand and imports is unlikely to change.



This is because, as industries approach capacity, domestic bottlenecks are eased by purchases from foreign sources. Since foreign sources of supply may be less secure (because of long transportation time), there is also an incentive to increase inventories of materials from foreign sources. In addition, with domestic price rises, foreign products become, at least temporarily, more competitive.

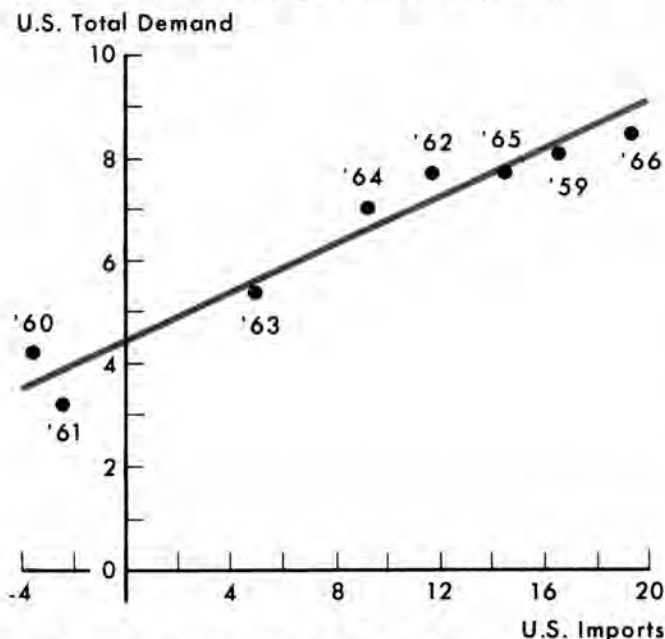
Just as U. S. imports are in general related to domestic total demand, U. S. exports are largely related to total demand in the rest of the world (given the exchange rate and level of technology in the United States). Measuring total demand in the rest of the world is a difficult procedure; however, the growth in world imports exclusive of that of the United States may be an approximate indicator.

In Figure 2, growth in U. S. exports is compared to growth in import demand of the rest of the world. In this relation, per cent changes in U. S. exports are plotted against per cent changes in imports of the rest of the world. One statistical test<sup>4</sup> shows that varia-

tion in imports of the rest of the world explains 87 per cent of the variation in U. S. exports. Since growth in demand for imports by the rest of the world was weaker in 1965, the growth in U. S. exports was also weaker than in the immediately preceding years. Although the growth in U. S. exports is estimated to have recovered considerably in 1966 (11.5 per cent versus 3.9 per cent in 1965), it is still well below the estimated 1966 growth in imports (20 per cent). Our exports also registered a low growth rate in 1965 because of a dock strike in the first quarter. This tended to make the

Figure 1

### Relation of U.S. Imports to Total Demand Per Cent Change from Previous Year



Note: Regression line shows the average per cent change in imports associated with a 1 per cent change in total demand.

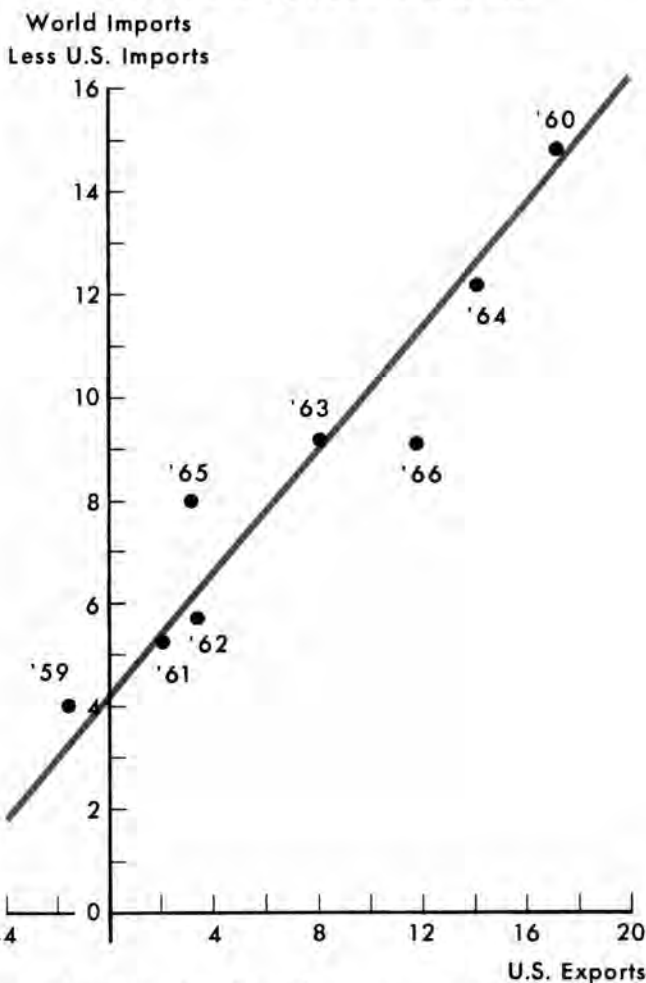
<sup>4</sup>The same statistical test was applied to exports as to imports (see footnote 3). The results are as follows:

