

December 1965

# FEDERAL RESERVE BANK OF ST. LOUIS

# Review

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FEDERAL RESERVE BANK  
OF ST. LOUIS

P.O. Box 442, St. Louis, Mo. 63166

1965:

## *Monetary Growth, Real Product Growth, Price Increases*

### 1. Introduction

ECONOMIC ACTIVITY continued to surge upward in 1965, the fifth consecutive year of marked economic growth. The rise occurred against a background of substantial monetary expansion and stimulative fiscal actions. The United States balance-of-payments position improved in the second quarter of the year, but this change was not primarily a result of constructive changes in underlying market forces.

Rising economic activity was manifested in a substantial increase of output and employment and in price increases. Unemployment declined to the lowest levels in several years. Prices rose more rapidly than in other recent years.

As 1965 began there was a sizeable discrepancy between the actual and the potential output of the economy. In the fourth quarter of 1964, with the economy operating at an estimated 96 per cent of its potential, the "full employment gap" was considered to be \$24 billion.<sup>1</sup> Moreover, there had been an absence of price inflation for several years. Thus, it appeared that 1965 could be an additional year of sustainable economic expansion with reasonable price stability.

<sup>1</sup>The potential gross national product of the U.S. economy was estimated as that which would be produced if the unemployment rate were at the interim target of 4 per cent. See *Economic Report of the President*, transmitted to the Congress January 1965, pp. 81-85.

On the other hand, there was increased concern about the U.S. balance of payments. While the current account (exports of goods and services minus corresponding imports) had shown improvement in 1964, this improvement was more than offset by deterioration in the capital account.

This article undertakes a description of the progress of the economy during 1965. There is first a discussion of the monetary and fiscal policies which contributed to the year's economic successes, followed by an enumeration of these successes. Next there are discussions of general credit developments, interest rates, and monetary expansion in 1965. The monetary expansion which emerged from the pattern of forces which existed in 1965 was rapid. United States balance-of-payments experience in 1965 is then described, along with a discussion of aspects of the Government's balance-of-payments program. Following this, conclusions are presented.

Discussion of developments during a year is aided by the perspective of experience over a longer period. Throughout much of this article, developments during the year ending in late 1965 are compared with those in a corresponding year-earlier period and the period of economic expansion beginning in early 1961. Further, experience from the peak year 1960 to late 1965 is compared with experience during the 1950-53, 1953-57, and 1957-60 periods. The initial and terminal years defining these periods are peaks in national business activity.<sup>2</sup> Such "peak-to-peak" comparisons provide a basis for gauging relative growth trends.

Several of the charts accompanying the article are designed to facilitate comparison of the past five years with experience during the two preceding five-year periods. The selection of these five-year periods is arbitrary but does permit an evaluation of a recent substantial period of time in relation to other periods of the same length. The period since early 1961 has been one of strong and continual monetary and economic expansion. The other two five-year periods were not; each included at least one period of prolonged stability or decline in the stock of money; each included at least one business recession. The charts highlight the dissimilarity of experience during these periods and afford a basis for considering why the periods were so different.

## 2. The Policy Environment

A substantial rise in the stock of money and markedly expansive fiscal developments both before and dur-

<sup>2</sup>Postwar peaks in national business activity, according to the National Bureau of Economic Research, were in 1948, 1953, 1957, and 1960.

ing 1965 stimulated total demand for goods and services during the year. If the impact of variations in the stock of money on final demand occurs with a lag, monetary developments significant for business activity in 1965 may have been in part those of an earlier period.<sup>3</sup> On the other hand, there appears to be a presumption that the effects of fiscal actions are more nearly simultaneous.<sup>4</sup>

## Money

Growth in the money stock during 1964 and 1965 was rapid by historical standards. Money rose 4.3 per cent from late 1963 to late 1964 (Chart 1). In 1965



money continued to rise at about this same rate. From early 1961 to the end of 1964 the money supply grew at a 3.2 per cent annual rate. The rate of growth has been relatively stable. There is a view that the economy is inherently resilient and, under ordinary circumstances, will not stray far from a stable path unless shocked away by wide movements in the monetary and fiscal environment.<sup>5</sup> In the 1956-60 and 1951-55

<sup>3</sup>For discussions of lags in the response of economic activity to public policy measures see Thomas Mayer, "The Inflexibility of Monetary Policy," *Review of Economics and Statistics*, Nov. 1958, pp. 358-74; Milton Friedman, "The Effects of a Full-Employment Policy on Economic Stability: A Formal Analysis," *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953), pp. 117-32; and John M. Culbertson, "Friedman on the Lag in Effect of Monetary Policy," *Journal of Political Economy*, Dec. 1960, pp. 617-21.

<sup>4</sup>Edgar C. Brown, Robert M. Solow, Albert Ando, and John H. Kareken, "Lags in Fiscal and Monetary Policy," *Stabilization Policies*, Commission on Money and Credit (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963), pp. 1-63.

<sup>5</sup>For an elaboration of such a view see Milton Friedman, "A Monetary and Fiscal Framework for Economic Stability," *The American Economic Review*, June 1948, pp. 245-64.

periods the growth in money was slower and less even.<sup>6</sup> (Section 7 provides a more complete discussion of monetary expansion in 1965.)

### Federal Budget

Fiscal actions were stimulative in 1965. The full employment surplus declined from an annual rate of \$4.8 billion in the last half of 1964 to approximate balance in the last half of 1965 (Chart 2). Government expenditures, which rose only slightly from the second quarter of 1964 to the second quarter of 1965, jumped sharply in the recent third quarter. Expenditures in the third quarter of 1965 were 7 per cent higher than one year earlier. While receipts rose in 1965, their increase was moderated by reductions in excise taxes.



A salient characteristic of 1965 and of the business expansion since 1961 has been the emphasis placed on fiscal actions as a means of stimulating economic activity. In 1962, during an early phase of the expansion, depreciation schedules and tax credits were changed. These measures were taken with a view to stimulating investment. In early 1964 tax rates both for personal incomes and for corporations were lowered. By virtue of the reduction in rates on personal incomes, after-tax income rose more rapidly than would otherwise have

<sup>6</sup>The standard error of the estimate around linear trends for 1961-64, 1956-60, and 1951-55 are \$1.0 billion, \$1.5 billion, and \$1.1 billion, respectively.

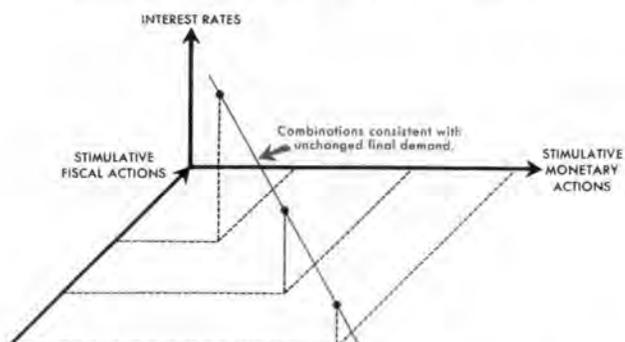
been the case. A reduction in excise taxes effective in May 1965, though not affecting money incomes directly, raised "real" incomes by increasing the quantities that each dollar could purchase. As a result, final demands for the product of the economy were stimulated. This may also have served to enhance the profit outlook of businesses and, thereby, to stimulate investment.

