

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

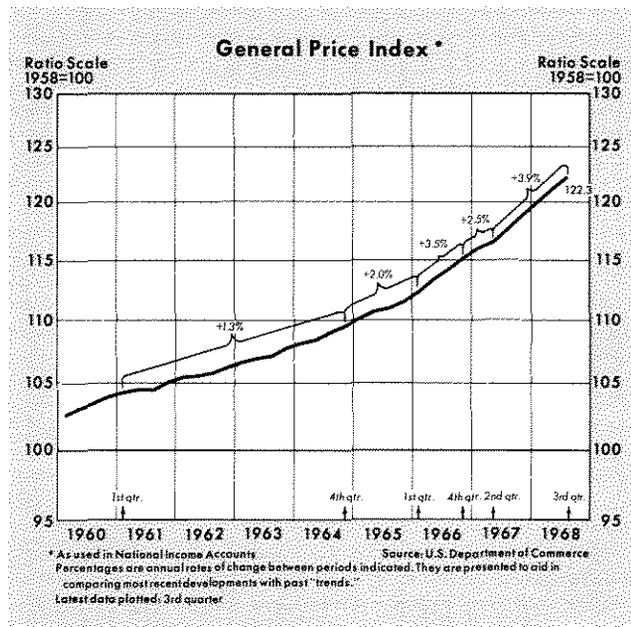
services grew only slightly faster than the productive capabilities of the economy. From 1957 to 1964 total demand rose at an average 5.3 per cent annual rate while real output was increasing at a 3.6 per cent rate. Total demand did not rise evenly during this period. Although pauses in demand growth 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.

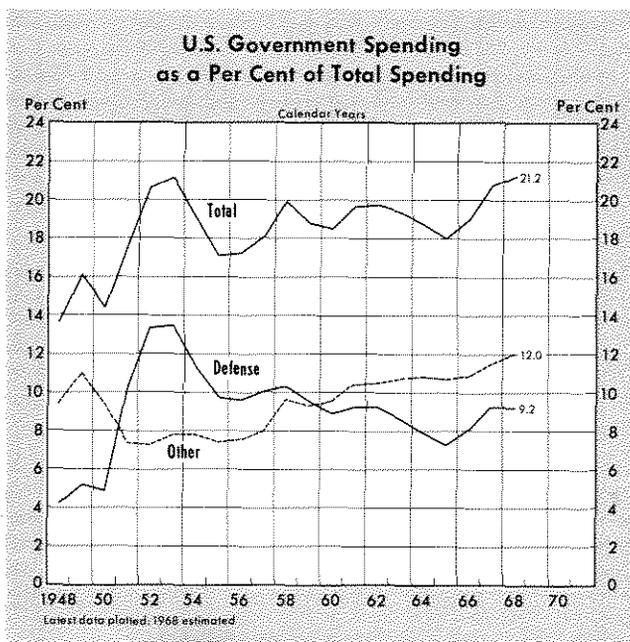
However, until mid-1968, Federal income tax rates were not increased. In fact, the Government did the opposite by reducing such taxes in 1964 and again in 1965.

