

FEDERAL RESERVE BANK OF ST. LOUIS



December 1968

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Review

Volume 50

Number 12

FEDERAL RESERVE SYSTEM ACTIONS DURING 1968

Federal Reserve Credit

	Annual Rates of Change	
	10/67	12/66
	to 10/68	to 12/67
Federal Reserve Holdings of U.S. Government Securities	12.5	11.7
Federal Reserve Credit	11.4	10.0
Total Reserves of Member Banks	6.0	9.9
Monetary Base	6.2	6.1
Reserves Available for Private Demand Deposits	4.1	5.4

Discount Rate (FRB St. Louis)

In effect January 1, 1968	4½%
March 15, 1968	5
April 23, 1968	5½
August 30, 1968	5¼
In effect December 5, 1968	5¼

Reserve Requirements¹

	Percentage Required					
	Net Demand Deposits up to \$5 Million		Net Demand Deposits in Excess of \$5 Million		Time Deposits up to \$5 Million & Savings Deps.	Time Deposits in excess of \$5 mil.
	Reserve City Banks	Other Mem- ber Banks	Reserve City Banks	Other Mem- ber Banks		
In effect Jan. 1, 1968.....	16½	12	16½	12	3	6
Jan. 11, 1968.....			17			
Jan. 18, 1968.....				12½		
In effect Dec. 5, 1968....	16½	12	17	12½	3	6

Margin Requirements on Listed Stocks

In effect January 1, 1968	70%
June 8, 1968	80
In effect December 5, 1968	80

Maximum Interest Rates Payable on Time & Savings Deposits

Type of Deposit	In effect Jan. 1, 1968	Apr. 19, 1968	In effect Dec. 5, 1968
Savings Deposits	4%	4%	4%
Other Time deposits:			
Multiple maturity:			
90 days or more	5	5	5
Less than 90 days	4	4	4
Single maturity:			
Less than \$100,000	5	5	5
\$100,000 or more:			
30-59 days	5½	5½	5½
60-89 days	5½	5¾	5¾
90-179 days	5½	6	6
180 days and over	5½	6¼	6¼

¹Federal Reserve Regulation D, concerning reserves of member banks, was amended effective September 12 of this year. The major features of the amendment include: (1) establishment of a one-week reserve period for non-reserve city banks as well as for reserve city banks, (2) reserve requirements calculated on the basis of deposits two weeks earlier, (3) use of vault cash of two weeks earlier in meeting reserve requirements, and (4) provision that either an excess or deficiency in reserve balances averaging up to 2 per cent of required reserves may be carried forward to the next reserve week.

1968—Year of Inflation

PRODUCTION AND INCOME rose rapidly during 1968, and employment remained at high levels. The major economic problem of the year was inflation, generated by an excessive demand for goods and services. By the latter part of 1968 average prices were 4 per cent higher than a year earlier and 12 per cent above those in late 1964.

Background of Inflation

The current inflationary upswing began about four years ago, after an extended period of near price stability. From 1957 to 1964 overall prices rose at an average 1.6 per cent annual rate. This was in sharp contrast to the rapid 6 per cent rate of inflation during World War II and the 3.5 per cent average rise of prices from 1946 to 1957.

Prices probably increased even less during the 1957 to 1964 period than indicated by the trend rates of the indices. Quality improvements and price discounts may not have been given proper weight in computing average measures, and any shifts of demand to new, less expensive, substitute products would cause the price rise to be overstated by a general index.

The relative stability of prices from 1957 to 1964 reflected the fact that total demand for goods and

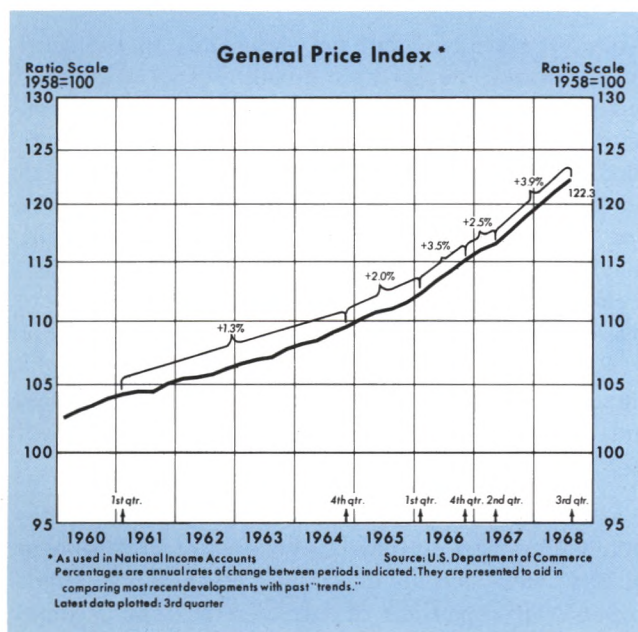
services grew only slightly faster than the productive capabilities of the economy. From 1957 to 1964 total demand rose at an average 5.3 per cent annual rate while real output was increasing at a 3.6 per cent rate. Total demand did not rise evenly during this period. Although pauses in demand growth in 1958 and 1960 were helpful in extinguishing inflationary expectations and pressures, there was a cost in terms of unemployed resources.

Since 1964 spending growth has accelerated, and inflationary pressures have again intensified. Total demand for goods and services, which had risen at a 5.3 per cent annual rate from 1957 to 1964, increased at an average 8 per cent rate from 1964 to 1968. Productive capacity increased at an estimated 4 per cent rate. Overall prices, after creeping up at the 1.6 per cent rate from 1957 to 1964, rose 1.7 per cent in 1965, 3.3 per cent in 1966, 3.2 per cent in 1967, and about 4 per cent in 1968. Effective prices may have accelerated more than these figures indicate, for when demands are excessive, discounts and rebates are eliminated, and there is a tendency to reduce quality standards. In the preparation of price indices, some of these developments may not have been detected, since producers do not like to disclose their complete discount policies or a deterioration of product quality.

Causes of the Inflation

The period of excessive demand for goods and services paralleled the nation's growing participation in the Vietnam war. During 1964, before the major military buildup, total demand for goods and services was large and expanding, and by year end production was at near capacity. Government outlays for military goods rose from \$50 billion in 1964 to an estimated \$79 billion in 1968, a 12 per cent annual rate of increase. Total real output grew at a 5 per cent rate during this period, so that a steadily greater proportion of the nation's production was utilized in the defense effort.

Even though national policy allocated an increasing share of the nation's product to war materials at a time when resources were fully utilized, excessive total demands could have been avoided. One method of financing the Vietnam effort and avoiding inflation would have been for the Government to reduce other,



lower priority programs. However, national policy dictated the opposite – a guns plus butter program. Welfare and other Government expenditures were accelerated during the military build-up. From 1964 to 1968 nondefense outlays of the Federal Government rose at an 11 per cent annual rate. This was more than double the rate of increase in real production and slightly greater than the 9.8 per cent trend rate of nondefense Government spending from 1957 to 1964.

Government spending on nondefense activities during the Vietnam conflict has been much greater than during the Korean action. At the peak of spending for each conflict, total U.S. Government outlays amounted to slightly over 21 per cent of gross national product. Defense expenditures during the Korean action rose to over 13 per cent of total product while in the Vietnam war they amounted to about 9 per cent. In the earlier period nondefense Government outlays were cut from about 10 per cent of total product to about 8 per cent. During the Vietnam conflict welfare and other nondefense spending continued to take an increasing share of total output, increasing from about 10.5 per cent to 12 per cent.

A second method of financing the greater expenditures while avoiding inflationary pressures would have been for the Government to increase taxes of businesses and individuals as was done in the Korean action. Additional revenue would have provided funds for enlarged expenditures while tax payments would have reduced the spending ability of the private sector by a roughly corresponding amount.

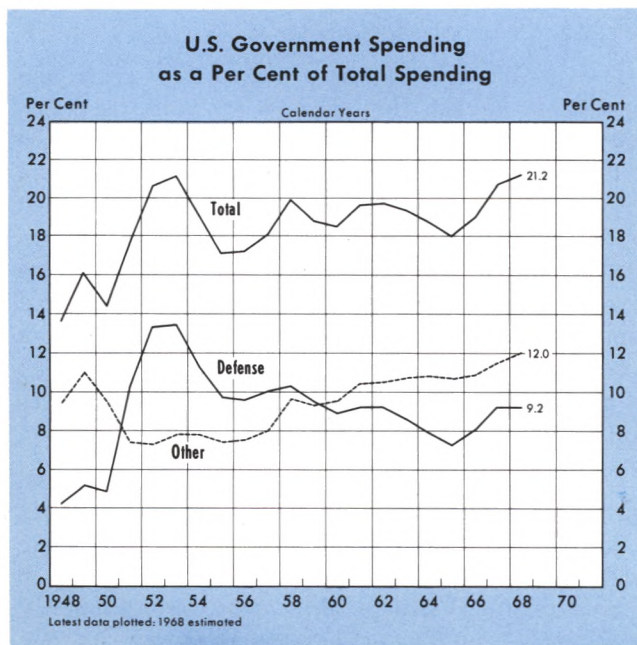
However, until mid-1968, Federal income tax rates were not increased. In fact, the Government did the opposite by reducing such taxes in 1964 and again in 1965.