Measures which reduce the net flow of Federal receipts from a given income stream, in addition to their more or less direct effect on consumer spending and business investment, serve to cause the Federal deficit at that level of income to be greater than would otherwise be the case. Thus, credit demands by the Federal Government at that level of income are greater than would otherwise be the case. In short, as a result of tax rate decreases or expenditure increases, upward pressures are exerted on interest rates at any given level of income.

### Monetary Policy—Fiscal Policy Trade-Off

Federal budget actions to stimulate, maintain, or limit final demand may be viewed as an alternative to monetary actions. But whereas stimulative fiscal actions serve to raise interest rates at any given level of income, stimulative monetary actions tend to reduce them. Figure 1 is a greatly simplified illustration of this proposition. The red line represents a locus of all combinations of monetary policy, fiscal policy, and interest rates which are consistent with any given rate of increase in final demand. For example, the rate of increase in final demand could be that which results in full employment—or which results in an acceptable choice or "trade-off" between employment increases and price increases.

Figure 1  
**Monetary Policy and Fiscal Policy Trade-Off**



If higher interest rates would contribute to achievement of ultimate goals of public policy, for example if

they could serve to foster a more viable international balance-of-payments situation, it would be useful to move along the red line toward "tighter" monetary policy and "easier" fiscal policy.<sup>7</sup>

To the extent that fiscal policy is not flexible in the short run, there is at any given time only one rate of monetary expansion and one level of interest rates which is consistent with optimum final demand.

### 3. Demand, Production, Employment, and Prices

The continued expansive monetary environment along with successive doses of fiscal stimulation nurtured a sustained rise in total demand during 1965. The increase in aggregate demand, in turn, resulted in part in more real product and employment and in part in price increases.

#### Dollar Demand for Goods and Services

Dollar demand for the economic product continued to rise rapidly in 1965. Total spending by consumers, business, and government on currently produced goods and services reached an annual rate of \$669 billion<sup>8</sup> in the third quarter, 7 per cent higher than in the third quarter a year earlier (Table I). Since 1960 total spending has risen 6 per cent per year, a somewhat more rapid rate of growth than in the 1957-60 and 1953-57 periods.

Far and away the bulk of total spending, \$637 billion or 95 per cent, was for domestically produced goods and services. The remainder, \$32 billion or 5 per cent, was for foreign goods and services. Imports were 12 per cent higher than in 1964 compared with an average annual rate of increase of 6 per cent since 1960.

**Consumer spending.** The major portion of total spending was directed, as always, toward consumer goods. Consumer spending reached \$432 billion in

the recent third quarter, up 7 per cent from the corresponding year-earlier period (Table I). Such spending has risen at a 6 per cent annual rate since 1960. Consumer outlays in relation to after-tax income remained near the 92 per cent level during much of 1965, after a moderate decline immediately following the 1964 tax cut.

**Business Spending.** Investment spending rose \$9.4 billion or 10 per cent in 1965, reaching \$102 billion in the third quarter.<sup>9</sup> Unless the public decides to save more out of any given level of income, a rise in investment is accompanied by a substantially greater rise in income. Variations in investment are therefore strategic in the income determination process. Fixed investment in 1965 was 8 per cent greater than in 1964. Since 1960 fixed investment has risen at an average annual rate of 6 per cent, about the same as in the 1953-57 period and about twice as rapidly as in the 1957-60 and 1950-53 periods (Table I).

Business added to total spending by building inventories in 1965. In the third quarter inventories were accumulated at a \$6.1 billion annual rate compared with a \$3.8 billion rate a year earlier. Notwithstanding the accumulation, inventories in relation to sales continued to edge downward during most of 1965. A few years ago, when desired inventories were apparently greater in relation to sales than now, a given dollar increase or decrease in sales resulted in a much greater change in inventories than has recently been the case when the desired inventories-to-sales relationship is apparently lower.

<sup>9</sup>Investment spending includes fixed investment and changes in business inventories. Fixed investment includes spending on residential structures in addition to spending on plant and equipment.

Table I

#### DOLLAR DEMAND FOR GOODS AND SERVICES

	(Valued at Current Prices)					
	3rd Qtr. 1965 (Billions)	Growth in Dollar Demand (Annual Rates)				
		3rd Qtr. 1964 to 3rd Qtr. 1965	Previous Peak to Date 1960-65e	Peak-to-Peak Periods		
			1957-60	1953-57	1950-53	
Total expenditures	\$669.4	6.9%	5.9%	4.7%	4.6%	8.8%
Consumer	432.2	6.8	5.7	4.9	5.2	6.4
Business	102.0	10.2	6.4	3.3	6.6	-0.9
Fixed investment	95.9	8.0	6.0	2.3	6.3	-3.3
Government	135.2	5.1	6.2	5.0	1.3	29.2
Gross national product <sup>1</sup>	677.5	6.7	5.9	4.5	4.9	8.6

e—Estimated

<sup>1</sup>The sum of consumer, business, and government expenditures plus net exports (exports minus imports).

<sup>7</sup>To the extent that interest rates (as a cost of borrowing) are an important consideration in investment decisions, higher interest rates may limit investment and growth. Hence, a choice between a more rapid rate of growth and international balance may emerge. If higher interest rates were chosen for international considerations, it may be that such fiscal tools as tax credits or other incentives may be desirable to facilitate growth.

<sup>8</sup>Gross national product in the third quarter of 1965 was \$677.5 billion. In estimating GNP, imports are subtracted from exports and the difference is presented as net exports. GNP exceeds total spending by the amount of net exports.

## Results Flowing from Dollar Demand

**Real product.** In response to the attraction of aggregate money demand, there was a strong rise in output in 1965. Real output expanded 5 per cent in the year ending in the third quarter. This increase compares with a 5.2 per cent rise in the preceding year and an average growth of 4.5 per cent since 1960. Growth in real output in earlier comparable periods—aside from the 1950-53 period of the Korean War—was substantially less rapid (Table II).

The bulk of national output, about 94 per cent, was sold in domestic markets. The remainder went to foreign markets. Despite Government efforts to expand exports, the rise in 1965 was only 5.4 per cent compared with 13 per cent the preceding year and a 7 per cent average annual rate of increase since 1960. Net exports (exports less imports) declined from the third quarter of 1964 to the third quarter of 1965 (Table II).

Expanding economic output in 1965 and since 1961 was made possible by growth in physical capacity, improvement in technology, and increased employment of labor. Physical capacity was increased by fixed investment expenditures which rose at a 6 per cent rate in 1965, unchanged from the rate in 1964. Since 1960 such spending has risen at a 5 per cent average annual rate, a substantially more rapid rate of growth than in earlier peak-to-peak periods (Table II).

**Employment.** Employment expanded rapidly in 1965. From November 1964 to November 1965 total civilian employment rose 3 per cent (Chart 3). In the preceding year employment rose 2.1 per cent. Since 1960, the most recent peak in business, employment has risen at a 1.6 per cent annual rate, somewhat more rapidly than in the 1953-57 and 1950-53 periods and nearly twice the rate of increase in the 1957-60 period (Table III).

Chart 3  
Total Civilian Employment



As an indication of the strength of the labor market, employment rose one and one-half times as rapidly in 1965 as did the population of working age (Table III). This means that "marginal" workers were drawn into the labor market. These workers may have been less productive than those already employed. If this were the case, it would provide some indication that demands for workers are rising more rapidly than the economically efficient "capacity" of the labor force.