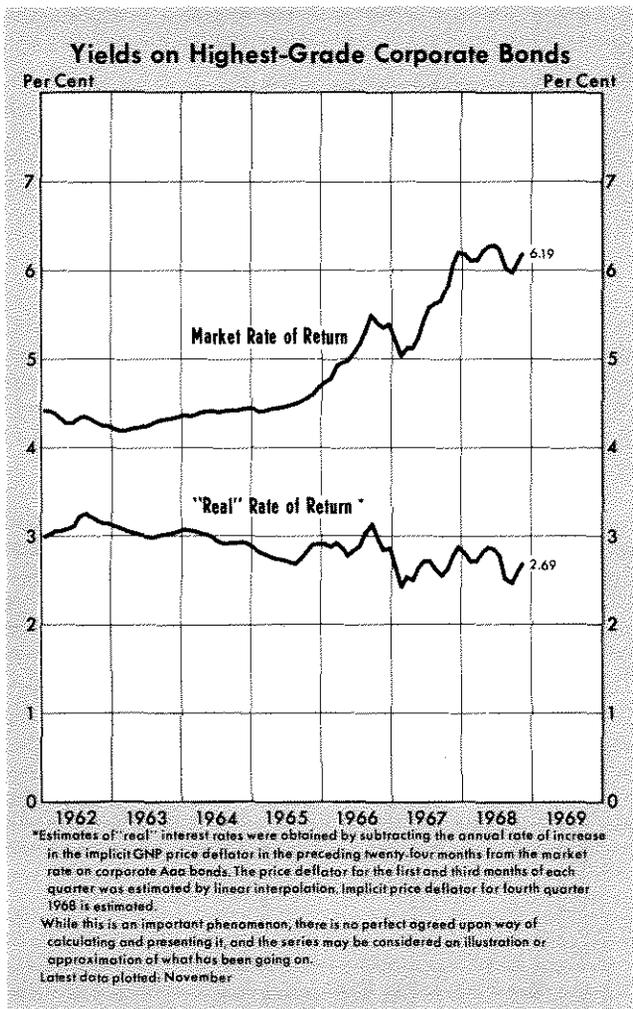
A third method of financing the increased Government outlays while minimizing inflationary pressures would have been for the Government to borrow the additional funds from the private, non-banking sector. This would have required an increase in interest rates, would have induced increased saving and 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.

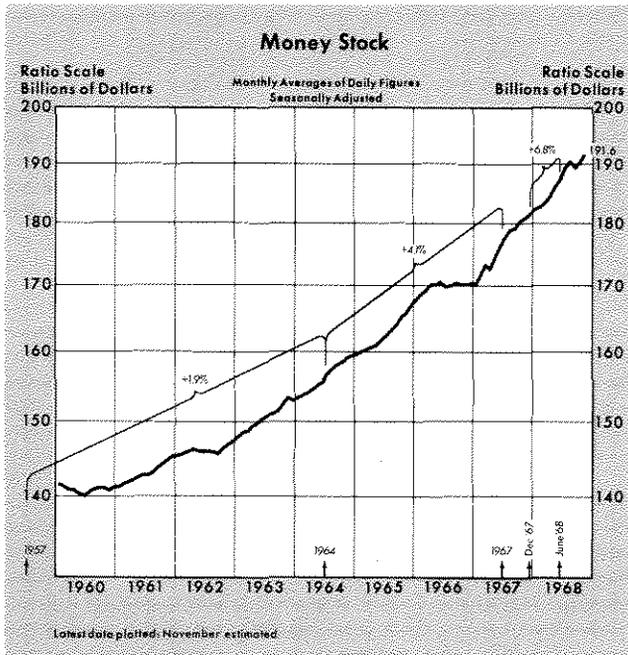
On December 12, 1967, to the Federal Open Market Committee, "it appeared highly probable that growth in overall activity would accelerate in early 1968 and the upward pressures on prices would persist as the effects of higher costs were reinforced by those of rapidly expanding demands." As a consequence, 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 rel-

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			



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.

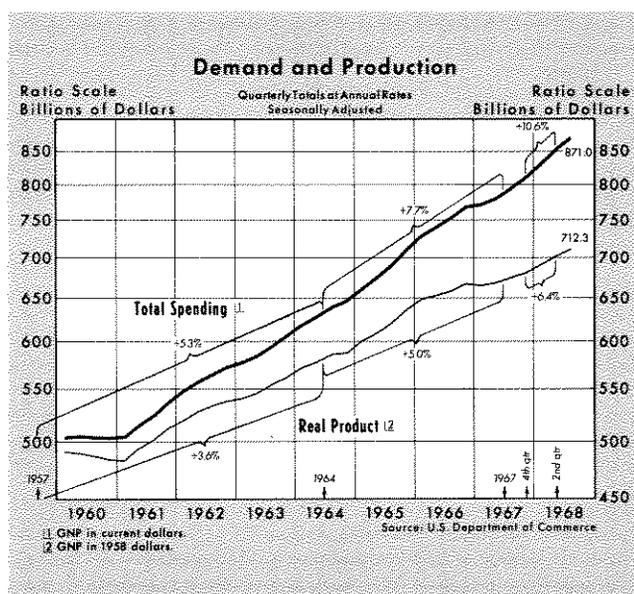
The rapidity of growth of monetary aggregates during the first half of 1968 may be measured by comparing their growth rates at this time with those of all other six-month periods in the last two decades. For example, the 6.8 per cent rate of increase in money in the first half of 1968 (See Table II)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