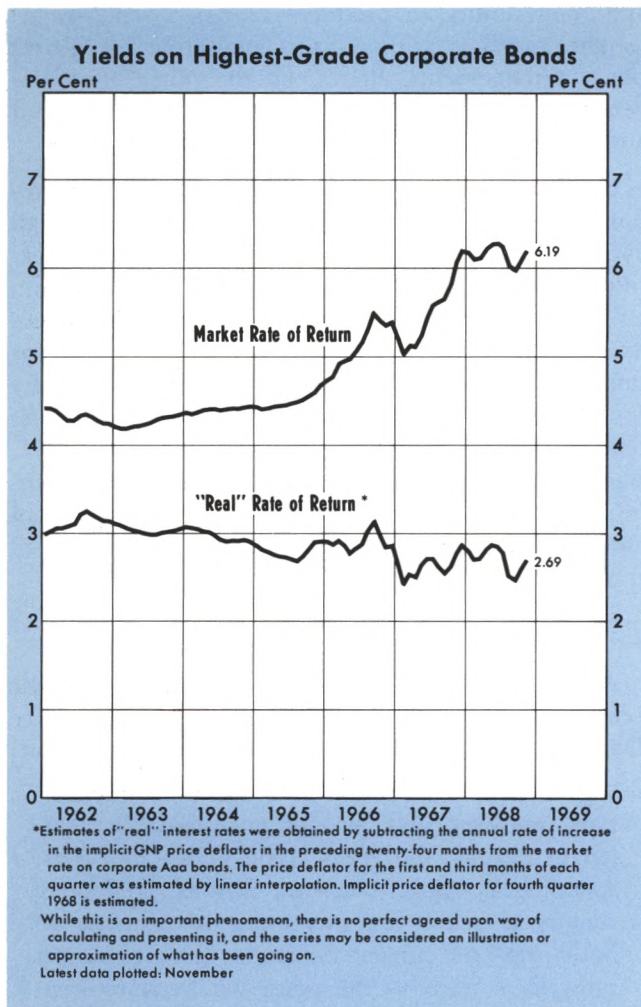
A third method of financing the increased Government outlays while minimizing inflationary pressures would have been for the Government to borrow the additional funds from the private, non-banking sector. This would have required an increase in interest rates, would have induced increased saving and would have curtailed investment. In this way, the larger Government spending would have been offset by a decrease in the outlays of businesses and consumers.

The benefits of non-inflationary borrowing of funds from the public must be weighed against the disruptive effects of rapidly changing interest rates. At times of heavy borrowing, interest rates probably would have risen sharply in order to attract the required funds from reduced private spending. Nevertheless, financing the Government deficit from saving might have fostered lower average interest rates over the past four years since total demands for goods and services and inflationary pressures would have been less. The problem of instability of interest rates was intensified by the fact that the Government (the largest borrower) concentrated its fund raising in a few large issues, most of which were at pre-determined rates. Concentration of borrowing not only tended to aggravate short-run fluctuations in market rates, but the rigidity of terms plus the presumed desirability of avoiding any Government financing failures placed an "even keel" constraint on monetary actions.

Interest rates rose but not sufficiently in the short run to attract enough new saving and to discourage enough private investment to finance the Government outlays. Yields on highest-grade corporate bonds increased from 4.40 per cent in 1964 to 6.15 per cent in 1968. However, in view of the inflation, real interest rates may have risen little, if at all. When prices are expected to rise, potential suppliers of loan funds must be offered a higher return to protect the purchasing power of their funds. Businesses are not discouraged from borrowing at the higher rates if they expect to repay in cheaper dollars and if they anticipate that postponed projects will cost more later.

A fourth way of financing expenditures is to create money. A large portion of the greater Government outlays was accompanied by creation of funds through an expansion of bank credit. The Federal





Reserve System was able to moderate upward movements in interest rates temporarily by buying securities, and these actions provided commercial banks with reserves which permitted them to expand their loans and investments. Federal Reserve credit expanded at a 9 per cent annual rate from 1964 to 1968 after rising at a 7 per cent rate from 1957 to 1964. Commercial bank credit, other than that matched by an increase in time deposits, rose at a 4 per cent annual rate from 1964 to 1968. From 1957 to 1964 this credit had grown at a 1.8 per cent rate.

"Manufacturing" money seemed less painful than cutting desired Government programs, raising taxes, or permitting an early increase in interest rates. Creation of spending power by expanding bank credit increased the ability of the Government to spend without reducing other dollar outlays. As a result, total dollar demands became excessive, and the rationing of the limited supply of goods and services was accomplished in the market by rising prices.

From 1964 to mid-1968 there was only one brief

period of about six months when increased Government expenditures were not accompanied by a large expansion of the money supply. This was during the summer and fall of 1966, when the money supply changed little on balance. At first, interest rates rose markedly as the competition for available funds became keen. Some private projects could not be financed and had to be postponed. Partially because of legal ceilings on certain interest rates, the rationing severely affected financial intermediaries and the housing industry.

The 1966 period of financial "crunch" received much adverse publicity, and the moderation in money growth was not pursued long enough to eliminate the inflation. Yet, in late 1966 and early 1967 inflationary forces moderated, and, with reduced inflationary expectations, interest rates fell. Conditions for financial intermediaries and the housing industry improved as market interest rates declined below legal ceilings.

Effects of Inflation

Inflation, by reducing the purchasing power of dollars, bonds and other fixed dollar claims of consumers and businesses, is one way of financing Government spending. Some observers believe that inflation may be the most acceptable alternative. Since some effects of inflation are apparent only with a lag, it seems easier to spend from created funds than to reduce other Government outlays, raise taxes, or permit interest rates to seek their equilibrium levels. Inflation, like higher taxes, spreads the burden of Government expenditures broadly. As long as demands for goods and services are excessive, most workers find employment, and businesses appear to thrive.

Some individuals and businesses may reduce the adverse effects of inflation on themselves by holding assets in the form of equities rather than debt instruments, by borrowing, and by putting cost-of-living escalators in wage and other contracts. However, the success of inflation as a means of financing Government expenditures depends upon a great many holdings of fixed dollar assets by a public which cannot or does not find alternatives.

Inflation reduces the value of the dollar and fixed dollar claims relative to other assets, redistributing wealth.¹ Declines in the relative value of fixed dol-

¹Irving Fisher noted on page 61 of his book *The Money Illusion* (New York: Adelphi Company, 1928), that: "It might be argued that no harm can be done to society as a whole either by inflation or deflation since the average wealth would not be changed. But one might as well reason that when a bank vault is robbed or when your house is burglarized, society is none the poorer."

lar claims reduce the attractiveness of placing funds in financial intermediaries. Since those with small savings have few satisfactory alternatives to financial institutions for their savings, the total amount of real saving may be reduced. Changing relative values of assets also makes speculation in inventories, stocks, and land more attractive relative to production.

Since inflation encourages the demand for saving relative to its supply, market interest rates are driven up. Much of the rise in nominal interest rates in the United States since 1964 may be explained by increasing inflationary expectations. Market interest rates have usually been higher in countries where prices have risen faster than in the United States.

Inflation has been a regressive "tax," tending to bear more heavily on those in the lower income brackets than a progressive income tax. Those with little wealth have not been able to protect themselves as well as those with greater means. Individuals with little net worth derive most of their income from wages, pensions, and other sources, many of which adjust slowly to inflation. By contrast, the wealthy derive more of their income from profits, which respond quickly to excessive demands and price changes. Savings of those with relatively small means are mostly in fixed dollar liabilities of financial institutions and U.S. savings bonds. The wealthy hold a larger portion of their assets in stocks, land, and commodities. Most private borrowing is by businesses and individuals with substantial net worth, and with inflation repayments are made in depreciated dollars.

Greater profit opportunities and higher levels of employment which accompany early stages of inflation are probably temporary. Although an acceleration of the demand for goods and services tends to stimulate production and employment, these benefits probably cannot be maintained without continually accelerating the rate of inflation. Once the inflationary expectations are fully anticipated and digested, interest rates and other prices rise to levels where investment and employment tend to fall back toward their long-run equilibrium even though the rate of inflation continues unabated.

Trade-offs between prices and employment (the so-called Phillips curve) occur because of a money illusion of spending power. However, as prices adjust to the new supply and demand conditions, the stimulative effects of the existing rate of inflation are dissipated. Ultimately, total employment depends on the number of people in the labor force

and their ability to produce compared with wages sought, together with a great multitude of institutional arrangements. Prices, on the other hand, reflect the relationship between total dollar demand and the volume of goods and services available.

Rising domestic prices and costs of production reduce the value of the dollar relative to foreign currencies. With higher costs of production, competition with foreign producers becomes more difficult. In 1964 the nation's exports of goods and services exceeded imports by \$8.4 billion. After 1964, as inflation accelerated, this excess declined, gradually falling to an annual rate of \$1.7 billion in the first half of 1968 (See chart on page 16 of the article "U.S. Balance of Payments in 1968" in this *Review*.) During this period imports of goods rose at a 16 per cent annual rate, while exports increased at a 7 per cent rate.

The Situation A Year Ago

As the year 1967 ended, the greatest domestic economic problem appeared to be inflation. The December 1967 issue of this *Review* pointed out:

"Conditions at year-end indicate that stabilization problems will present a formidable challenge during the year 1968. Late in 1967, spending is rising twice as fast as productive resources, prices are increasing in response to both past and current demands, market interest rates have risen to the point where many concerns were threatened by legal and institutional rigidities, balance of payments problems continue, and both monetary and fiscal influences are more stimulative than at any time in two decades."

An initial problem in 1968 will probably be to contain excessive demands for goods and services."

The Economic Report of the President, released in early 1968, stated that:

"Most experienced observers agree that the pace (of economic activity) now is — and in the months ahead will be — too fast for safety. The gain in gross national product in the current quarter is generally expected to be one of the largest in our history — a record we could gladly do without at this time. . . . I therefore urgently renew my request that Congress enact a temporary 10 per cent surcharge on corporate and individual income taxes."²

²*Economic Report of the President*, February 1968, pp. 9 and 10.

On December 12, 1967, to the Federal Open Market Committee, "it appeared highly probable that growth in overall activity would accelerate in early 1968 and the upward pressures on prices would persist as the effects of higher costs were reinforced by those of rapidly expanding demands." As a consequence, the manager of the monetary system's Open Market Account was directed "... to moving slightly beyond the firmer conditions that had developed in the money markets. . . ."³

Stabilization Actions in the First Half of 1968

Despite the recognized desirability of taking actions to reduce the excessive demands, both fiscal and monetary influences continued expansionary in the first half of 1968. Fiscal restraint was delayed while Congress and the President debated the relative merits of a tax increase or spending cuts. Monetary authorities, observing rising interest rates and fearful of the effects on the nation's financial institutions, on construction, and on other sectors if interest rates rose substantially further, continued the rapid monetary growth.

The high-employment budget, a measure of Government fiscal policy, was at an annual rate of deficit of \$14 billion in the first half of 1968. This was \$2 billion greater than in the corresponding period a year earlier and \$8 billion more expansionary than in 1964, the year of the tax cut designed to encourage economic expansion. The first half rate of deficit amounted to a shift of about \$25 billion from the 1960 through 1964 period of balanced economic expansion when there was an average surplus of \$11 billion a year.