Table III  
GROWTH IN EMPLOYMENT AND POPULATION  
OF WORKING AGE

	(Annual Rates)	
	Employment	Population Aged 18-64
1964-65 <sup>1</sup>	2.9%	1.8%
1960-65	1.6	1.3
1957-60	0.9	0.8
1953-57	1.2	0.7
1950-53	1.2	0.7

<sup>1</sup>November to November.

Table II

### REAL OUTPUT OF GOODS AND SERVICES

(Valued at 1958 Prices)

	3rd Qtr. 1965 (Billions)	Growth in Output (Annual Rates)				
		3rd Qtr. 1964		Peak-to-Peak Periods		
		to 3rd Qtr. 1965	Previous Peak to Date 1960-65e	1957-60	1953-57	1950-53
Total (GNP)	\$609.7	4.7%	4.5%	2.5%	2.3%	5.1%
Consumer	396.7	5.1	4.5	3.1	3.5	2.9
Business	92.9	8.0	5.2	1.7	3.0	-4.1
Fixed investment	87.0	5.8	4.8	0.6	2.9	-0.4
Government	112.9	2.2	3.4	2.1	-2.7	23.6
Net exports	7.3	-16.1	9.9	-11.5	54.1	-25.9

e—Estimated

Unemployment declined significantly in 1965. As a share of the labor force, unemployment averaged 4.3 per cent in the three months ending in November 1965 compared with 5.1 per cent a year earlier. Unemployment of married men declined from 2.4 per cent a year ago to 2.0 per cent.

**Prices.** Prices rose more rapidly in 1965 than in other recent years. Price increases have been substantial and quite general, responding to strong total de-

mand. As Table IV indicates, each of the major price indexes rose at an increased rate, with wholesale prices showing the most pronounced surge. The rate of increase in wholesale prices of industrial goods, 1.3 per cent in the year ending in October, compares with essentially no increase in the five years since 1960. Further, the change in the trend of these prices may have been greater than the indexes indicate since, in response to strong demand, transactions prices have probably risen relative to quoted prices.

The major part of the increase in consumer prices was accounted for by rising prices of services (including housing). In service industries, or other areas of the economy where technological gains are relatively limited, price increases are a means by which productive factors needed for those uses can participate in the general rise in living standards. Unless increases in real income are made available to the general population by price decreases in sectors experiencing greatest technological gains, there must be an expansion in dollar incomes via price increases if society wishes to hold workers and other productive facilities in sectors of more slowly improving technology. Only if there are price decreases in fields of greatest efficiency can increases in the general level of prices be avoided.

### Price—Employment Trade-Off

The rise in prices during 1965 may be viewed as the social cost of such marked expansion in employment and decline in unemployment. There may be a trade-off between further gains in employment or declines in unemployment on the one hand and price increases on the other. Figure 2 is a greatly simplified illustration

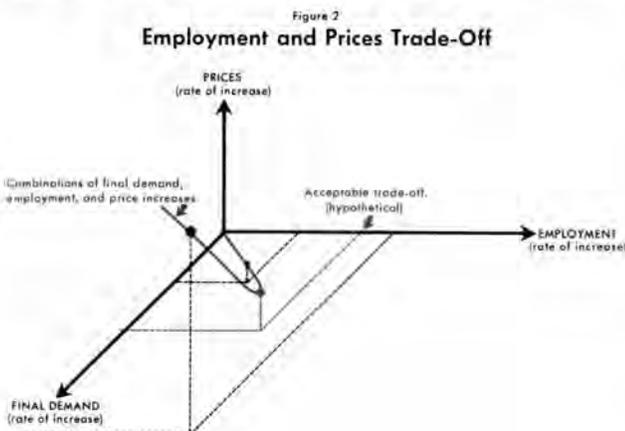


Table IV

### PRICES

(Annual Rates of Change)

	Year Ending Late 1965 <sup>1</sup>	Previous Peak to Date 1960-65 <sup>e</sup>	Peak-to-Peak Periods		
			1957-60	1953-57	1950-53
Consumer price index	1.8%	1.2%	1.7%	1.3%	3.6%
Services	2.6	2.0	3.3	3.0	4.0
Commodities	1.3	0.9	1.1	0.5	3.2
Food	2.6	1.4	1.2	0.6	3.7
Nonfood	0.7	0.6	1.0	0.6	2.7
Wholesale price index	2.3	0.3	0.6	1.7	2.2
Industrial commodities	1.3	0.1	0.6	2.5	2.7
Implicit deflator	1.9 <sup>2</sup>	1.4	2.0	2.5	3.3

<sup>e</sup>—Estimated

<sup>1</sup>October unless otherwise indicated.

<sup>2</sup>Third quarter.

tion of such a trade-off.<sup>10</sup> The solid red line represents the locus of combinations of rates of increase in employment (or, alternatively, declines in unemployment) and prices which emerge, given our institutional structure and productive process,<sup>11</sup> from successive increases in final demand. The figure is drawn to suggest that beyond some point, as the rate of growth in final demand increases further, a rise in employment is accompanied by an increasingly rapid rise in prices. The conjunction of dotted red lines depicts the "acceptable" trade-off alluded to in connection with Figure 1, p. 3.

## 4. Credit Developments

### Credit Uses

Credit flows to ultimate users were at an annual rate of \$64 billion in the third quarter of 1965 (Table V).<sup>12</sup> While demands for credit were strong, the flow was \$6 billion less than one year earlier. After remaining near an annual rate of \$70 billion from the third quarter of 1964 to the first quarter of 1965, the flow of credit declined, chiefly reflecting a shift by the Federal Government from net borrowing to net debt repayment.

While total credit flows were less in the third quarter of 1965 than a year earlier, there was a rise

<sup>10</sup>Figure 2 is of necessity drawn from some starting point in terms of capacity utilization and rate of unemployment.

<sup>11</sup>For example, the success of a wage-price guideline policy may alter the trade-off between prices and employment.

<sup>12</sup>Data reported in this section for the third quarter of 1964 are averages of the second, third, and fourth quarters. Data for the third quarter of 1965 are averages of the second and third quarters. To the extent that there is an upward trend in credit flows, the third quarter of 1965 is biased downward. Averages are used instead of the annual rate of flow for a single quarter in an effort to reduce the effects of random or irregular movements. These data are from the flow-of-funds statistics published regularly in the Federal Reserve *Bulletin*.

Table V

## FUNDS RAISED BY ULTIMATE USERS

(Billions of Dollars, Seasonally Adjusted Annual Rates)

	Credit Flows			Changes in Credit Flows		
	3rd Qtr. 1965 <sup>1</sup>	3rd Qtr. 1964 <sup>2</sup>	1960	3rd Qtr. 1964 to 3rd Qtr. 1965	1963 to 1964	1960 to 3rd Qtr. 1965
Total .....	63.5	69.8	33.1	- 6.3	8.9	5.9
U. S. Government .....	-4.1	6.4	-2.0	-10.5	1.7	-0.4
Foreign borrowers .....	2.1	4.9	2.0	- 2.8	1.3	0.1
Private domestic nonfinance <sup>3</sup> ..	65.5	58.6	33.0	6.9	5.9	6.3

<sup>1</sup> Average of second quarter and third quarter (preliminary).<sup>2</sup> Average of last three quarters.<sup>3</sup> Includes households, businesses, and state and local governments.

Totals may not add due to rounding.