$$\text{Per cent change in U.S. exports} = -7.2 + 1.7 (\text{Per cent change in rest-of-world imports}) \quad r^2 = .87$$

This illustrates that if rest-of-world imports are unchanged, U.S. exports will decline 7.2 per cent in that year. If rest-of-

Figure 2

### Relation of U.S. Exports to World Imports Per Cent Change from Previous Year



Note: Regression line shows the average per cent change in U.S. exports associated with a 1 per cent change in world imports.

world imports increase 4.2 per cent, U.S. exports will remain unchanged:

$$[-7.2 + 1.7 (4.2) = 0]$$

But for every 1 per cent increase in rest-of-world imports beyond 4.2 per cent, U.S. exports will increase 1.7 per cent:

$$[-7.2 + 1.7 (5.2) = 1.7]$$

growth in exports in 1966 larger than could be explained by the growth in imports of the rest of the world. With acceleration of imports in response to domestic growth in total demand unmatched by similar growth in exports, the U. S. trade surplus has deteriorated both in 1965 and 1966.

In spite of this weakness in the trade position, the overall balance of payments has shown a smaller deficit in 1965 and 1966 than in the 1958-64 period. Looking at the balance of payments on an annual basis (see chart), there may be some optimism concerning the basic trend of the balance of payments. The deficit on a liquidity basis moved from \$4 billion in 1959 and 1960 to just over \$1 billion in 1966. On an official settlements basis, the improvement was from a \$3.5 billion deficit to a \$0.6 billion surplus in the first three quarters of 1966. However, an investigation of quarterly data (chart) shows sharp up-and-down movements in both measures of the balance of payments through 1964. Only since the last half of 1965 has the balance of payments looked consistently better than in previous years. There is considerable question whether the improvement of the last two years represents an underlying favorable trend or whether it is due to special circumstances.

### Corrective Measures

For more than a decade after the war (1946-57), the U. S. Government, as a matter of policy, encouraged imports and American capital exports. This policy, together with economic and military aid, helped rebuild the devastated countries of Western Europe. With the

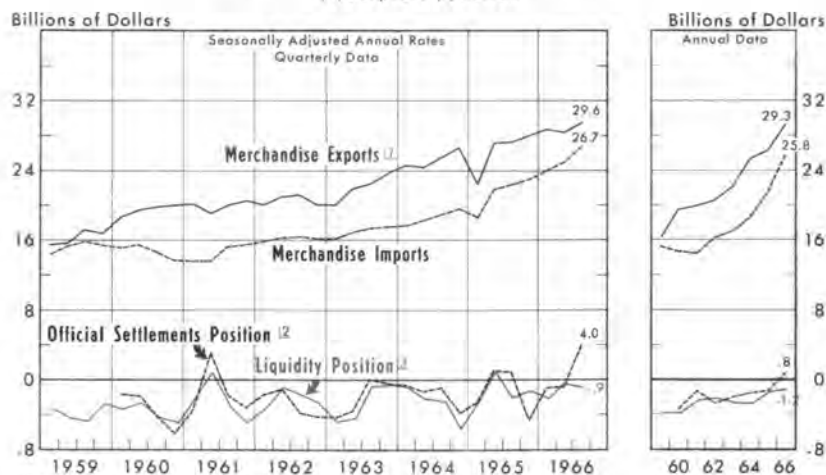
deterioration in the balance of payments starting in 1958, the realization emerged that the United States must take some corrective actions to eliminate its deficit position. Because the weakness in the balance of payments in the late 1950's occurred simultaneously with a period of concern about domestic unemployment and growth prospects, there was a conflict between the achievement of two desirable targets, external balance and domestic expansion. The classical remedy to eliminate the balance-of-payments deficits would have been restrictive domestic policies. But primary consideration was directed to achieving domestic goals,<sup>5</sup> which required application of relatively expansionary monetary or fiscal policies.<sup>6</sup> At the same time, restrictive monetary and stimulative fiscal policies kept European interest rates high. This made solution of our balance-of-payments problem more difficult.