³Annual Report of the Board of Governors of the Federal Reserve System for 1967, pp. 199-205.

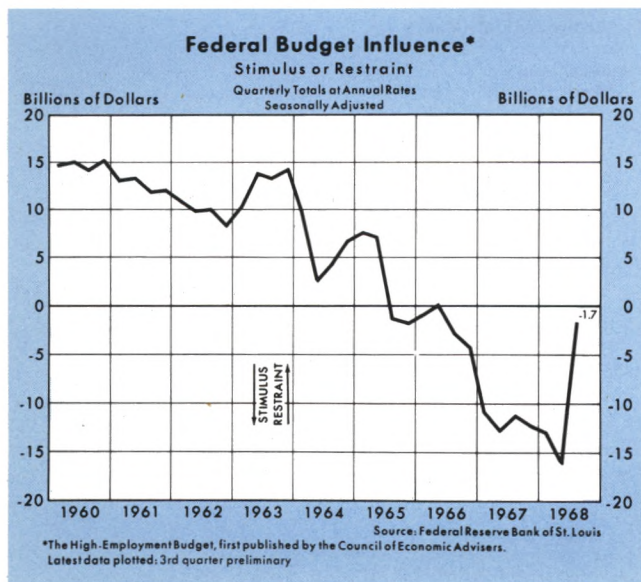


Table 1

Contribution of Various Factors to Rates of Change in the Money Stock

(Monthly Averages of Daily Figures — Seasonally Adjusted)

	Annual Rates of Change in Money Stock		
	June 68 to Oct. 68	March 68 to June 68	Nov. 67 to March 68
1. Banking System			
Excess Reserves	0.7	0.5	- 0.2
Bank Structure ¹	0.2	0.1	0.5
Other Banking ²	2.0	0.7	- 0.3
Total Banking	2.9	1.3	- 0.
2. Public			
Currency Held	- 8.4	-10.1	- 9.7
Time Deposits at Member Banks	- 4.5	- 0.1	0.0
Total Public	-12.9	-10.2	- 9.7
3. Government			
Demand Deposits at Member Banks	- 3.6	5.6	- 0.6
4. Other Reserve Factors³	- 3.7	- 3.5	- 8.9
5. Total of 1, 2, 3, and 4	-17.3	- 6.8	-19.2
6. Federal Reserve			
Borrowing from Reserve Banks	- 3.6	- 1.4	7.5
Federal Reserve Portfolio	25.6	17.2	23.4
Reserve Requirement Changes	0.0	0.0	- 7.7
Total Federal Reserve	22.0	15.8	23.2
7. Rate of Change in Money Stock			
Total of 5 and 6	4.7	9.0	4.0

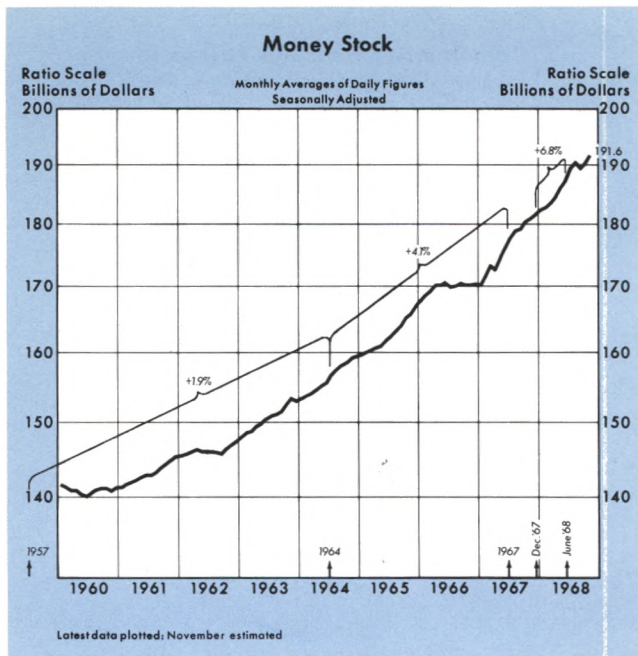
¹Shifts in deposits among classes of member banks.

²Net of member bank demand balances "due to" and "due from" banks, and of the nonmember bank demand deposit component of money.

³Factors determining total member bank reserves other than Federal Reserve holdings of U. S. Government securities, member bank borrowing from Reserve Banks, and currency held by the public.

Government debt management operations were also more expansionary in the first half of 1968. Because of the legal maximum interest rate of 4¼ per cent on new issues with maturities over seven years, the Treasury was forced to finance with relatively short-term issues, adding to the liquid assets of the public. Average maturity of the public debt declined from 62 months in 1964 to 53 months in 1967 and to 50 months in June 1968.

Monetary aggregates accelerated during the spring of 1968 from an already very expansionary rate. Growth in the nation's money supply, consisting of private demand deposits and currency, after slowing from November 1967 to March, quickened in the second quarter. Fluctuations in the growth rate of money reflected many developments (See Table I). One factor was a build-up of Treasury deposits (not included in money supply) in the winter, followed by a sharp decline in the spring and early summer.



Changes in the Treasury's cash balances cause opposite movements in private deposits (money), but over longer periods they have had little net effect, since the Treasury seeks to keep its average cash holdings at a practical minimum which changes little over time.

The money supply increased at a 6.8 per cent annual rate in the first half of 1968, following a rise of 6.4 per cent in 1967. From 1964 to 1967 the money stock increased at an average 4.1 per cent rate, and from 1957 to 1964 the trend growth was at a 1.9 per cent rate. The major factor causing the sharp rise in money in the first half of 1968 was Federal Reserve System actions. Federal Reserve credit by itself provided for an increase of money at a 19 per cent annual rate.

The supply of money rose faster than the amount of money demanded. When money exceeds the demand for money to hold, there are incentives to eliminate the discrepancy by spending the excess on goods, services or financial assets. A review of changes in the money supply and spending since early 1953 indicates that the demand for money to hold has usually risen at a fairly steady rate.⁴ In the first half of 1968, the demand for money as an asset may have risen more than usual, as income, wealth and transactions rose. A partial offset was probably caused by the fact that rising interest rates increased the alternative cost of holding money balances.

Not only the quantity of money but other mone-

⁴See "Economic Pause, Acceleration and Excesses—1967 in Retrospect" by Norman N. Bowsher in the December 1967 issue of this *Review*, pp. 14-16.

tary aggregates as well rose very rapidly in early 1968, compared with the 1957 to 1964 trend rates or the 1964 to 1967 rates when inflationary pressures were building up.

Money plus time deposits and bank credit, although increasing substantially in the first half of 1968, rose less rapidly than in the 1964 to 1967 period. The slower growth rates of these broad measures can be attributed chiefly to the behavior of time deposits in the second quarter of 1968. The rates of interest that commercial banks are permitted to pay on savings and other time deposits are governed by Regulation Q. In the spring of 1968 market interest rates rose relative to the ceiling rates of Regulation Q, and banks could not effectively compete for these funds. Consequently, the normal channels of the flow of funds from saver to investor were disrupted, and some funds bypassed commercial banks by going directly into Treasury bills, commercial paper and other instruments. Growth of total commercial bank deposits and of total bank credit was moderated, but total liquid assets and total credit extended (bank plus nonbank) was probably affected little by Regulation Q. The interruption of the normal flows probably reduced the efficiency of the financial system, and may have favored the Government and other large borrowers, who obtain funds

Table II
Growth Rates of Selected Monetary Aggregates
(Annual Rates of Change)

	Dec. 1967 to June 1968	1964 to 1967	1957 to 1964
Federal Reserve Credit	13.0%	8.1%	7.4%
Total Member Bank Reserves	5.3	4.8	2.8
Reserves Available for			
Private Demand Deposits	6.3	2.8	1.2
Monetary Base	6.6	4.9	2.7
Demand Deposit			
Component of Money	6.5	3.7	1.8
Money Supply	6.8	4.1	1.9
Money Supply plus			
Time Deposits	6.0	8.2	5.3
Bank Credit	8.3	8.8	6.4

Table III
Percentile Rank of Growth Rates of
Monetary Aggregates¹

	June 1968 to Oct. 1968	Dec. 1967 to June 1968
Federal Reserve Credit	70	86
Total Member Bank Reserves	89	78
Reserves Available for Private		
Demand Deposits	39	91
Monetary Base	90	92
Demand Deposit Component of Money	72	92
Money Supply	80	93
Money Supply plus Time Deposits	97	62
Bank Credit	98	68

¹All possible consecutive four-month and six-month periods from January 1949 to October 1968.

in the capital markets, relative to consumers, small businesses and real estate buyers, who rely more heavily on local financial institutions.

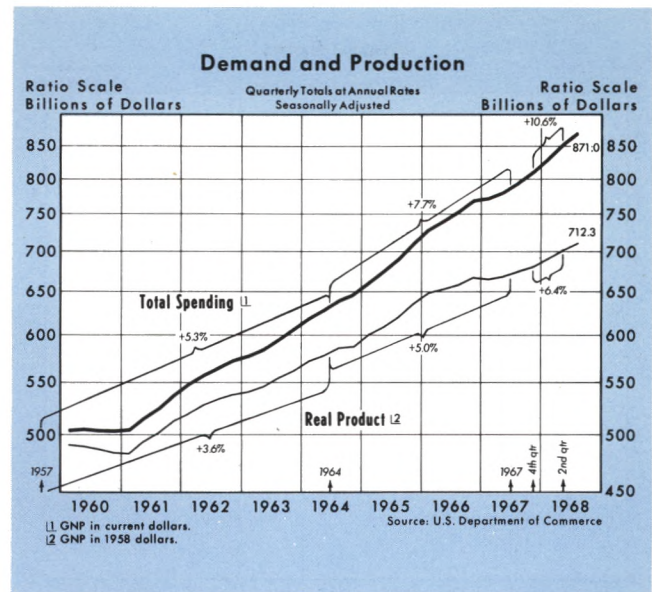
The rapidity of growth of monetary aggregates during the first half of 1968 may be measured by comparing their growth rates at this time with those of all other six-month periods in the last two decades. For example, the 6.8 per cent rate of increase in money in the first half of 1968 (See Table II) ranked in the 93rd percentile among 238 consecutive six-month periods (Table III).