Source: Board of Governors of the Federal Reserve System (Flow-of-funds accounts).

in flows to the private domestic economy. Private domestic borrowing rose \$7 billion over the rate in the third quarter of 1964, reaching an annual rate of \$66 billion (Table V). This expansion in private credit flows was about the same as the annual average rise since 1960.

The Federal Government reduced its debt at a \$4 billion annual rate during the third quarter of 1965, whereas it borrowed heavily during late 1964 (Table V). Had there not been a change in tax laws, Federal debt reduction would probably have been even greater. During the period of economic expansion since 1961 the Federal Government has generally been a net borrower. In contrast, in earlier periods of rising economic activity the Federal Government was frequently a net supplier of funds.

Foreign "takings" of credit were at an annual rate of \$2.1 billion during the third quarter, down nearly \$3 billion from the rate in the corresponding year-earlier period. From 1963 to 1964 the flow of foreign borrowing increased \$1.3 billion but on the average has risen only \$100 million a year since 1960 (Table V). The slowdown in borrowing during 1965 reflects largely the effects of a program of voluntary credit restraint (discussed on p. 14).

## Credit Sources

Funds flowed from surplus to deficit spending units through several channels. A substantial portion of credit demands, about 70 per cent in 1965, was met through financial intermediation (Chart 4). The remainder was met chiefly from direct lending by households, nonfinancial businesses, or state and local governments (Table VI, Private domestic nonfinance).

Intermediaries supplied funds to borrowers at a \$47 billion annual rate in the third quarter of 1965, \$2.1 billion greater than the flow in the same period of 1964 (Table VI).<sup>13</sup> Intermediaries serve economic functions for both lender and borrower. They are a means by which the lending surplus unit can efficiently make funds available and at the same time experience little risk. Rather than lend to the ultimate borrower, a surplus unit can hold the liability of a financial in-

<sup>13</sup> Intermediaries include savings and loan associations, mutual savings banks, insurance companies, noninsured pension plans, finance companies, security brokers and dealers, and open-end investment companies. Time deposits in commercial banks are also included as intermediated funds.

Table VI

## FUNDS ADVANCED

(Billions of Dollars, Seasonally Adjusted Annual Rates)

	Credit Flows			Changes in Credit Flows		
	3rd Qtr. 1965 <sup>1</sup>	3rd Qtr. 1964 <sup>2</sup>	1960	3rd Qtr. 1964 to 3rd Qtr. 1965	1963 to 1964	1960 to 3rd Qtr. 1965
Total to ultimate users .....	63.5	69.8	33.1	-6.3	8.9	5.9
Intermediation .....	47.0	44.9	25.6	2.1	1.4	4.2
Nonbank finance <sup>3</sup> .....	27.6	29.8	19.8	-2.2	1.1	1.5
Commercial banks (time deposits) <sup>4</sup> .....	19.4	15.1	5.8	4.3	0.3	2.7
Other .....	16.7	25.2	7.6	-8.5	7.6	1.8
Commercial banks (other) <sup>5</sup> ..	- 0.8	8.2	3.1	-9.0	2.6	-0.8
Monetary authorities .....	3.2	3.6	0.8	-0.4	0.5	0.5
Federal Government .....	4.8	4.0	2.3	0.8	1.1	0.5
Foreign .....	- 1.6	1.0	1.2	-2.6	-0.4	-0.5
Private domestic nonfinance <sup>6</sup> ..	11.1	8.4	0.2	2.7	3.8	2.1
Memo: Commercial banks (total)	18.5	23.3	8.9	-4.8	2.9	1.9

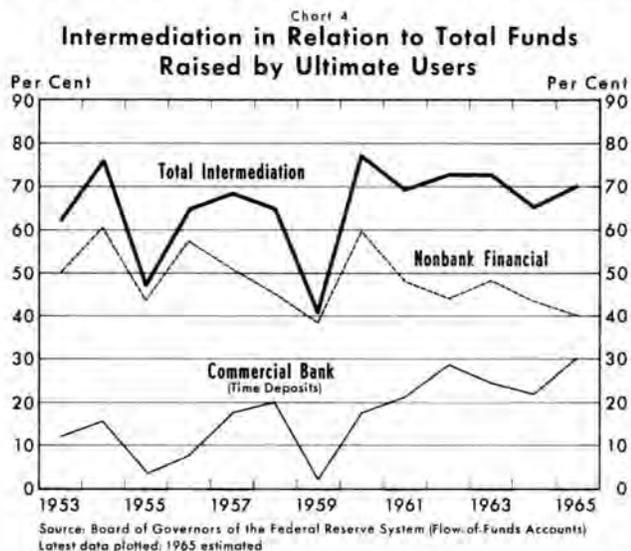
<sup>1</sup> Average of second quarter and third quarter (preliminary).<sup>2</sup> Average of last three quarters.<sup>3</sup> Includes savings and loan associations, mutual savings banks, insurance companies, noninsured pension plans, finance companies, security brokers and dealers, and open-end investment companies. The figures are net; that is, credit raised by these institutions is subtracted out.<sup>4</sup> Funds matched by time deposits.<sup>5</sup> Earning assets of banks, less security issues and funds matched by time deposits.<sup>6</sup> Includes households, businesses, and state and local governments.

Totals may not add due to rounding.

Source: Board of Governors of the Federal Reserve System (Flow-of-funds accounts).

termediary. Financial intermediaries pool risk and thereby reduce average risk. Gains from risk reduction are passed on to borrowers in the form of lower competitive interest rates. Intermediaries also provide a service to borrowers by pulling together small and large amounts of funds and putting together loans tailored to specific needs.

Commercial banks have been increasingly involved in intermediation (Chart 4). The flow of time de-



posits—including certificates of deposit and savings deposits—was at an annual rate of \$19 billion in the third quarter of 1965, more than \$4 billion greater than in the corresponding year-earlier period (Table VI). Flows of time deposits have expanded at an average of nearly \$3 billion per year since 1960. In 1953 banks intermediated, through the flow of time deposits, 12 per cent of total funds raised by ultimate users; they intermediated 18 per cent in 1957 and 1960 and 30 per cent in 1965 (Chart 4). The factors contributing to this change are discussed on p. 9.

## 5. Commercial Bank Expansion

While total credit expansion was less in the third quarter of 1965 than a year earlier, the amount sup-

plied through expansion of commercial bank time deposits was greater. Banks were apparently able to offer increasingly attractive terms to surplus spending units and to provide borrowers with funds on favorable terms, thereby diverting demand away from competitors.

## Changes in Assets

Earning assets of commercial banks rose at a \$20 billion annual rate in the recent third quarter, reaching \$294 billion (Table VII).<sup>14</sup> In the corresponding year-earlier period earning assets rose at a \$24 billion annual rate, and in the first quarter of 1965, at a \$29 billion rate.

Although total earning asset expansion of commercial banks was less in the third quarter of 1965 than a year earlier, there was a continued expansion in bank holdings of loans and securities originating from the private economy and from state and local governments. Commercial bank holdings of earning assets other than U.S. Treasury securities rose at a \$27 billion annual rate in the third quarter of 1965, reaching \$231 billion. In the third quarter of 1964 these assets rose at a \$25 billion annual rate (Table VII). On the

<sup>14</sup>Data discussed in connection with Table VII are from the flow-of-funds accounts. Third quarter data for 1964 are averages of the second, third, and fourth quarters. Third quarter 1965 data are averages of the second and third quarters (see footnote 12).