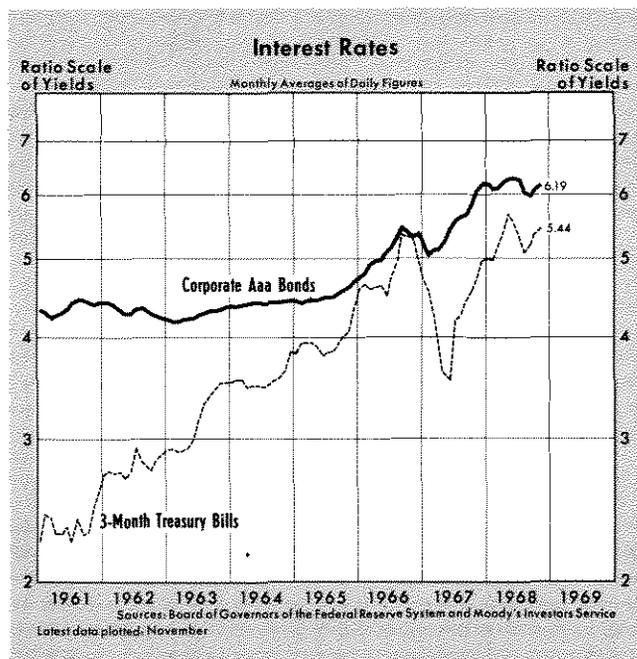
Employment rose at about the same pace as the population of working force age in the first half of 1968. Most entrants into the labor force were able to find work, many jobs remained unfilled, and unemployment remained a relatively low 3.6 per cent of the labor force. Among married men, unemployment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

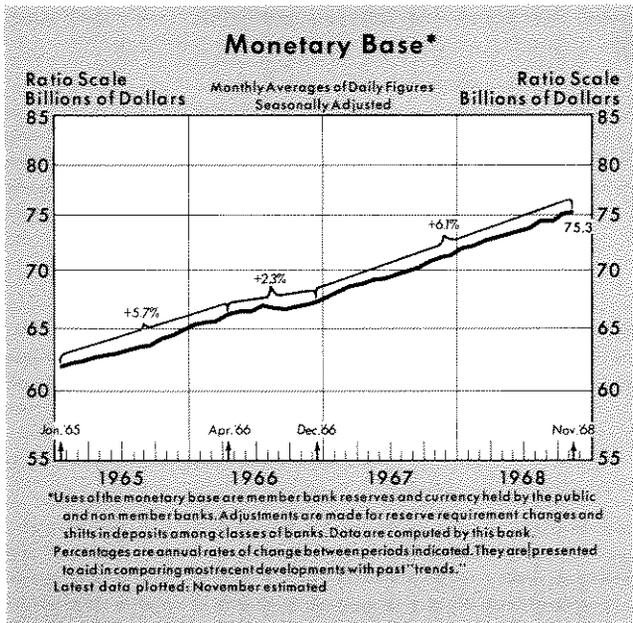
Last spring most analysts felt that a tax increase was essential.⁵ Chairman William McChesney Martin of the Federal Reserve Board told the American Society of Newspapers Editors in late April that: "We must have a tax increase, reduce the budgetary deficit and correct the adverse balance of payments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