Economic Activity in the First Half Year

Stimulated by the expansionary fiscal and monetary developments of late 1967 and early 1968, total spending accelerated in the first half of 1968. Demand for goods and services rose at an 11 per cent annual rate, a sharp acceleration from the 8 per cent rate of the previous six months. From 1964 to 1967 demand had increased at a 7.7 per cent rate, and from 1957 to 1964 it grew at a 5.3 per cent trend rate.

The demand for goods and services was strong in every major sector of the economy. In the first half of 1968, consumer spending rose at a 10.5 per cent annual rate, business spending at a 9.2 per cent rate, and Government purchases at a 16.4 per cent rate. Business outlays on inventories were particularly heavy in the second quarter, but the inventory-sales ratio was lower at mid-year than it was six months earlier.

In response to the strong demand, production continued to expand in early 1968, despite shortages of efficient workers, bottlenecks due to capacity limitations, and labor strikes. Total real output increased at a 6.4 per cent annual rate in the first half of 1968. During the Vietnam build-up from 1964 to 1967, production increased at a 5 per cent rate, and from 1957 to 1964 it grew at a 3.6 per cent rate. Over the long run the maximum growth in produc-



tion is determined primarily by improved technology and by increases in the labor force and capital goods. From recent growth rates in these resources it is estimated that capacity has been going up at about a 4 per cent annual rate in recent years. Rates of increase in output in excess of the trend growth in capacity are unsustainable.

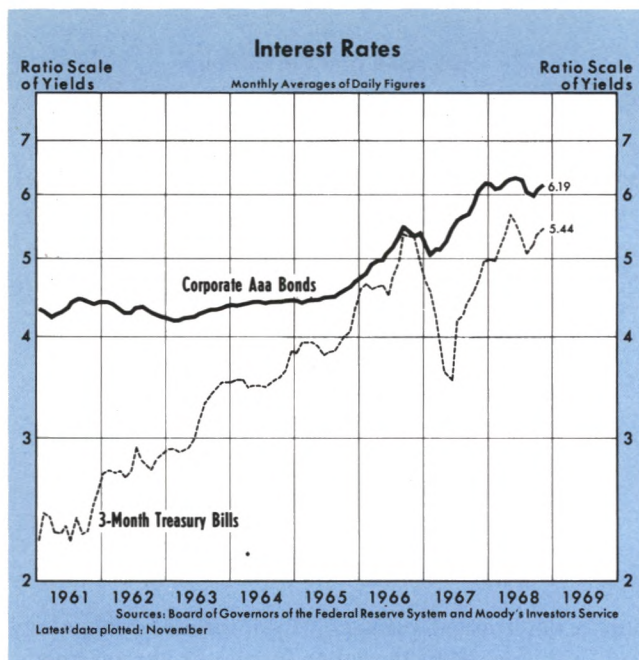
Employment rose at about the same pace as the population of working force age in the first half of 1968. Most entrants into the labor force were able to find work, many jobs remained unfilled, and unemployment remained a relatively low 3.6 per cent of the labor force. Among married men, unemployment averaged 1.6 per cent.

The strong demand for qualified workers tended to drive up wage rates, creating an illusion of unusually large increases in real income. Average hourly earnings in manufacturing rose at a 6 per cent annual rate in the first six months of 1968 compared with a trend rate of 3.3 per cent from 1957 to 1967. Disposable income (income after taxes), measured in current dollars, increased at a 10 per cent annual rate in the first half of 1968. From 1964 to 1967 after-tax income rose at a 7.6 per cent rate while from 1957 to 1964 it increased at a 5.1 per cent rate. Yet, in terms of purchasing power, disposable income grew little faster in early 1968 (5.6 per cent rate) than in the previous decade (4.2 per cent trend), and many on relatively fixed incomes found their real income declining.

Although funds available for lending rose in early 1968, demands for credit were sufficient to drive up interest rates. Nominal incomes were large, and the proportion saved was high. Saving amounted to 7.4

Table IV
Growth Rates of Selected Business Indicators
(Annual Rates of Change)

	Dec. 1967 to June 1968	1964 to 1967	1957 to 1964
Total Spending	10.6%	7.7%	5.3%
Business Spending	9.2	6.7	4.8
Consumer Spending	10.5	7.1	5.2
Government Spending	16.4	11.5	5.8
Real Production	6.4	5.0	3.6
Industrial Production	4.1	6.1	4.0
Total Employment	1.3	2.4	1.1
Payroll Employment	2.9	4.2	1.4
Personal Income	9.8	8.1	5.1
Consumer Prices	4.6	2.5	1.4
Wholesale Prices	3.6	1.8	0.2
Overall Prices	3.9	2.5	1.6



per cent of income after taxes in the first half of 1968, compared with an average rate of 6 per cent from 1959 through 1967. Bank credit expansion, not matched by increased time deposits, was sizable, rising at a 6.5 per cent annual rate compared with a 2.4 per cent trend rate from 1957 to 1967.

Interest rates on highest-grade corporate bonds averaged 6.28 per cent in June compared with 6.19 per cent in December 1967, 4.40 per cent in 1964, and 3.89 per cent in 1957. Yields on three-month Treasury bills averaged 5.52 per cent in June compared with 4.96 per cent in December 1967, 3.54 per cent in 1964, and 3.22 per cent in 1957. The Federal Reserve Banks increased their discount rates, the interest rate on advances to member banks, from 4½ per cent to 5 per cent in March and to 5½ per cent in April in an effort to keep these rates in line with other rates.

The strong demand for credit reflected the large Government deficits and inflationary expectations as well as the relatively high and rising level of production. The Federal Government's borrowings from the public, seasonally adjusted, amounted to an \$8 billion annual rate during the first half of 1968. From 1960 through 1967 net borrowings averaged \$2 billion per year. Further, with the growing expectations for inflation, private borrowers were willing to pay higher rates since repayments were expected to be made in cheaper dollars and any project postponed would be likely to cost more later.

Stabilization Actions During the Summer

On May 30, President Johnson delivered an ad-

dress to the nation, reasserting a need for and strongly recommending a 10 per cent surtax on corporate and individual incomes. In this speech he stated a willingness to accept planned Government spending for fiscal 1969, some \$6 billion less than provided in the budget message, in order to obtain the tax increase. The fiscal package was subsequently signed into law in late June and was implemented shortly thereafter.

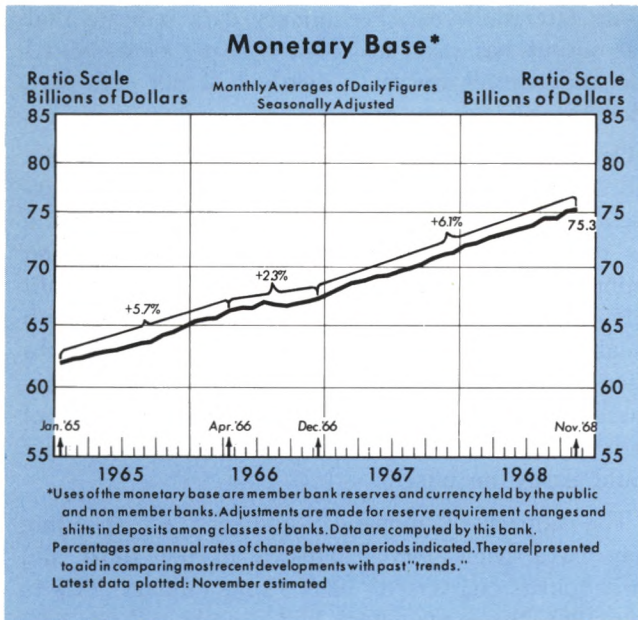
Last spring most analysts felt that a tax increase was essential.⁵ Chairman William McChesney Martin of the Federal Reserve Board told the American Society of Newspapers Editors in late April that: "We must have a tax increase, reduce the budgetary deficit and correct the adverse balance of payments . . ."

Despite the strong feeling that a tax increase was essential, once the tax was passed many analysts felt that the action was too vigorous, and a fear of "overkill" developed. In the August 5 issue of *U.S. News and World Report*, Arthur Okun, the President's chief economic adviser, stated, "I know of no one who would say now that our worries are still those of expanding too fast. If anything, the balance has shifted a bit in the other direction." Most econometric models of the economy indicated a quick and marked slowing in activity as a result of the fiscal action. The University of Pennsylvania's Wharton School model was typical; it forecast on May 23 that if the fiscal package were adopted on July 1, total spending would rise at an \$8.7 billion annual rate from the second to the third quarter compared with the \$21 billion rate in the first half. Also, it was predicted that most of the increase in spending would be matched by price rises, and total real production would change little.

Reflecting the marked shift in sentiment and expectations after the tax increase and cut of planned Government spending, monetary policy was relaxed. The Federal Open Market Committee's instructions to the desk manager on July 16 stated in part, "The new fiscal restraint measures are expected to contribute to a considerable moderation of the rate of advance in aggregate demands." The desk manager was asked to conduct operations "...with a view to accommodating the tendency toward somewhat less firm conditions in the money market. . . ."⁶

⁵In a speech in late March, Professor Paul Samuelson stated that "tax increase is needed to check the exuberant and inflationary trends in the economy." In May, Professor Paul McCracken said "the tax increase must be passed; the basic need is for a policy of disinflation to cool the overheated domestic economy and regain an environment in which there is some possibility of less costly wage settlements."

⁶Federal Reserve *Bulletin*, October 1968, p. 866.

