August 1966

FEDERAL RESERVE BANK OF ST. LOUIS

Review

CONTENTS

Volume 48 • Number 8

FEDERAL RESERVE BANK OF ST. LOUIS

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

Strong Total Demand, Rising Interest Rates, and Continued Availability of Credit

Introduction

TOTAL DEMAND for the product of the economy, expressed in dollars, rose further through the early summer. This expanding demand for economic product was accompanied by greater demand for financing. Although credit became available at very rapid rates, the demand for credit rose even more rapidly. As a result, interest rates moved up.

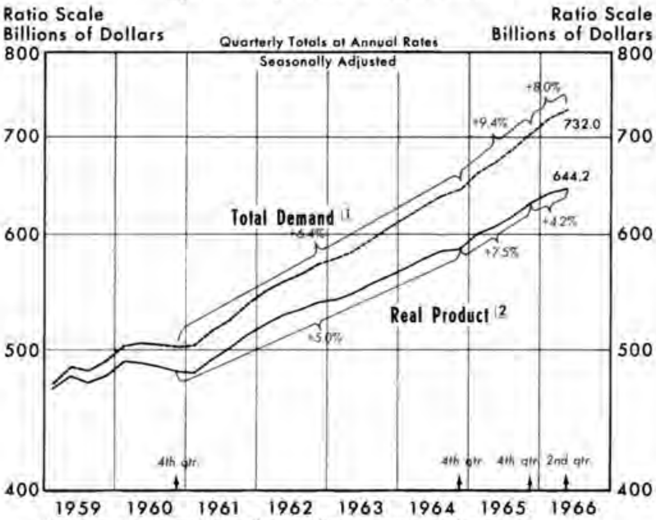
The relative role of financial intermediaries, such as commercial banks and savings and loan associations, lessened as an increased proportion of credit needs was met in the open market. The rise in market interest rates on primary debt relative to rates offered for holding claims on financial institutions induced investors to lend funds directly rather than through the institutions. Borrowers, turned aside by intermediaries which had only limited means of adjusting to the increased loan demand, similarly turned to the open market to meet their credit needs.

Strong Economy

The rate of expansion of economic activity may be judged as very strong in the second quarter measured by the total demand for the product of the economy. Gross national product in current prices was up at a 6.1 per cent annual rate from the first quarter. While this rise was smaller than the quarter-to-quarter increases over the preceding five quarters, it was strong compared with the 5.8 per cent average annual rate of increase from 1960 to 1964, a period of relative price stability, and the 5.4 per cent average annual rate of increase from 1953 to 1965.

If economic activity is measured by real product, it appears that the rate of expansion has faltered. Gross national product in constant prices rose at only a 2.3 per cent annual rate from the first to the second quarter, substantially less than the 6.0 per cent annual rate of increase in the preceding quarter and the 7.2 per cent average rate of increase over the preceding five quarters. The recent rise in real product is also less than the 4.4 per cent average annual increase from 1960 to 1964 and the 3.4 per cent average growth rate from 1953 to 1965.

Spending and Production



Percentages are annual rates of change between quarters indicated.
1 GNP in current dollars.
2 GNP in 1958 dollars.
Source: U.S. Department of Commerce
Latest data plotted: 2nd quarter preliminary