With the major monetary and fiscal tools directed elsewhere, the balance of payments was dealt with by a series of particular actions by the Government to correct deficits in individual segments of the balance of payments. Economic aid to developing countries was "tied" to American sources of supply rather than being open to worldwide competitive bidding (1959); countries in which American military forces were stationed (such as Germany and Italy) were asked to make military purchases from the United States roughly equivalent to foreign exchange cost of maintaining these troops (1961). On the private side, long-term

<sup>5</sup> It is theoretically possible that two conflicting policies could be achieved simultaneously by application of an appropriate combination of different policy tools. If each tool is applied to the target on which it has the strongest impact, it is conceivable that both targets could be obtained. However, such desirable results are difficult to obtain in practice. The required movement in the policy tool may be larger than would be desirable for the smooth functioning of the economy. For example, balance-of-payments equilibrium may call for tight money, with interest rates in excess of average postwar levels, together with easy fiscal policy. As the U.S. financial system has operated on the basis of relatively low interest rates, it may be badly shaken when rates move up significantly in a relatively short period. There was fear expressed in some quarters that the U.S. financial system was being subjected to great stress when long-term rates rose rapidly in the summer of 1966.

<sup>6</sup> Some economists have argued that the relatively moderate monetary expansion from 1960 to 1964 was a policy response to the balance-of-payments deficit. Perhaps this is true. However, for such a policy to have affected the balance of payments, it would have had to attract U.S. capital from foreign to domestic needs. As a matter of record, the 1960-64 period was one of unprecedented increase in U.S. capital outflow in spite of the healthy growth in domestic investment opportunities.

**United States Balance-of-Trade and Balance-of-Payments Positions**  
(+) Surplus; (-) Deficit



(1) Excluding military transfers under grants.

(2) Deficit measured by net decline in U.S. monetary reserve assets plus net increase in liquid and certain nonliquid U.S. liabilities to foreign official agencies.

(3) Deficit measured by net decline in U.S. monetary reserve assets plus net increase in U.S. liquid liabilities to all foreigners.

Latest data plotted: quarterly data: 3rd quarter preliminary; annual data: 1966 estimated

Source: U.S. Department of Commerce

portfolio investment abroad was discouraged by the interest equalization tax (IET) (1963, 1965). This was designed to raise the cost of borrowing by foreigners in United States financial markets by roughly 1 per cent per annum. In addition, a whole range of other administrative actions was taken to encourage exports, foreigners' travel in the United States, the use of American instead of foreign ships, etc.

These actions in some cases had significant impact on the particular components of the balance of payments toward which they were directed; but the overall deficit was not significantly reduced, as items not subject to control experienced larger deficits or smaller surpluses. This was probably because the major components of the balance of payments (imports, exports, and private capital) are so large and important in the economy that only application of major policy tools can effect a significant change in them. Such steps were not taken in the 1958-64 period because it was believed that to do so would have conflicted with achievement of domestic objectives.<sup>7</sup>

### *Recent Developments*

Because a piecemeal policy had obviously been unsuccessful, it was decided in February 1965 to introduce a more comprehensive but "voluntary" program to limit the outflow of funds, which was considered the major cause of the deficit. This program was designed to encourage banks and corporations with extensive foreign commitments to reduce their rate of growth. The program has had some success. Bank commitments are now actually below that permitted by the voluntary program while corporations have shifted much financing of direct investment from U. S. capital markets to foreign capital markets. This has reduced the capital outflow considerably in 1965-66. However, as these actions have taken place at a time when U. S. capital markets are tight and interest rates high, it is impossible to say how much of this improvement was due to the voluntary program and how much to the natural forces in the market place.