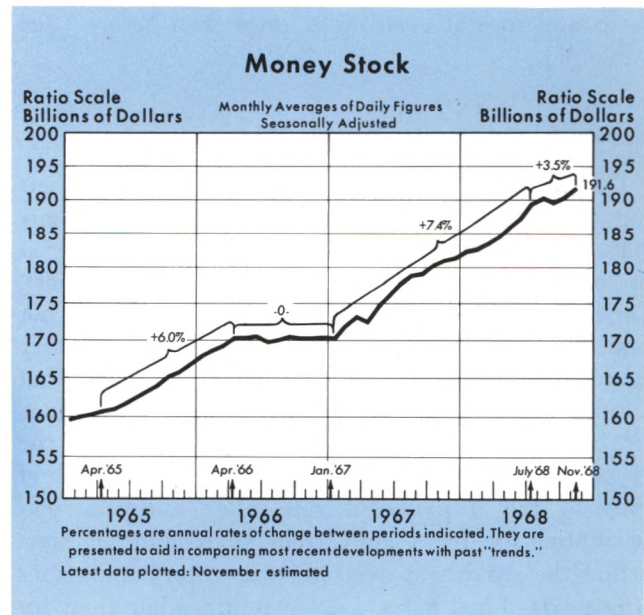


Interest rates moved lower during the summer, partly in response to the new expectations of less Government borrowing, of less rapid increases in total spending and of reduced inflationary pressures. Three-month Treasury bill rates declined from about 5.75 per cent in mid-May to around 5.00 per cent in mid-August. Yields on highest-grade corporate bonds went from about 6.30 per cent to less than 6.00 per cent. Following the decline in market interest rates, the Federal Reserve Banks lowered the discount rate from 5½ per cent to 5¼ per cent in August. In the fall it gradually became apparent that spending was not slowing abruptly, and market interest rates rose, retracing most of the earlier declines by early December.

Despite the moderate decline of interest rates in June and July, it now appears that during the sum-

mer months there was a shift in monetary influence toward less stimulus. Because of the tax increase and spending cuts, the Federal Government borrowed less than it otherwise would have. Other demands for credit became less intense, perhaps reflecting a lowering of expectations for future economic activity and prices. As a result, while interest rates declined from May to August, the rate of System purchases of securities was not accelerated. Total Federal Reserve credit continued to increase at roughly the 10 per cent annual rate that it had risen since early 1967. Similarly, the monetary base continued to rise at the 6 per cent rate of the earlier period.

A reduced rate of money expansion after July reflected primarily the fact that more of bank reserves and the monetary base were utilized for non-monetary purposes. Treasury deposits in member banks, which are not included in the money stock but which must be supported by the base, rose from a low level of about \$1.5 billion in early July to about \$5 billion in November. Time deposits in commercial banks, which also are supported by the base but are not money, began rising rapidly after mid-year when market interest rates on competitive instruments fell below Regulation Q ceilings which banks are permitted to pay on time deposits. Time deposits, after climbing at a 5 per cent annual rate in the first half of 1968, increased at an 18 per cent rate from July to November.

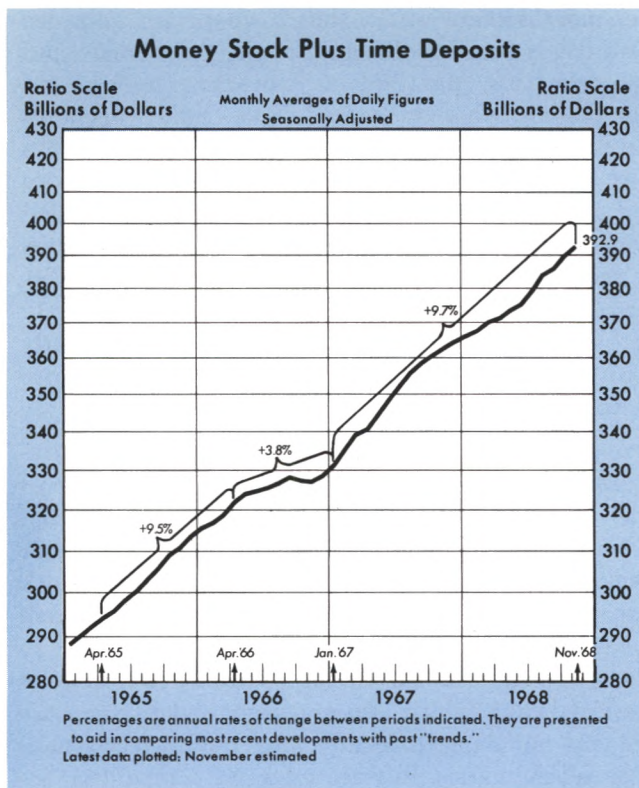


As a result, the money supply of the nation, defined as private demand deposits and currency, rose at a 3.5 per cent rate from July to November after increasing at a 7.4 per cent rate from early 1967 to July 1968. The demand deposit component of money

Table V
Growth Rates of Selected Monetary Aggregates
(Annual Rates of Change)

	July 68 to Nov. 68 ¹	Jan. 67 to July 68	1957 to 1966
Federal Reserve Credit	10.0%	9.8%	7.7%
Total Member Bank Reserves	9.5	7.6	3.2
Reserves Available for			
Private Demand Deposits	1.8	6.4	1.6
Monetary Base	6.2	5.9	3.2
Demand Deposit			
Component of Money	2.6	7.6	2.2
Money Stock	3.5	7.4	2.4
Money Stock plus			
Time Deposits	10.7	9.5	6.0
Bank Credit	17.0	10.6	6.9
Time Deposits	18.2	11.8	12.1
Large CD's	40.0	13.9	—
Other time & savings	16.0	11.6	—

¹Estimated.



rose at a 2.6 per cent annual rate from July to November, following a 7.6 per cent rate of increase in the previous eighteen months. Broader measures, such as bank credit and money plus time deposits, were heavily affected by the reintermediation of time deposits and rose at even faster rates than before (See Table V).

Economic Activity Since Mid-Year

Despite the change in fiscal policy at mid-year and the more restrictive monetary developments that began in July, spending continued to rise at an excessive rate during the last half of 1968. Total demands for goods and services rose at a 9 per cent annual rate in the third quarter, and preliminary figures for October and early November indicate that a rapid pace was maintained early in the final quarter. The slightly reduced pace in spending from the 11 per cent rate of increase during the first half of 1968 to the 9 per cent rate after mid-year was accounted for by a shift from stockpiling of steel before the strike was averted to inventory reductions afterwards. Final sales, i.e., spending other than for inventories, has continued to rise rapidly. Final sales increased at a 10 per cent annual rate in the third quarter, about the same as in the first half.

With increases in spending continuing to outpace growth in capacity, inflationary pressures continued

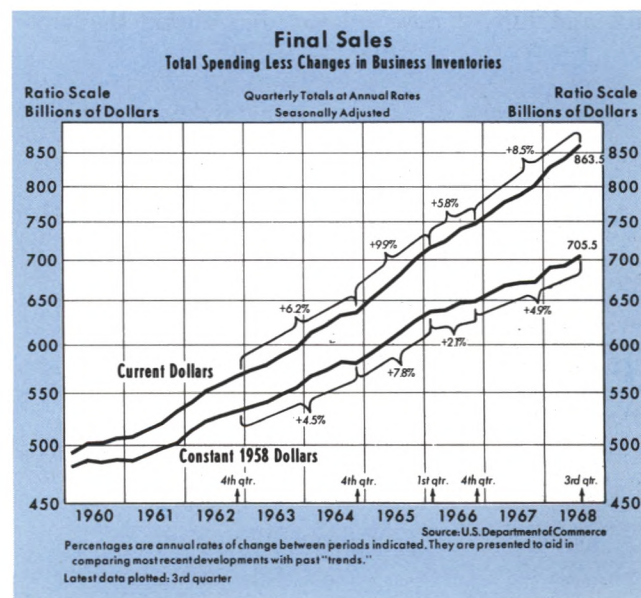
strong after mid-year. Preliminary data indicate that real output has risen at about a 5 per cent annual rate and overall prices at nearly a 4 per cent rate since the second quarter.

Continued spending at an excessive rate in the July to early November period, despite earlier expectations of a quick and marked slowing after the tax increase, was not inconsistent with stabilization actions taken. Monetary growth was very rapid until July, and the expansionary effects of such growth usually continue to be strong for about five months after it moderates. Fiscal actions were not large compared with the size of the economy, and much of their effect was either delayed in implementation or could easily be offset.

The impact of monetary influence on spending may have been very expansive in the third and early fourth quarters of 1968. From January 1967 to July 1968, the money stock had risen at a 7 per cent annual rate, about three times the trend rate from 1957 to 1966. Studies indicate that changes in the growth rate of the stock of money have a significant effect on changes in the growth of spending, with much of the impact coming in the following two quarters.⁷ Hence, even though monetary expansion slowed around mid-July, monetary influence during most of the last half of 1968 probably continued to be excessively stimulative.

Because of the financing constraint, questions have been raised as to the strength of fiscal actions alone in resisting inflation. Higher taxes may merely re-

⁷See "Monetary and Fiscal Actions: A Test of Their Relative Importance In Economic Stabilization," by Leonall C. Andersen and Jerry L. Jordan in the November 1968 issue of this *Review*.



place borrowing from the public, leaving total spending, public and private, about unchanged. Similarly, a drop in Government spending may be offset by more private spending since the Government borrows less from the private sector. It has been found that "... either the commonly used measures of fiscal influence do not correctly indicate the degree and direction of such influence, or there was no measurable net fiscal influence on total spending. . ."⁸

The fiscal package when fully implemented would amount to about \$17 billion, or roughly 23 per cent, of the increase in gross national product in the previous year. However, the fiscal stance of the Government would still be approximately the same as in the early 'sixties when economic activity was expanding rapidly. Even when the surtax and spending cuts are fully implemented, the Government's high-employment surplus will amount to less than 2 per cent of total spending. By comparison, in 1963 the budget surplus amounted to 2.2 per cent of spending, and in that year spending rose faster (6 per cent) than the growth of capacity.

The fiscal package was not immediately implemented in full, reducing the likelihood of a quick slowing response in spending. It takes time to reduce the momentum of Federal programs, and meanwhile, activities not under the Expenditure Control Act of 1968 have continued to expand. As a result, total Federal expenditures have not been cut and are now expected to be about \$188 billion in fiscal 1969, 5 per cent or \$10 billion above fiscal 1968, and about \$2 billion more than the level proposed before imposition of the \$6 billion cut. Further, since the full amount of the increased tax was not withheld from wages and salaries in 1968, much of the impact of the tax was delayed until the spring of 1969 when the retroactive liabilities must be paid.

Some of the restraining effect of the tax on private spending may be offset. The surtax is highly progressive, falling mainly on those in the upper-middle and higher income brackets. These are the ones most likely to maintain their standards of living after imposition of the tax, especially in view of the high rate of saving early in 1968 and the possibly temporary feature of the tax (scheduled to be removed in mid-1969).