Table VII

### COMMERCIAL BANK CREDIT

(Billions of Dollars)

	Levels			Flows <sup>1</sup>		
	3rd Qtr. 1965 <sup>2</sup>	3rd Qtr. 1964 <sup>3</sup>	1960	3rd Qtr. 1965 <sup>2</sup>	3rd Qtr. 1964 <sup>3</sup>	1960
Total earning assets .....	294.3	271.7	201.7	19.6	23.8	9.0
Earning assets other than						
U.S. Government securities ...	231.1	207.0	138.2	26.8	24.8	7.3
U.S. Government securities ....	63.2	64.7	63.5	- 7.2	- 1.0	1.7
State and local obligations ....	36.9	32.5	17.6	5.9	4.1	0.6
Business loans .....	60.6	51.7	40.2	9.9	9.4	2.2
Real estate loans .....	47.0	42.5	28.7	5.7	4.5	0.6
Consumer credit .....	32.2	28.8	20.6	4.7	2.7	1.7
Other bank loans <sup>4</sup> .....	99.5	85.0	61.9	13.4	11.6	2.8
Other earning assets .....	15.5	18.2	9.4	- 2.8	2.0	1.4

<sup>1</sup>Seasonally adjusted annual rates.

<sup>2</sup>Average of the last three quarters. Levels data are estimated.

<sup>3</sup>Average of second quarter and third quarter (preliminary).

<sup>4</sup>Contains the following categories (figures are for 1960 levels):

Households .....	7.2
Farm business .....	5.0
Nonfarm noncorporate business .....	9.1
Corporate business .....	31.1
Savings and loan associations .....	0.2
Finance companies .....	6.2
Rest of the world .....	3.0
Total .....	61.9

Totals may not add due to rounding.

Source: Board of Governors of the Federal Reserve System (Flow-of-funds accounts).

average, this flow expanded \$3.8 billion per year from 1960 to the third quarter of 1965.

Business loans were the most rapidly growing class of commercial bank assets. The flow into such assets in the third quarter of 1965 was at a \$10 billion annual rate, about the same as a year earlier (Table VII). Since 1960 the flow has risen \$1.5 billion per year. Real estate loans and obligations of states and local subdivisions each expanded at a \$6 billion annual rate in the third quarter of 1965, somewhat greater than the flow a year earlier. Consumer loans rose at a \$5 billion annual rate compared with a \$3 billion rate in the third quarter of 1964.

### ***Financing the Expansion***

Funds for expansion of commercial bank assets other than U.S. Government securities were from two chief sources: growth in time deposits (and other market instruments) and reductions in holdings of Treasury securities. Also, the reserve base increased more than necessary to accommodate the growth in time deposits as a result of Federal Reserve System actions and member bank borrowing from the Federal Reserve System.

**Merchandising Time Deposits.** The "merchandising" of time deposits and other liabilities has been the chief means by which the banking system has acquired funds.<sup>15</sup> In the third quarter of 1965 time deposits rose at a \$19 billion annual rate compared with a \$15 billion rate in the third quarter of 1964 and a \$6 billion rate in 1960. Commercial bank time deposits consist of an assortment of liabilities. In terms of both flows and outstanding amounts the most important time deposits are passbook savings accounts, which are generally available to depositors on demand, and large denomination certificates of deposit, which are a highly liquid short-term market instrument.<sup>16</sup>

The flow of savings deposits at weekly reporting member banks (the only readily available source of current data for such deposits) rose at an annual rate of \$5.2 billion in the third quarter of 1965, reaching \$44 billion. In the third quarter of 1964 these savings rose at a \$3.4 billion annual rate.

Large negotiable certificates of deposit at weekly reporting banks rose at a \$3.1 billion annual rate in the third quarter of 1965, reaching \$16 billion at the end of the quarter. By late September CD rates offered

by many large commercial banks had reached the maximum permitted by the Board of Governors, and the spread between these rates and the yields on three-month Treasury bills became much less than previously. Effective December 6 the Board of Governors raised the maximum rate on CD's from 4.5 per cent to 5.5 per cent.

From a modest beginning of just over \$1 billion in late 1960, certificates of deposit have since risen at a rapid pace. From the end of 1960 to the third quarter of 1965 they increased on the average about \$3 billion per year. In mid-1960 yields on other short-term market instruments such as Treasury bills fell below maximum rates banks could pay on time deposits. Throughout the economic expansion beginning in early 1961 rates paid on CD's have generally been above the yield on U. S. Treasury bills.

**Reduction of Holdings of Treasury Securities.** Commercial bank holdings of U. S. Treasury securities declined sharply in 1965. During the recent third quarter bank holdings of these securities declined at a \$7.2 billion annual rate, reaching a level of \$63 billion. One year earlier banks held \$65 billion of these assets. Because a large share of these securities are used as "pledged" assets behind deposit liabilities to the Federal Government and state and local governments, the extent to which they can be reduced further is limited. Treasury securities also serve individual banks as a buffer for deposit losses.

The banking system does not gain funds from security sales. However, such sales are the initial step in the process whereby banks shift from these relatively low yielding assets to loans or other relatively high yielding assets.

**Member Bank Borrowing.** As a source of additional reserves to the banking system member bank borrowing has been negligible in recent years. Borrowing from Reserve Banks declined at a \$70 million annual rate during the third quarter of 1965, reaching \$500 million at the end of the quarter. During the comparable year-earlier period such borrowing rose at a \$200 million annual rate.

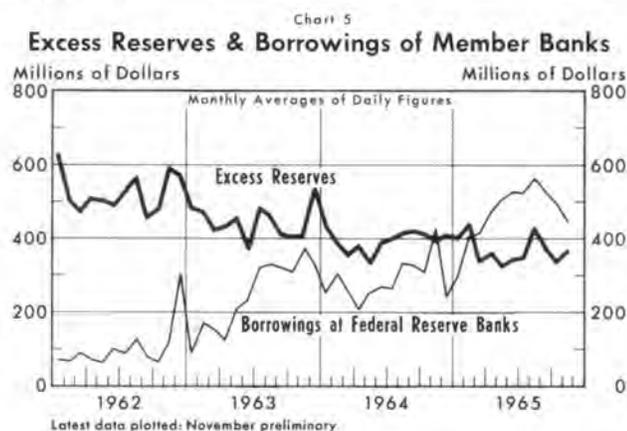
Commercial bank borrowing both from banks and nonbank sources rose markedly in the third quarter of 1965, continuing an upward trend which began in 1961. Such borrowing rose at a \$3 billion annual rate and was \$4.1 billion at the end of the quarter. During the corresponding year-earlier period interbank borrowing declined at a \$3 billion rate.

<sup>15</sup> Commercial banks have also obtained funds through sale of subordinated debentures and capital notes.

<sup>16</sup> See this *Review* of March 1963 for an article entitled "Movements in Time and Savings Deposits, 1951-1962."

Interbank borrowing does not add to total reserves or to total investible funds of the banking system. It is one of several mechanisms whereby excess reserves of the banking system are kept at an economically efficient level. Viewed from the standpoint of net changes over a year, interbank borrowing may be considered simply as a type of intermediation, whereby banks transfer funds from one to another. The borrowing banks are enabled to make more loans or purchase more securities, while the lending banks extend correspondingly less credit to the public.