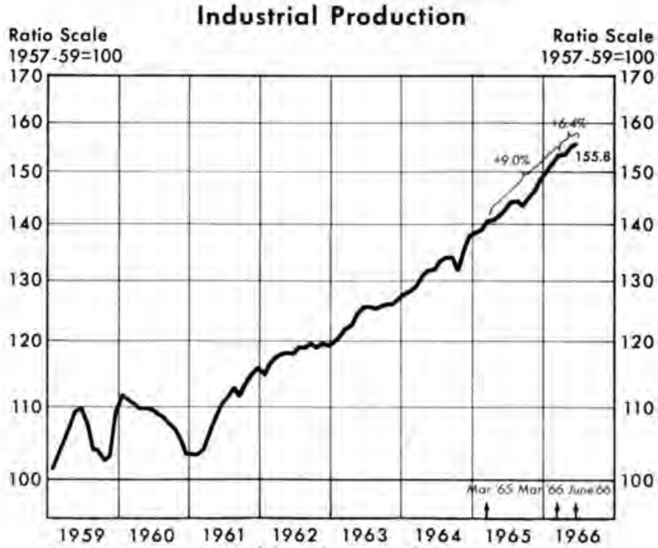
Notwithstanding the moderation in the rise of total demand, prices have continued to move upward. Prices as measured by the GNP implicit price deflator rose at a 3.6 per cent annual rate from the first to the second quarter. This increase was the same as in the preceding quarter but was substantially greater than the 2.1 per cent average rate of increase over the preceding five quarters. The "trade-off" between real product increases and price increases has become more unfavorable in recent quarters. During 1965 each 1 per cent annual rate of increase in real product was accompanied by a 0.3 per cent rise in prices; from the last quarter of 1965 to the first quarter of this year each 1 per cent rise was accompanied by a 0.6 per cent rise in prices; in the recent second quarter each 1 per cent increase in real product was accompanied by a 1.6 per cent rise in prices.

Prices

1 1958=100 (GNP deflator)
2 1957-59=100
Sources: U.S. Department of Commerce and U.S. Department of Labor

The decline in the rate of increase of real product since late 1965, both absolute and relative to the rate of increase of total demand, may be viewed as resulting from the economy's reaching substantially full use of resources. The 4.2 per cent rate of increase of real product in the first two quarters of 1966 (compared with a 7.5 per cent increase from the fourth quarter of 1964 to the fourth quarter of 1965) was about the rate of growth of productive capacity. Total dollar demand beyond that was manifested in price increases. Arrival at substantially full use of resources was manifested by a decline of the rate of increase of total employment from 3.5 per cent in 1965 to a 0.9 per cent per annum increase in the period since January; of payroll employment from 5.2 per cent in the period from March 1965 to March 1966 to a 3.0 per cent rate in the period from March to June 1966; and of industrial production from 9.0 per cent in the period from March 1965 to March 1966 to a 6.4 per cent rate in the March-June 1966 period.

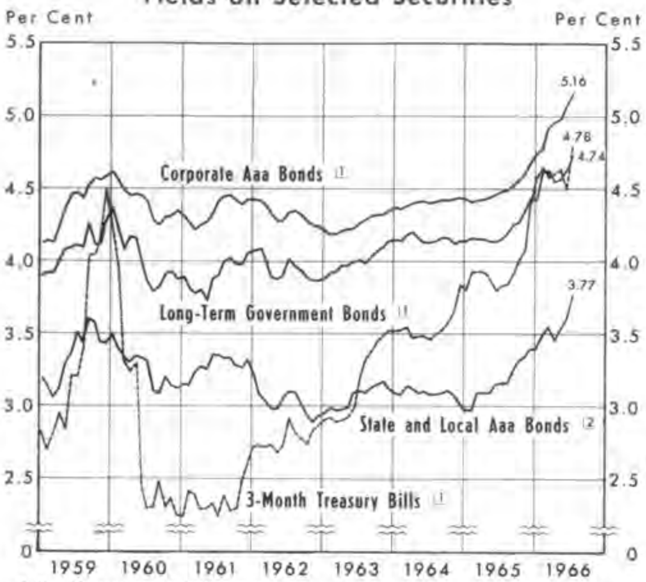
Industrial Production



Percentages are annual rates of change between months indicated.
Latest data plotted: June preliminary

Rising Interest Rates

Interest rates have moved up sharply since the beginning of the year and since mid-1965. The rise in



1 Monthly averages of daily figures.
2 Monthly averages of Thursday figures.
Latest data plotted: July
Sources: Board of Governors of the Federal Reserve System and Moody's Investors Service

rates thus far in 1966 has been, in general, greater than in the last half of 1965 (see table).