Summary and Outlook

Nineteen sixty-eight was the fourth successive year of accelerating inflation. Prices rose about 4 per cent after going up 3.2 per cent in the previous

year. By contrast, from 1957 to 1964 prices rose at a 1.6 per cent annual rate. The inflation resulted from an excessive demand for goods and services which was nurtured by stimulative fiscal and monetary developments.

At mid-year the Government imposed a 10 per cent surtax and provided for a \$6 billion cut in planned expenditures with a view to moderating total spending. Monetary developments also became less expansive; since July the money stock has increased at a 3.5 per cent annual rate after rising at a 7 per cent rate in the previous eighteen months.

Despite these actions, total demand for goods and services has remained excessive. The continued ebullience has reflected the delayed effects of the earlier rapid monetary expansion. The fiscal package was moderate in size, slowly implemented, and partially offset by a lower saving rate.

Economic activity in the first half of 1969 is likely to be greatly influenced by stabilization actions already taken. The slower growth of money since July may act as a restraining force on the growth of total demand in early 1969. In addition, the gradual implementation of the surtax and Government spending cuts will increase the probabilities of continued moderate monetary growth and may cause some slowing in total spending, especially in March and April when retroactive tax payments are made. Social security taxes are scheduled to increase on January 1, withdrawing an estimated \$1.5 billion annually from employees and a similar amount from employers.

Even if spending slows markedly in early 1969, inflationary forces will probably remain a serious problem throughout the year. Price markups usually continue for an extended period after growth in overall demand for goods and services moderates, reflecting "cost-push" forces generated by earlier excessive spending. Some prices, such as bargained wages and those set in other contracts, which have been relatively inflexible during recent periods of excessive demands, will probably move up later at times of renegotiation. Other price adjustments have been retarded by lack of knowledge of costs, by public opinion, and by inertia. As these wages and prices advance, the increase in production costs will place upward pressure on other prices.

Because of the basic imbalances caused by past spending excesses and price rigidities, the economy may simultaneously experience rising prices and a reduced rate of growth of resource use for an extended period. At such times, pressure frequently

⁸*Ibid*, p. 22.

builds up for imposing controls on wages and prices. Such controls, however, are of little value in aiding the economy to reach equilibrium at stable prices. The problem of current price increases resulting from past excessive demand is a reflection of the relative inflexibility of prices, and imposing more rigidities can prolong the adjustment process. Controls also raise problems of resource allocation, interfere with freedom, and are difficult to administer.

A major consideration for stabilization policy-makers in 1969 will be to determine how rapidly the excessive rate of increase of total demand should be reduced. If fiscal and monetary actions are adopted which will slow the rise in total demand for goods and services abruptly, inflationary pressures may be rapidly reduced. However, the cost in lower production, employment, and incomes would be large. On the other hand, if total demand is moderated slowly enough to permit the growth in production, employment and income to continue at near their long-run trends, moderation of the inflationary pressures may be a long, slow process.

Some appreciation of the task confronting policy-makers can be obtained by reviewing the last period when inflationary pressures were significantly diminished. From 1947 to 1953 total demand rose at an average 8 per cent annual rate, with real product expanding at an unsustainable 5 per cent rate and prices at a 3 per cent rate. In the following eight years, from 1953 to 1961, total demand grew at a much slower 4.5 per cent rate. Average gains in real output fell to a relatively low 2.4 per cent rate, but price increases were only gradually reduced from the

3 per cent pace to 1.1 per cent in 1961. Inflationary expectations may be easier to eliminate now than they were in the fifties, since they have existed only about four years compared with over a decade in the 'forties and early 'fifties. Also, a gradual reduction of total demand may be more effective in combating inflationary expectations and less costly in terms of reduced real output than the actual stop-and-go influences of the 'fifties. Nevertheless, elimination of inflationary pressures appears to take considerable time, with real output falling below long-run attainable rates.

Problems of domestic economic stabilization in 1969 may be aggravated by unforeseen changes in defense spending as international developments unfold. Varying moods of optimism and pessimism, changes in tastes and preferences by consumers and businesses, strikes, weather, institutional and legal rigidities, and technological change all increase the task of economic stabilization. Also, there is a continuing balance-of-payments problem which might act as a constraint on policies designed for domestic purposes.

Other obstacles to economic stability include incomplete and delayed information on economic developments and a lag in effect of stabilization actions taken. A complete "fine tuning" of the economy probably cannot be attained in the present state of knowledge, and vigorous efforts to do so may actually be destabilizing. However, if extremely destabilizing actions can be avoided, we should make progress toward the goals of a continued high level of employment and reasonable price stability in a basically free economy.

NORMAN N. BOWSER



U. S. Balance of Payments in 1968*

NINETEEN SIXTY-EIGHT was a year of interesting developments with respect to the balance of payments. The virtual elimination of the United States trade surplus was associated with a strong improvement in the overall balance of payments, and the rapid domestic inflation manifested in a 4 per cent decline in the purchasing power of the dollar has coincided with a revival in foreign confidence in the dollar and the United States economy in general. These seemingly paradoxical events will be considered in this article.

Shifts in Components of Balance of Payments

The overall balance of payments has improved and there has been a sharp change in its components in the first three quarters of 1968, compared with 1967 (see table). The trade surplus, a traditionally strong component of the United States balance of payments accounts, declined from \$3.5 billion in 1967 to an \$0.8 billion annual rate in the first three quarters of 1968. The capital account, generally an area of weakness in the balance of payments, showed an improvement from a deficit of \$2.8 billion to a surplus of about \$1.4 billion in the first half of 1968. The Government sector (excluding military purchases and sales) also showed a strong improvement. However, this was due almost entirely to a unique and non-recurring transfer between the Canadian and the United States Governments of \$500 million in May, 1968.¹

The net effect of the weakness in the trade account and the strength in the capital and Government accounts was an improvement in the overall balance of payments. On the liquidity basis, the \$3.6 billion deficit in 1967 became a \$1.1 billion annual rate of deficit in the first three quarters of 1968, while on the Official Settlements basis the \$3.4 billion deficit in 1967 became a \$1.8 billion annual net surplus in the first three quarters of 1968. These sharp changes in the trade balance and in the private capital account can be attributed partially to developments within the United States and partially to developments abroad.

*This article will consider only the U.S. balance of payments. A forthcoming article will consider other international economic topics.

¹The Canadian government purchased \$500 million of special nonmarketable, medium-term U.S. Government securities under the U.S.-Canadian reserve agreement. In substance, the United States agreed to exempt Canada from the Interest Equalization Tax, and Canada agreed not to increase its international reserves above a certain limit.

Domestic Factors

Trade Account — During 1968 the United States economy has been characterized by rapid growth in real income with virtually full employment and an acceleration in prices. These domestic factors contributed to rapid growth in imports and therefore to a decline in the trade balance. Larger real incomes resulted in an increase in foreign as well as domestic purchases, with foreign purchases accelerated partially because domestic labor resources were fully employed. In addition, domestic prices increased relative to foreign prices, and more favorable prices of foreign products induced a substitution of foreign goods for domestic goods by United States firms and households. Consequently, while real income increased 6 per cent between the third quarter of 1967 and the third quarter of 1968, and prices increased 4 per cent, imports increased by a phenomenal 37 per cent.² The trend rate of import growth from 1960 to 1967 was 9.1 per cent.

U. S. Balance of Payments
(Billions of Dollars)

	1967	1968 First Three Quarters At Annual Rate
I. CURRENT ACCOUNT	4.8	2.0
(Trade Balance)	(3.5)	(0.8)
Exports	30.5	33.6
Imports	27.0	32.8
II. CAPITAL ACCOUNT ¹	- 2.8	+ 1.4*
Long-term	- 2.0	+ 1.7*
Short-term	- 0.8	+ 0.3*
III. GOVERNMENT ACCOUNT	- 4.2	- 3.4 ^e
IV. BALANCE OF PAYMENTS MEASURES		
Liquidity Balance ²	- 3.6	- 1.1
Official Settlements Balance	- 3.4	+ 1.8

*First half 1968.

^e—estimated.

¹Liquidity basis.

²Balance of payments is not a sum of components because errors and omissions and private transfers are not included.

Capital Account — The major factor contributing to the improvement in the balance of payments in 1968 was the shift in private capital flows from an outflow to an inflow. One possible explanation for this switch

²There were also some special factors which tended to accelerate imports during the four quarters ending September 1968. The strike in the United States copper industry forced domestic consumers to purchase foreign copper rather than domestic copper, and the anticipated strike in the steel industry encouraged domestic consumers to establish foreign sources of supply in case their domestic source of supply was severed.

was the President's expanded Foreign Credit Restraint Program (F.C.R.) announced on January 1, 1968. This program, as eventually implemented, restricted the outflow of corporate and banking capital.

Two earlier Administration attempts to improve the balance of payments by restricting capital flows, the Interest Equalization Tax (I.E.T.) originally proposed in July 1963, and the first Voluntary Foreign Credit Restraint Program (V.F.C.R.) announced in February 1965, have not had discernibly beneficial effects on the balance of payments in the long run.³

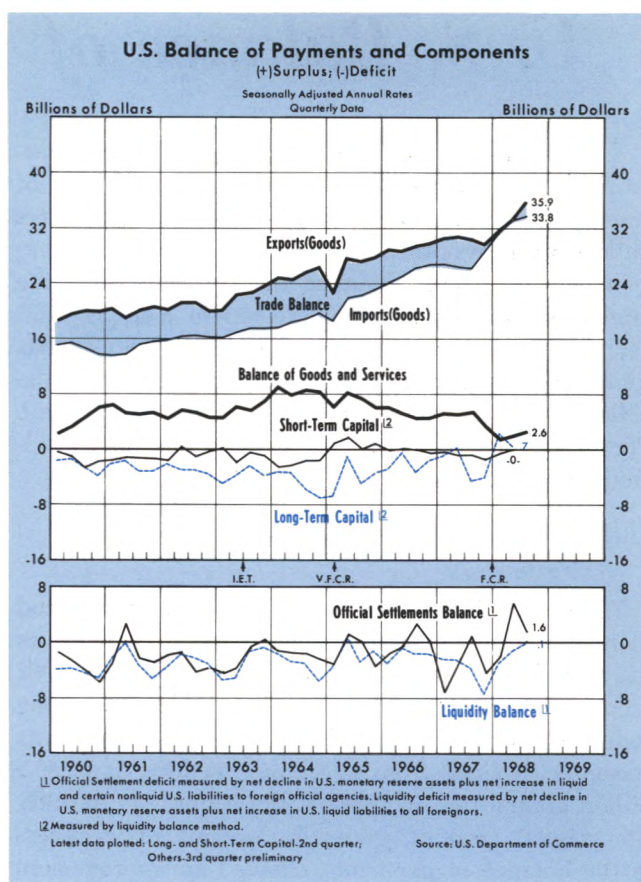
Following announcement of the 1963 I.E.T. program, the overall balance of payments improved for about six months and then deteriorated as those capital items not subject to the I.E.T. (largely bank loans) increased rapidly. By the second half of 1964 the overall balance of payments had returned to its weak position of the previous year.