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-

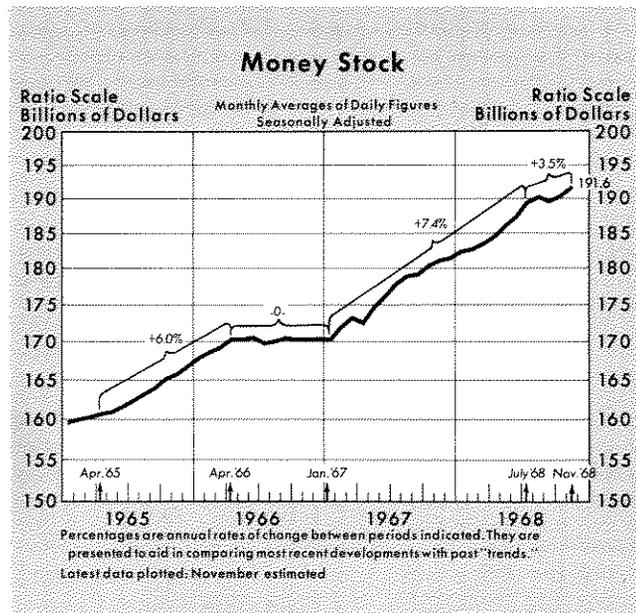
mer months there was a shift in monetary influence toward less stimulus. Because of the tax increase and spending cuts, the Federal Government borrowed less than it otherwise would have. Other demands for credit became less intense, perhaps reflecting a lowering of expectations for future economic activity 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.

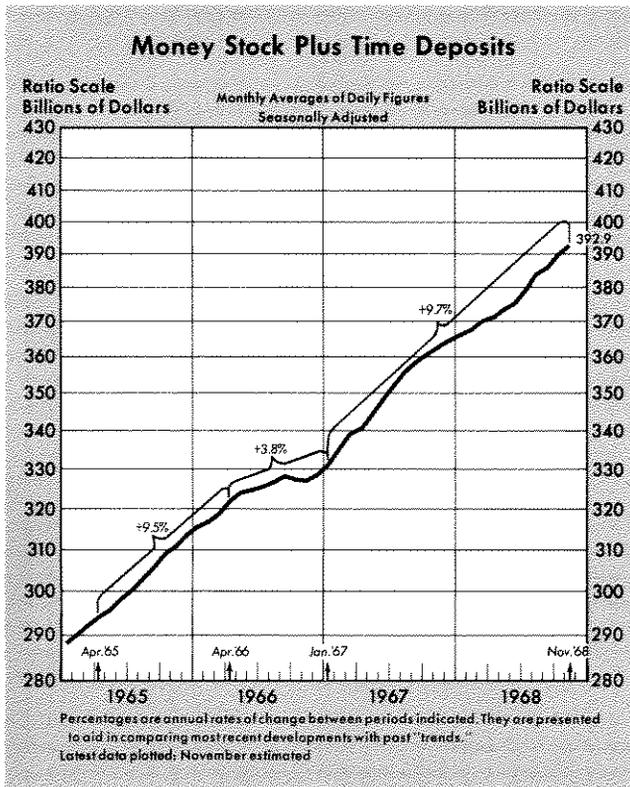
Table V
Growth Rates of Selected Monetary Aggregates
(Annual Rates of Change)

	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.



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



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

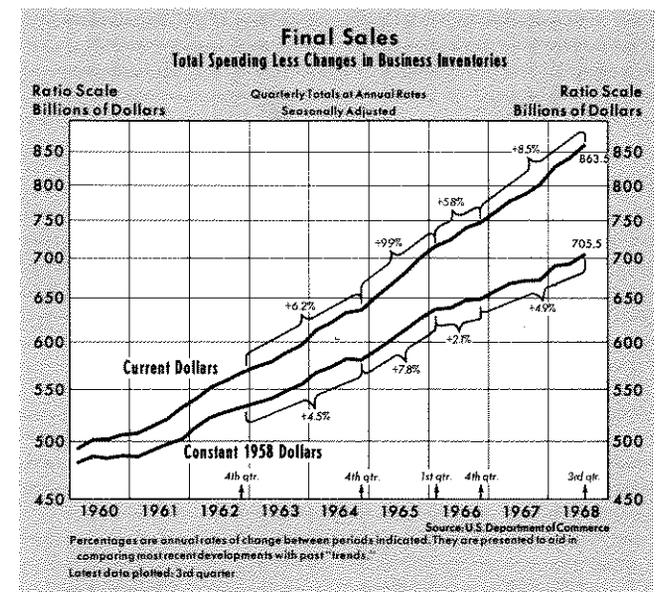
strong after mid-year. Preliminary data indicate that real output has risen at about a 5 per cent annual rate and overall prices at nearly a 4 per cent rate since the second quarter.

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

⁸*Ibid*, p. 22.

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

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.

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