**Member Bank Excess Reserves.** Bank asset expansion is limited by the level of required reserves in relation to the total amount of reserves available. Required reserves cannot legally exceed the total reserve base of the banks. In practice, given the total reserve base, the extent to which required reserves can rise is influenced further by the banking system's desire or need to hold reserves in excess of legal requirements. Excess reserves were about unchanged during the third quarter of 1965 and totaled about \$350 million at the end of the quarter. From the third quarter of 1964 to the recent third quarter excess reserves declined \$60 million (Chart 5). Excess reserves were \$360 million in November.



Some analysts regard the level of excess reserves as a measure of monetary tightness or ease. They reason, quite correctly, that the amount of excess reserves at any given time represents, in a certain abstract sense, the unused lending capacity of the banking system. But in another sense, the existence of excess reserves is evidence of the impracticability of every bank's keeping its reserves at exactly the legal requirement in every reserve computation period. Other analysts accordingly prefer to emphasize dynamic operations through time, stressing what has been happening to total reserves or other aggregate reserve measures (discussed on p. 12).

## 6. Interest Rate Increases

Demands for funds in 1965 were strong, reflecting the marked rise in business activity. Since supplies of funds did not keep pace with rising demand, interest rates were higher in December 1965 than a year earlier. Most of the rise in interest rates occurred after mid-year, a time of the year when there are strong seasonal demands for funds. In early December the Federal Reserve discount rate was raised from 4.00 per cent to 4.50 per cent, and the maximum rate permitted under Regulation Q on time certificates of deposit was raised from 4.50 per cent to 5.50 per cent.

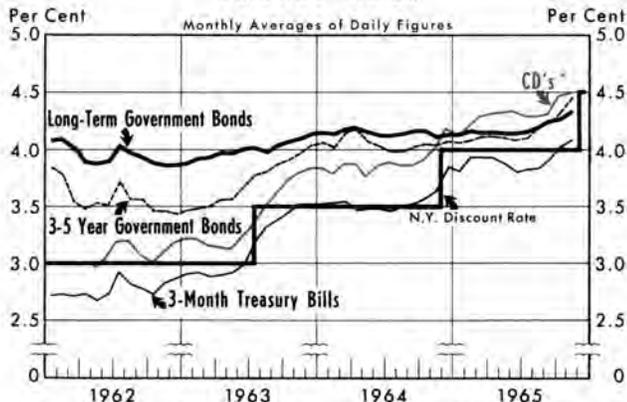
Interest rate increases occurred during the year on marketable debt of both short and long maturity. Yields on three-month Treasury bills rose from 3.84 per cent in December 1964 to 4.40 per cent in December 1965 (Table VIII). These yields rose somewhat in early 1965 and then rose further after midsummer. The secondary market yield on certificates of deposit rose from 4.16 per cent in December 1964 to 4.90 per cent in December 1965. Rates paid on newly issued CD's in October and November were frequently quoted at 4.50 per cent, the maximum then permitted under Regulation Q; they rose to about 4.75 per cent after the maximum was raised to 5.50 per cent in December. During the past year rates on prime commercial paper maturing in four to six months rose from 4.17 per cent to 4.70 per cent. Yields on directly placed finance company paper increased from 3.98 per cent to 4.58 per cent, and yields on 90-day bankers' acceptances rose from 4.00 per cent to 4.55 per cent.

Table VIII  
SELECTED INTEREST RATES  
Averages of Daily Figures  
(Per Cent Per Annum)

	Dec. 1965 <sup>1</sup>	Dec. 1964
Prime commercial paper (4 to 6 months) .....	4.70	4.17
Finance company paper placed directly (3 to 6 months).....	4.58	3.98
Prime bankers' acceptances (90 days) .....	4.55	4.00
U.S. Government Securities (Taxable)		
3-month bills .....	4.40	3.84
6-month bills .....	4.58	3.94
3- to 5-year bonds .....	4.79	4.07
Long-term bonds .....	4.45	4.14
CD's (secondary market rate) <sup>2</sup> .....	4.90	4.16
Corporate bonds (Aaa) .....	4.68	4.44
State and local government bonds (Aaa) .....	3.40	3.01
Conventional mortgages .....	5.90	5.80

<sup>1</sup> Estimated. December estimates are for the week ending December 17.  
<sup>2</sup> Negotiable time certificates of deposit at commercial banks.

Chart 6  
Selected Yields



\*Monthly averages of weekly figures, secondary market rates for negotiable time certificates of deposit with a maturity of three months.  
Sources: Board of Governors of the Federal Reserve System and Salomon Brothers & Hutzler.  
Latest data plotted: November

Accompanying the increases in short-term interest rates were increases in yields on debt of greater maturity. Yields on long-term Government bonds increased from 4.14 per cent to 4.45 per cent in the year ending in December. Corporate Aaa bond yields rose from 4.44 per cent in late 1964 to 4.68 per cent in December 1965. Yields on state and local government Aaa bonds increased from 3.01 per cent to 3.40 per cent. Conventional mortgage interest rates changed relatively little over the past year, reflecting weakness in residential construction.

### Interpretation of the Interest Rate Increases

The rise in interest rates has been viewed by some as evidence of restrictive monetary action. However, as suggested above, to the extent that the recent mix of total stabilization policy includes greater fiscal stimulation, there is a rise in the interest rate consistent with that mix and with any given level of final demand (see Figure 1). Thus, interest rates could have been lower if monetary expansion had been greater, but this would have caused total Government economic policy to have been even more stimulative than it was.

According to another interpretation, not inconsistent with the first, the working up in interest rates indicates that credit demands tended to exceed forthcoming supplies at earlier prevailing rates. In this view, rising interest rates were necessary for additional funds to be attracted into the market or into intermediation and for limited funds to be allocated efficiently. Also, the rise in interest rates since mid-1965 has been in some measure a manifestation of seasonal pressures.

### Effects of Interest Rate Increases

There are several ways by which interest rate increases may affect economic activity. Because rising

## FEDERAL RESERVE SYSTEM ACTIONS DURING 1965

### Purchases of U. S. Government Securities

	Millions of Dollars
1964 .....	3,451
1965 (through December 15) .....	3,780

### Discount Rate (New York)

In effect January 1, 1965 .....	4 %
December 6, 1965 <sup>1</sup> .....	4½%
In effect December 24, 1965 .....	4½%

### Reserve Requirements

	Per Cent of Deposits			
	Demand Deposits		Time Deposits	
	Reserve City Banks	All Other Member Banks	Reserve City Banks	All Other Member Banks
In effect				
January 1, 1965	16½	12	4	4
In effect				
December 24, 1965	16½	12	4	4

### Margin Requirements on Stocks

In effect January 1, 1965 .....	70%
In effect December 24, 1965 .....	70%

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

	Savings Deposits		Other Time Deposits	
	Less than 1 Year	1 Year or More	30 Days to 90 Days	90 Days or More
In effect				
January 1, 1965	4%	4%	4 %	4½%
December 6, 1965	4%	4%	5½%	5½%
In effect				
December 24, 1965	4%	4%	5½%	5½%

<sup>1</sup>The discount rate charged by the Federal Reserve Bank of St. Louis was raised from 4 per cent to 4½ per cent effective December 10, 1965.

interest rates are reflected in declining security prices, such an increase implies a decline in wealth and, thereby, may restrict total spending. Also, rising interest rates make saving more attractive relative to current spending. Finally, and not necessarily inconsistent with the other two, rising interest rates—representing a cost to the borrower—serve to restrict investment or consumption of durable goods.