The V.F.C.R. Program inaugurated in February 1965 was also followed by a balance-of-payments improvement for about six months. However, with the escalation of the Vietnam War and shrinkage in the trade surplus, this improvement was not sustained. By the second half of 1967 the deficit was as large as it had been prior to February 1965. Yet, the V.F.C.R. actions in 1965 seemed to have a longer and more beneficial effect on the capital account than the I.E.T. With respect to the four quarters just before and just after February 1965, short-term capital went from \$-2.0 billion to \$0.6 billion, and long-term capital from \$-4.3 billion to \$-2.7 billion. This was probably because these Administrative actions coincided with a rise in United States interest rates relative to those of foreign countries, especially Japan. This tightening in domestic financial markets made it easier for banks and corporations to comply with the program without being in serious conflict with their profit objectives.

The Foreign Credit Restraint Program now in effect appears to be more effective than earlier programs because the forces of the market, specifically, high interest rates, have complemented it. Inflation in the United States implies not only that the prices of commodities and services are rising, but that the price of financial assets⁴ is rising if, as is the case in 1968, inflationary expectations are strong. If the general price level is expected to rise, purchasers of financial assets will demand a higher nominal return

³For a detailed explanation of these programs, see the December 1966 issue of this *Review*, p. 21.

⁴The price of a financial asset is most appropriately measured by its market yield rather than by its market price. This is because the yield represents the cost of issuing and the benefits of purchasing financial assets. The relation between market price (P) and market yield (r) is as follows: $P = (1/r)$.



so that their real rate of return will not decline, and the suppliers of financial assets will be willing to pay a higher nominal return on the expectation that continued inflation will ease the burden of interest payments in the future.

A rise in domestic interest rates has the short-term effect of making United States financial assets more attractive than foreign financial assets. Consequently, United States funds which would otherwise have gone abroad in 1968 stayed at home, and foreign funds which would otherwise have been invested abroad were attracted to the United States. In addition, United States corporations making direct investments abroad have had more of an interest rate incentive to finance these investments in foreign rather than in United States financial markets. United States corporate borrowing in Europe was \$1,087 million in the first half of 1968, compared with just \$440 million in all of 1967 when United States Corporate Aaa bond yields rose to 6.2 per cent from 5.5 per cent.

Consequently, the net private capital outflow of \$2.8 billion in 1967 became a net private capital inflow of about \$1.4 billion in the first half of 1968, measured on a liquidity basis. This major reversal in the capital account substantially exceeded the guide-

lines specified in the January 1, 1968 program. The rise in United States interest rates was probably a major factor in this occurrence.

Capital inflows associated with high interest rates and domestic inflation may only be temporary. If the inflation and high interest rates continue for an extended period, individuals may become fearful that the decline in the domestic value of the dollar will force a devaluation in the international value of the currency. Such expectations could lead to a speculative capital outflow. As is obvious from recent British experience, no matter how high domestic interest rates are, expectations of a devaluation can cause a large capital outflow.

The present healthy glow in the United States balance of payments may therefore be a sign of inflation fever associated with the boom phase of the business cycle rather than recovery in the balance of payments. If and when the present rapid inflationary pace is slowed, the short-term effects on the capital account may be adverse. Containing inflation will cause market interest rates to decline, reducing the short-term incentive to invest in the United States financial assets, and causing a decline or reversal in the recent capital inflow. However, this would probably cause only a temporary weakness in the balance of payments.

Foreign Factors

While the primary factors in recent balance-of-payments developments can be ascribed to domestic conditions, developments abroad also played an important role. The higher rate of economic growth in Europe in 1968 relative to 1967 has encouraged United States exports to grow at a rate of 16.2 per cent in the first three quarters of 1968, more than double the trend rate of 7.0 per cent between 1960 and 1966. The rapid growth in United States exports largely to Europe helped prevent the decline in the United States trade balance from being much worse.

The continued uncertainties with respect to the British balance of payments, and speculation against the French franc after the May 1968 crisis, have resulted in capital outflows from those countries. The outflow of funds from England and France was largely deposited in the Euro-dollar market where branches of United States commercial banks aggressively bid for them. When these funds are transferred to the head office in the United States, they are recorded as a capital inflow on the Official Settlements measure of the balance of payments. (See pages 18 and 19 for an explanation of the various balance of payments measures).

If United States commercial banks had not been aggressively bidding for Euro-dollar funds, those selling francs and sterling probably would have purchased more deutsche marks than they actually did. The demand by United States banks kept the Euro-dollar rates high and rising so that the decline in official holdings of dollars by the French and British was not matched by an equal increase in official dollar holdings by central banks of other countries in the first three quarters of 1968.⁵ It is still too early to tell what effects will result in the fourth quarter of 1968 from the massive currency speculation in November 1968.

Conclusion

The virtual elimination of the United States trade surplus has been associated with a strong improvement in the overall balance of payments in 1968, due to the initially favorable effects inflation and high interest rates have on the capital account. The rise in interest rates will continue to attract foreign funds into the United States until such time as the continuing inflation and declining purchasing power of the dollar lead to speculation of devaluation of the dollar. The United States is presently in the position where inflation has encouraged the capital inflow, but has not created strong expectations of devaluation.

The improved international position of the dollar, in spite of what for the United States is a heavy inflationary period, can only be partially explained by Administrative actions and rising interest rates. Perhaps an equally important reason is political rather than economic. Recent events in Europe may have convinced some people that the underlying political stability of the United States, in spite of well-publicized riots and disorders, may be greater than that of Europe. This attitude has undoubtedly influenced some Europeans to invest their funds in the United States.

⁵It is difficult to say whether the improvement in the United States capital account was due to the problems faced by France and England, which caused a decline in their holdings of dollars, or to high interest rates in the United States, which made it attractive for United States banks to borrow in the Euro-dollar market. If it had not been for the incentive of United States banks to borrow, the decline in official dollar balances of France and England probably would have been matched by an increase in official dollar balances of other countries. That is, the speculators would have moved their funds not into the Euro-dollar market, but into some other European currency.

There was a substantial speculation in deutsche marks in September and in late November, 1968, but the German central bank made it profitable for the German commercial banks to reinvest balances in the Euro-dollar market which came from selling deutsche marks to speculators.

MICHAEL W. KERAN

How To Interpret The Balance of Payments Accounts

The Balance of Payments Accounts is a double entry record of real and financial transactions between U.S. and foreign residents. Because it is based on double entry bookkeeping principles, the balance of payments always balances in the sense that receipts always equal payments. The double entry nature of the Balance of Payments Accounts is shown on the left-hand side of the accompanying table. This strictly accounting balance must not be confused, however, with a meaningful economic balance, because the economic behavior underlying some of these transactions may not be sustainable. For example, the receipt of \$1.2 billion in 1967 from the sale of the U.S. gold stock (IV.3.a) can only continue as long as our gold stock lasts. There are two officially accepted measures of our economic Balance of Payments, the *Liquidity Balance* and the *Official Settlements Balance*, which are shown on the right-hand side of the table.

To understand the bookkeeping aspect, it is convenient to divide the Balance of Payments Accounts into four categories: Goods and Services, Private Capital, Government, and Other. These accounts are, of course, linked to one another; an export could be financed by a private bank loan, by a Government grant, or by a private gift.

I. Goods and Services: Merchandise exports and imports are a measure of physical goods which cross national boundaries. Service exports and imports measure purchases and sales of services by U.S. residents to foreign residents. Sales of military equipment are included in service exports, and U.S. military purchases abroad are included in service imports (I.2.a). Investment income from the large volume of U.S. direct and portfolio investment abroad is the largest surplus item in the service category (I.2.b). Next to military, travel is the largest deficit item in the Goods and Services category (I.2.c).

II. Private Capital: For long-term capital, this records all changes in U.S. private assets and liabilities to foreigners. Net increases in U.S. assets are measured as payments of dollars abroad, and net increases in U.S. liabilities are measured as receipts of U.S. dollars from abroad. Direct investment (II.1.a) by Americans abroad is much larger than direct investment by foreigners in the United States. However, portfolio investment (II.1.b) is about evenly divided. For short-term capital, payments represent changes in all private U.S. assets, while receipts represent only changes in non-bank short-term liabilities. Changes in U.S. bank short-term liabilities are listed under IV.4 along with short-term liabilities of U.S. official monetary institutions.

III. Government: Cross outflow of loans, grants, and transfers for the Government were \$5.6 billion, and the net outflow was \$4.2 billion in 1967. A large share of

Government loans and grants is tied to purchases in the United States. To the extent that tied purchases would not have been made without the Government loan or grant, this results in an increase in exports of U.S. Goods and Services. Thus, the \$4.2 billion deficit somewhat overstates the Government's real impact on the overall Balance of Payments deficit.

IV. Other: Private Transfers represents gifts and similar payments by American residents to foreign residents. Errors and Omissions is the statistical discrepancy between all specifically identifiable receipts and payments. It is believed to be largely unrecorded short-term capital movements. Changes in U.S. Reserve Assets represent official transactions of the U.S. Government with foreign governments and the International Monetary Fund. Changes in U.S. Liquid Liabilities represent increased foreign holdings of liquid dollar liabilities of U.S. private and official monetary institutions (Banks, the U.S. Treasury and the Federal Reserve).