The heavy domestic demand for credit, which has pushed some interest rates to their highest level in forty years with loan deposit ratios at record highs, has caused commercial banks to take defensive steps which affect the capital account: (1) domestic credit

rationing has resulted in only the best and largest customers of many banks receiving most of their credit needs. Foreigners, along with other marginal customers, are being rationed out of the market. As a result, short-term and long-term bank credit outflows have been curtailed to a level which is now \$1.2 billion below the voluntary guideline established in February 1965. (2) U. S. banks, faced with a curtailment of domestic sources of loan funds, have turned to the Euro-dollar market to an increasing degree. In the first three quarters of 1966 U. S. banks increased their borrowing from foreign banks (largely through their branches in London and Paris) by about \$1.9 billion versus \$0.1 billion in all of 1965. However, these favorable developments in the capital account have led to only moderate improvement in the overall balance-of-payments position because of the decline in the current account surplus.

The unusually tight domestic credit conditions in the late summer, coupled with the fear of sterling devaluation in July and August, were major factors in the \$1.5 billion increase in borrowing from foreign banks in the third quarter. This is recorded as a short-term capital inflow in the official settlements measure of the balance of payments. This official settlements measure has averaged slightly smaller than the liquidity balance-of-payments measure of the deficit. Official settlements excludes from the deficit increased holdings of dollars by private foreigners. The rationale for using this measure is that foreign private holdings of dollars represent a real demand for international liquidity which holders presumably believe can best be achieved with dollar balances. Because these dollars are satisfying a normal foreign demand (like the export of any good or service) their increase should not be treated in the balance of payments as an increase in the deficit. The sharp increase in dollar holdings of private foreigners in 1966 has pushed the official settlements measure of the balance of payments into surplus during the first three quarters of the year. On this basis, our balance of payments will show substantial improvement in 1966 compared with previous years, while the liquidity measure is estimated to register only a small improvement over last year.

The factors which contributed to a surplus in the official settlements measure of the balance of payments in 1966 may not continue in 1967. The three factors which largely influence private foreign holdings of dollars are the growth in world trade, the interest rate incentive of holding dollar assets compared with alternative international liquid assets, and the degree of uncertainty foreigners have regarding the major alternative sources of international liquidity. In 1966,

<sup>7</sup> Another reason for not applying stronger medicine to the ailing balance of payments was the conviction that the problem was only temporary and that fundamental corrective forces were operating. This optimism was based on increasing European price levels and stable U.S. price levels in the 1959-64 period. Thus it was considered that only actions which produced short-term improvements in the balance of payments were needed.



especially in the third quarter, U. S. interest rates registered an unusually sharp increase, from which they are now retreating, and at the same time there was a sharp speculative attack on the other major reserve currency, the pound sterling. Both events attracted foreign private holdings of dollars. Since these or similar developments are unlikely to occur again in 1967, a sharp increase in private foreign holdings of dollars cannot be relied upon to provide the degree of support for the balance of payments that was achieved in 1966.

In spite of a wide range of administrative measures and the recent short-term capital inflow, the United States continues to experience a serious balance-of-payments problem. There is, however, one ray of hope regarding the future. The previous conflict between simultaneously achieving domestic and international

goals did not arise in 1966. The primary domestic problem has been excessive demand, calling for monetary and fiscal restraint. These same policies are most appropriate to eliminating the balance-of-payments deficit. Within the context of an overall policy of restricting total demand, having monetary policy relatively more restrictive than fiscal policy holds interest rates higher and thereby adds to the favorable balance-of-payments impact of a restrictive policy.

If the monetary restraint which has been applied in the United States since the second quarter continues, some further inflow of short-term funds may be encouraged. And if these tight credit conditions bite into the growth in total demand, imports will decline and the trade surplus will be enlarged. Thus, future prospects for the balance of payments depend to a large measure on monetary and fiscal developments.



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