Under some conditions it is desirable to limit spending and investment, and under other conditions it is undesirable. Public policy can under some conditions and to some extent limit a rise in interest rates. Greater monetary expansion may meet rising demand for loan funds. That is, rather than to rely on intermediation as a means of attracting funds via rising interest rates, there can be a step-up in the pace at which the commercial banking system is permitted to “monetize” debt.

The rise in interest rates during the past year occurred despite a rapid monetary expansion. While a major portion of credit demands were accommodated through intermediation and direct placement of saving, there was excess demand which was in part dissuaded by the rise in interest rates and by rationing by lenders and in part accommodated by monetary expansion. If monetary expansion had been less, interest rates would have risen more. For interest rates to have been prevented from rising, the money supply would have to have been increased yet more rapidly.

## 7. Monetary Expansion

The stock of money, demand deposits plus currency, reached \$166 billion in November 1965, up 4.2 per cent from a year earlier. The increase consisted of a \$4.8 billion rise in demand deposits and a \$2 billion expansion in currency.

The rise in money proceeded at an uneven pace. From October 1964 to April 1965 money rose at a 3 per cent rate; then the rate of increase more than doubled. Money has risen at an average annual rate of 3.4 per cent since early 1961 compared with an average rate of 1 per cent in the 1956-60 period and a 3 per cent rate from 1951 to 1955.

Whether variations in the rate of increase in money stem chiefly from the supply side, and then induce changes in interest rates, spending, and economic activity in general, or whether the variations in supply are brought about by the economic process itself, is a question which has recently received increased attention.

According to one view, the essence of monetary control consists of bringing about an appropriate rate of

growth in the stock of money. It assumes that the stock of money can be controlled by the central bank by varying the rate at which it supplies reserves to the banking system.

During 1965 total reserves of member banks were expanded \$1 billion or 4.5 per cent compared with a 4.2 per cent expansion in the preceding year. Expansion in total reserves since 1961 has been more rapid and continual than in earlier periods, rising at an average annual rate of 3.8 per cent compared with 1.3 per cent in the 1956-60 period and 2.9 per cent in the 1951-55 period.

Increases in time deposits, government deposits, and interbank deposits—which do not represent an expansion in money as ordinarily defined—impounded a substantial portion of the increment to total reserves in 1965. Reserves available for expansion of private demand deposits, the major component of the money supply, rose \$330 million or 2 per cent in the year ending in November. Since April 1965, however, the annual rate of increase in these reserves has been about 4 per cent. Since 1961 they have expanded at a 1.5 per cent annual rate.

An alternative view concerning the determination of the supply of money visualizes the causation as running from changes in demand to changes in supply. According to this view, “. . . banks are not constrained in their ability to supply deposits by the existence of legal reserve requirements or by the level of bank reserves. . . . Since this is true for each and every bank in the system, the constraint on bank deposits . . . is derived from the public’s desire to hold bank deposits.”<sup>17</sup> It may be that these two views are not necessarily contradictory. It may be a question of which is the more expedient or useful way of viewing the process.

## 8. International Developments

Developments both in the domestic U.S. economy and in other major industrial countries of the world continue to exercise an important influence on the U.S. balance of payments.

### *Current Account*

Imports of goods and services in the third quarter of 1965 were at an annual rate of \$31.8 billion, 12 per

<sup>17</sup>Lyle E. Gramley and Samuel B. Chase, Jr., “Time Deposits in Monetary Analysis,” *Federal Reserve Bulletin*, October 1965, p. 1385. Also see James Tobin, “Commercial Banks as Creators of ‘Money,’” *Banking and Monetary Studies*, edited by Deane Carson (Homewood, Ill.: Richard D. Irwin, Inc., 1963), pp. 408-19.

cent above the third quarter of 1964. This rise was basically responsive to the 7 per cent growth in gross national product in the same period. Since 1961 the money value of GNP has increased at an average annual rate of 7 per cent, while imports have increased at an 8.5 per cent rate. As the economy's productive capacity becomes more fully utilized (i.e., reduction in unemployment and increase in operating rates), imports increase more rapidly for a given increase in GNP.

U.S. exports of goods and services in the third quarter of 1965 were at an annual rate of \$40 billion, an increase of 7 per cent over the same period in 1964 and slightly lower than the 8 per cent rate of growth since late 1960. The annual growth in world-wide imports in the same period (exclusive of the United States) has also been about 8 per cent. On the other hand, exports of other industrial countries in the European Economic Community (Common Market) and Japan have increased at an 11 per cent annual rate since late 1960. Against this index U. S. export performance has not been especially impressive.

### Capital Account

U. S. capital outflow in the first two quarters of 1965 was at a \$3.6 billion annual rate compared with a \$6.5 billion outflow in 1964. This turn-around was accounted for primarily by direct administration policy measures (discussed below). In addition, increased domestic demand for credit and a moderate rise in interest rates may have contributed to the improvement.

### Administration Measures

Table IX indicates that the U. S. balance of payments, as measured on a regular transactions basis,<sup>18</sup>

<sup>18</sup>The regular transactions method of measuring the U. S. balance of payments includes the following major transactions: (1) changes in U.S. official reserve assets (gold and convertible foreign currencies); (2) changes in liquid liabilities to foreign official institutions (e.g., central banks); (3) changes in liquid liabilities to foreign private persons.

In the "official settlements" definition of the balance of payments which has recently been adopted by the Department of Commerce, changes in liquid liabilities to foreign private persons (3 above) are excluded and certain minor nonliquid liabilities to foreign official institutions are included as part of the balance-of-payments position. For an explanation

Table IX  
U. S. BALANCE OF PAYMENTS

	(Billions of Dollars)			Change 1960-1964
	1st Half 1965 (Annual Rate)	1964	1960	
<b>Current account</b> .....	<b>6.0</b>	<b>7.8</b>	<b>3.4</b>	<b>4.4</b>
Exports of goods and services...	37.5	37.0	27.2	9.8
Imports of goods and services...	-30.5	-28.5	-23.2	-5.3
Transfer payments .....	-1.0	-0.8	-0.7	-0.1
<b>Private capital (net)</b> .....	<b>-3.5</b>	<b>-6.2</b>	<b>-3.5</b>	<b>-2.7</b>
Long-term capital .....	-5.2	-4.2	-2.1	-2.1
Direct investments .....	-4.0	-2.4	-1.5	-0.9
Bank loans .....	-0.6	-0.9	-0.2	-0.7
Other .....	-0.5	-0.9	-0.4	-0.5
Short-term capital .....	1.7	-2.0	-1.4	-0.6
<b>Government transactions (net)</b> <sup>1</sup> ..	<b>-3.5</b>	<b>-3.6</b>	<b>-2.8</b>	<b>-0.8</b>
<b>Errors and omissions</b> .....	<b>-0.4</b>	<b>-1.2</b>	<b>-1.0</b>	<b>-0.2</b>
<b>Balance of payments on regular   transactions</b> .....	<b>-1.3</b>	<b>-3.1</b>	<b>-3.9</b>	<b>0.8</b>

<sup>1</sup>Includes net Government grants and capital outflows; excludes transfer payments (e.g., social security) to private foreigners which are included in the current account.