Balance of Payments Measures

Two economic measures of the balance of payments are represented in the table. The Net Balance column shows the source and overall size of the deficit or surplus, while the Financing column shows how the deficit is financed or the surplus disposed.

The major difference between these two measures is the way foreign holdings of U.S. bank and Treasury liabilities are handled. The underlying assumption about economic behavior in *Liquidity Balance* is that all foreign holdings of dollar liabilities which mature in one year or less (Liquid Liabilities) are a real claim on the U.S. gold stock. As such, the Liquidity Balance measures the actual decline in the U.S. gold stock and other reserve assets of the U.S. Government and increases in all U.S. liquid liabilities to foreigners.

The underlying economic rationale of the *Official Settlements Balance* is that only foreign official holdings of dollars represent a real claim on the gold stock. Foreign private holders and international organizations have a demand for dollar balances as an international currency in the same way as they may have a demand for any U.S. services. Thus, an increase in foreign private holdings of dollars is treated in a manner similar to that of a capital inflow; i.e., included in the Net Balance column rather than in the Financing column. The Official Settlements Balance measures changes in U.S. reserve assets, and changes in foreign official holdings of dollars both liquid and non-liquid. Thus, long term U.S. bank liabilities of \$8 billion and U.S. Treasury liabilities of \$5 billion purchased by foreign governments are in the Financing column.

U. S. BALANCE OF PAYMENTS, 1967
(In Billions of Dollars)

Transactions	Balance of Payments Accounts			Balance of Payments Measures			
				Liquidity Balance		Official Settlements Balance	
	Receipts	Payments	Balance	Net Balance	Financing of Net Balance	Net Balance	Financing of Net Balance
I. Goods and Services.....	45.8	41.0	+ 4.8	+ 4.8	....	+ 4.8	....
1. Mdse. Trade (goods).....	30.5	27.0	+ 3.5	....	....	....	....
2. Services.....	15.3	14.0	+ 1.3	....	....	....	....
a. Military.....	1.2	4.3	- 3.1	....	....	....	....
b. Investment Income.....	6.9	2.3	+ 4.6	....	....	....	....
c. Travel.....	1.7	3.2	- 1.5	....	....	....	....
d. Other.....	5.5	4.2	+ 1.3	....	....	....	....
II. Private Capital.....	2.7	5.5	- 2.8	- 2.8	....	....	....
1. Long term.....	2.3	4.3	- 2.0	....	....	....	....
a. Direct Investment.....	.2	3.0	- 2.8	....	....	- 2.8	....
b. Portfolio Investment.....	1.0	1.3	- .3	....	....	- .3	....
c. Bank and Other Loans (Net)....	1.1	.0	+ 1.1	....	....	+ .3	+ .8
2. Short term.....	.4	1.2	- .8	....	....	- .8	....
III. Government (non-military).....	1.4	5.6	- 4.2	- 4.2	....	....	....
1. Loans.....	1.4	3.4	- 2.0	....	....	- 2.5	+ .5
2. Grants and Transfers.....	....	2.2	- 2.2	....	....	- 2.2	....
IV. Other.....							
1. Private Transfers.....	....	.8	- .8	- .8	....	- .8	....
2. Errors and Omissions.....	....	.5	- .5	- .5	....	- .5	....
3. Changes in U.S. Reserve Assets	1.2	1.1	+ .1	....	+ .1	....	+ .1
a. Gold (outflow is receipt).....	1.2	....	+ 1.2	....	....	....	....
b. Convertible Currencies.....	....	1.0	- 1.0	....	....	....	....
c. I M F Gold Tranche Position....	....	.1	- .1	....	....	....	....
4. Changes in U.S. Liquid Liabilities.....	3.7	.2	+ 3.5	....	+ 3.5	....	....
a. Foreign Official Holders.....	2.0	....	+ 2.0	....	....	....	+ 2.0
b. Foreign Prvt. Holders.....	1.7	....	+ 1.7	....	....	+ 1.7	....
c. Int'l. Organizations other than I M F.....	....	.2	- .2	....	....	- .2	....
Total.....	54.8	54.8	.0	- 3.6*	+ 3.6	- 3.4*	+ 3.4

*Figures do not add because of rounding.

Reflections on the International Monetary Crisis

by ROBERT SOLOMON, Adviser to the Board of
Governors of the Federal Reserve System

THE INTERNATIONAL monetary system has experienced another crisis. It is clearly too early to know whether the measures adopted in the three countries most directly affected — Germany, France, and the United Kingdom — will be adequate to solve the current problems. But this crisis, which rounded out a year of turmoil following the devaluation of sterling, has led many observers to state that the international monetary system is in need of an overhaul that will prevent the recurrence of such acute difficulties. It may be worthwhile, therefore, to ask whether this latest crisis teaches us any lessons as to the need for international monetary reform.

The crisis arose as the result of market expectations that the German mark would soon have to be revalued. Germany's very large current account surplus seemed to be chronic. It had increased sharply during Germany's recession of 1966-67 and remained substantial during recovery, strengthened by declining unit labor costs and, incidentally, by an increase in import taxes and export rebates last January 1. Germany had succeeded in offsetting its large current account surplus with massive capital outflows, but observers were becoming increasingly doubtful that the Bundesbank would be willing or able to maintain its easy money policy, which is a necessary condition for the continuance of the capital outflow in a volume more or less equal to the current account surplus.

In these circumstances, there was widespread talk of a possible revaluation of the deutsche mark (DM) and an accompanying speculative flow of funds to Germany. The speculative flow naturally was at the expense primarily of the two currencies regarded as most vulnerable — the French franc and the British pound. But, in the absence of the speculation on an appreciation of the DM, there would not have been a crisis over either the franc or the pound. France seemed to be adjusting as well as could be expected to the disturbances of last spring, and reserve losses had subsided. Sterling, despite poor trade figures in October, was not under severe pressure; furthermore, it is likely that the British authorities would

have taken further steps to restrain consumer spending in any event. However, the United Kingdom and France could not go on for long losing reserves heavily as speculators continued to bet on a revaluation of the DM.

The crisis involved the danger that a devaluation forced on either France or the United Kingdom could set off a chain reaction in which other countries would also be forced to devalue. The crisis also had political aspects, which were symbolized in the question of which country, Germany or France, would have to act. Movement in the exchange rate of one would lessen if not eliminate the need for a move in the exchange rate of the other.

The first observation we can make about this crisis is that it was not in any direct way attributable to the nature of the present international monetary structure. The fact that the dollar is widely held as a reserve currency was in no way responsible for the difficulties. (It is notable that the market price of gold barely rose during the eventful week of November 18.) One could imagine a similar crisis — involving expectations of exchange rate changes and the danger of competitive depreciation — in a Jacques Rueff gold standard world or in a Robert Triffin conversion account world in which there is only one reserve asset. In other words, the so-called confidence problem — involving the interconvertibility of two or more reserve assets — had nothing to do with the cause or severity of this crisis. It is one of the many ironies of the events of the last two weeks of November that the international monetary crisis which embroiled France should not reflect the alleged weaknesses in the monetary system that French officials have been pointing to for years.

The positive lesson that many observers are drawing from the crisis is that there is a need for a more flexible means of correcting payments imbalances. It may be significant that the Wall Street Journal recently ran an editorial calling for greater flexibility of exchange rates.

While there is much to be said for studying ways of facilitating exchange rate adjustment when

needed, it would be a great oversimplification to believe that the recent crisis stems simply from a fetish regarding fixed exchange rates on the part of monetary authorities. In the case of Germany, for example, the major obstacle to revaluation appears to be the political fallout from a drop in farm prices that would result from an appreciation of the DM. It would be naive to think that Germany's political leaders would have been more ready to revalue the mark had there been in effect an approved technique involving greater flexibility of exchange rates.

My point here is not to strike a blow against consideration of techniques for limited flexibility of exchange rates but to call attention to the fact that resistance to use of such techniques is not easily overcome. If that resistance on the part of governments could be overcome, there is nothing in the present IMF system to prevent adjustments as and when needed.

The most powerful argument on the side of those who favor greater exchange rate flexibility is that it would prevent the build-up of very large imbalances whose correction requires drastic and disruptive action both externally and internally. If gradual adjustment of exchange rates could occur in a routine way without engaging the prestige of governments, the sort of crisis just experienced would be less likely.

Perhaps another lesson from the recent experience is that adjustments in border taxes and export rebates can at times be a useful and less disruptive substitute for adjustment of exchange rates. Germany has reduced by 4 percentage points both its import taxes and its export rebates (authorized under GATT to compensate for domestic indirect taxes). France has substituted a value-added tax for its 4¼% payroll tax. This will permit France to raise import taxes and export rebates. This technique of balance of payments adjustment is not a complete substitute for exchange rate changes—but that may be a virtue as well as a shortcoming. One

advantage of this technique is that it does not induce large anticipatory capital flows. To benefit speculatively from this type of adjustment one must buy or sell commodities. Another advantage is that changes in border taxes and rebates appear less permanent than exchange rate adjustments and may therefore be more readily undertaken. But this may also be a disadvantage, since temporary adjustments of border taxes may not be suitable to correct structural imbalances.

Clearly changes in border taxes and rebates influence only merchandise trade whereas exchange rate adjustment may affect the entire balance of payments. But the difference between the two techniques may be smaller than it appears. In fact, the impact of exchange rate changes on capital flows is unclear, and ordinarily capital account effects are not aimed at when exchange rates are changed. Thus it is mainly current account flows other than merchandise trade that are unaffected by border adjustments but are subject to exchange rate moves. How serious this shortcoming is will vary from country to country.

In any event, it seems worthwhile to examine this technique as possibly representing—not the optimal theoretical adjustment method but—one that might make up in acceptability and feasibility for what it lacks in elegance. Were this approach to be adopted more frequently and more widely, it can be envisioned that the GATT and the IMF would provide multilateral surveillance over the border actions of individual countries.

A final and hardly novel lesson from recent experience is that domestic policies are crucially important to the success of exchange rate adjustments. The response in Britain to last year's devaluation points up this lesson. Whatever the case for greater flexibility in the pattern of exchange rates, adoption of such techniques will not by itself eliminate balance of payments problems.



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