Source: U. S. Department of Commerce.

showed very little improvement from 1960 to 1964. Although there was substantial improvement in the current account, it was largely offset by deterioration in the capital account.

Starting in 1960 the administration took a variety of measures to strengthen the current account of the balance of payments. These included (1) the negotiation of military sales contracts (mainly to Germany and Italy) in direct proportion to U. S. military spending in those countries, (2) the tying of economic aid to U. S. sources of supply, and (3) introduction of a large number of relatively small administrative actions to encourage exports (e.g., improved export insurance coverage, establishment of trade centers abroad). Price stability in the United States relative to Europe also helped to widen the trade surplus. Finally, past foreign investments began paying off handsomely and resulted in a large growth in investment income.

However, because of stimulative monetary and fiscal policy and high total demand in Europe, interest rates there generally rose more rapidly than those in the United States, so that our capital outflows increased and only moderate net improvement resulted in our overall balance of payments. There was some apprehension that a more stringent monetary policy leading to higher interest rates in this country would trigger a domestic recession which "would rapidly create

tion of these changes see, *The Balance of Payments Statistics of the United States: A Review and Appraisal*, Report of the Review Committee for Balance of Payments Statistics to the Bureau of the Budget, April 1965 (popularly referred to as the Bernstein Report).

forces for easy money that would be likely to prove irresistible."<sup>19</sup>

To reduce capital exports without a lower rate of monetary expansion and higher interest rates, the Interest Equalization Tax (IET) was proposed to the Congress in mid-1963. The IET was designed to raise, by approximately one percentage point, the long-term rates to foreign borrowers in the U.S. capital market while leaving long-term rates to domestic borrowers unchanged. However, because of the large gaps in application (especially exemption of bank loans) the tax resulted in a shift in the composition of capital outflow rather than in reduction in net amount. As a consequence, the balance of payments showed little improvement and additional measures were deemed necessary.

It was decided to ask for the voluntary cooperation of banks and corporations. This approach was embodied in the President's announcements on February 10, 1965 which consisted of the following proposals: (1) The Interest Equalization Tax was broadened to include bank loans of one year or more. (2) Banks, other financial institutions, and nonfinancial corporations were requested to refrain from engaging in some otherwise profitable foreign business and financial activities. Specifically, banks were asked to limit their net increase in claims on foreigners, both long- and short-term to 5 per cent of their level on December 31, 1964. Nonbank financial institutions were asked to take broadly parallel action. In addition, some 500 industrial corporations with large international investment positions were asked to improve their individual balance of payments during 1965. Considerable latitude was given regarding how this improvement was to be brought about—increased exports, increased remittance of dividends and interest on previous foreign investments, reduction in new foreign investments, recall of short-term funds held abroad, etc.

The immediate effect of the voluntary program was quite satisfactory. In the first quarter of 1965 the balance of payments was in deficit at a \$3.1 billion annual rate, only half the rate of deficit of the fourth quarter of 1964. In the second quarter of 1965 the U. S. balance of payments showed a small surplus (\$500 million seasonally adjusted annual rate) for the first time since the third quarter of 1957. However, in the third quarter the balance of payments again deteriorated.

Whether the voluntary controls will contribute more than a temporary improvement in the balance of pay-

ments can only be answered by additional experience with the program. The sharp deterioration in the third quarter does not provide compelling evidence against the possibility of further improvement, just as the surplus in the second quarter did not provide evidence of continued improvement.

Whether doing something about the capital movements directly is most appropriate may depend in part on whether the causes of the flow are considered natural or artificial. Given existing exchange rates and relative price levels, capital flows may be thought of as natural if, in the countries receiving the capital, interest rates and profits are higher because the marginal efficiency or productivity of capital is higher than in the capital exporting countries. Capital flows may be thought of as artificial if the interest and profit differentials which might attract the capital are caused (1) by excessive total demand in the surplus countries, (2) by extreme and inappropriate mixes of monetary and fiscal policies in either surplus or deficit countries, or (3) by the juxtaposition of free and controlled capital markets in either the surplus or the deficit countries.<sup>20</sup>

If, in surplus countries, the disequilibrating capital flows are induced by interest rate differentials which are caused artificially, then a restoration of balance in the international accounts may be promoted by removal of these influences. For example, extremely expansionary fiscal policy may be a major cause of the high interest rates in some surplus countries. Substantially lower interest rates and reduced capital imports in those countries might be achieved by less expansionary fiscal policy. An easier monetary policy might be used to maintain an appropriate income level.

However, a deficit country cannot dictate such action to surplus countries, and the introduction of direct restraints on capital outflow may be the only type of action available to neutralize these artificial stimulants by other countries to capital exports from this country.

## 9. Summary

Expansion of total demand in 1965 was sufficiently rapid to bring about a substantial reduction in the margin of the nation's unused resources. The gap between actual and estimated potential gross national product narrowed to \$15 billion in the third quarter, 38 per cent less than at the beginning of the year. The actual product in the third quarter was 98 per cent of the somewhat arbitrarily estimated potential. Employ-

<sup>19</sup> Secretary of the Treasury Douglas Dillion, address before the American Bankers Association Annual Monetary Conference in Princeton, New Jersey, March 19, 1965.

<sup>20</sup> See "Fiscal Policy, Monetary Policy, and International Disequilibrium," in the September 1965 *Review* of the Federal Reserve Bank of St. Louis.

ment rose to 73 million in November, and the unemployment rate declined to 4.2 per cent, probably bringing about still further reduction of the gap. This year's improvements have involved costs or a trade-off, however. The rate of increase in prices has jumped sharply, and, while the balance of payments showed a modest surplus in the second quarter, it again deteriorated in the third quarter.

The monetary and fiscal situation which prevailed in late 1964 and early 1965 along with monetary and fiscal developments in 1965 were important factors in bringing about the aggregate demand that emerged. Thus, monetary and fiscal policies were important ingredients in shaping the trade-off between employment and prices.

We now face the problem of determining optimum total demand for the future. What are the price level and employment effects which will come from various possible levels of total demand? Which combination of employment and price level is best for the nation? We must choose not only the total demand we think best in the light of the trade-off choice, but also the best combination, or mix, of public policies to provide it. The combination of fiscal and monetary policies used to achieve the sought-after total demand involves a choice between effects on the balance of payments and effects on domestic investment.

Every other nation faces these same choices—the determination of optimum total demand and the mix

of policies to obtain it. Their decisions along with ours have a great bearing on the balance of payments of the various nations. Other nations can affect the U. S. balance of payments both by the total demand which they foster and the mixes of fiscal and monetary policy which they adopt to achieve the sought-after total demand.

Total demand in each country in 1966 will be dependent, among other factors, upon: (1) decisions of consumers to spend and of business to invest, (2) Government spending and taxing policies, and (3) monetary policy. Public policy in each country should attempt to choose some combination of elements 2 and 3 that will provide an acceptable combination of internal production and price developments. In seeking the desired total demand each country should use a combination of monetary and fiscal measures which will contribute to tolerable balance in the international accounts of all nations. Also, as the various countries decide on the combination of fiscal and monetary policy to achieve the desired domestic total demand, it is important that they choose combinations which promote acceptable trade-offs between investment and growth on the one hand and balance-of-payments considerations on the other hand.

Choices regarding the future are affected by policy actions of the recent past and the present. In the United States the stimulative monetary and fiscal situation of the last half of 1965 will probably impinge in some measure on economic developments in 1966.



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