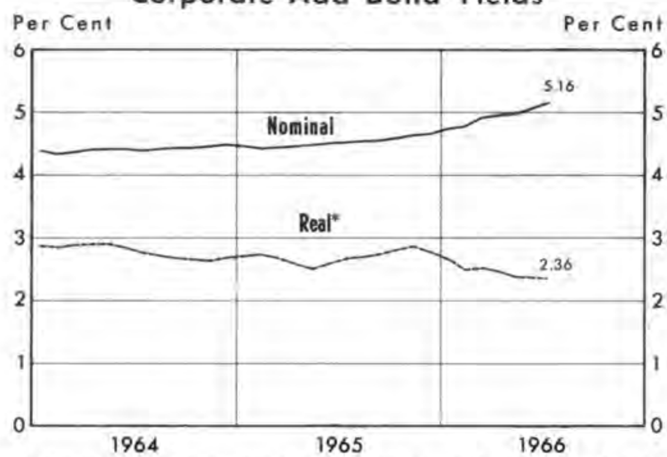
SELECTED INTEREST RATES

	Week Ending			Per Cent Increase	
	August 5, 1966	January 7, 1966	July 9, 1965	To Date in 1966	Last Half 1965
Corporate Aaa	5.24	4.73	4.47	10.8	5.8
State and local Aaa	3.78	3.40	3.17	11.2	7.3
Prime rate	5.75	5.00	4.50	15.0	11.1
Large certificates of deposit	5.50	4.80	4.25	14.6	12.9
Commercial paper, 4- to 6-months	5.75	4.75	4.38	21.1	8.4
Bankers' acceptances	5.63	4.75	4.25	18.5	11.8

The level of interest rates which prevails at a given time is that which equates the flows of credit demands and supplies. The recent and continuing upward movement in market rates of interest appears to have resulted chiefly from strong demands for investment funds, which in turn derived in large measure from the stance of the Federal budget, the high total demand for goods and services, and rising prices. There is little evidence that the public is currently saving less at any given market interest rate than it was earlier.

Loan or investment funds continue in great demand. The strong demand has resulted in large measure from the great total demand for goods and services. In turn, the strong total demand for goods and services reflects the stimulative fiscal stance, the accumulated effects of monetary expansion, and the strong foreign demands for investment funds. Moreover, anticipation of future price increases has a stimulative effect on current spending decisions, particularly decisions to engage in real investment and to borrow.

While market interest rates have risen, this is not reflected in the "real" price of borrowed funds. If a borrower realizes that the nominal rate of return on investment will rise by the rate of inflation, he will be willing to pay a nominal interest rate on current funds higher than his expected real rate of return from the gainful employment of those funds. Similarly, if, during a period of inflation, a lender is to avoid a decline in the real rate of return on his funds he must receive a nominal or market rate which is sufficiently above the real rate to offset the expected inflation. According to the accompanying chart, the estimated real rate of interest has declined on balance since late last year and has drifted downward over the past several years of strong economic expansion.[1] It is anomalous to suggest that interest rate increases are restrictive during a period when the real rate of interest has not increased.



*Estimates of real interest rates were obtained by subtracting the per cent change in the implicit GNP price deflator in the preceding year from the market rate on corporate Aaa bonds. The price deflator for the first and third months of each quarter was estimated by linear interpolation.
Latest data plotted: July

[1] Statements concerning borrower and lender expectations imply a time horizon. The appropriate expectational horizon for the inflation adjustment is one which corresponds to the maturity of the debt. (For a discussion see Irving Fisher, *The Theory of Interest*, New York: Kelley and Millman, Inc., 1954, pp. 36-44.) Any specific calculations, as in the chart, are arbitrary both with respect to choice of the nominal rate of interest and the inflation adjustment. Numerous alternatives were investigated: Various weighting systems, time periods, and price indexes, along with different market interest rates, were used in constructing the expectational adjustment. While in some instances it was possible to show an increase in the real rate of interest over the period shown on the chart, the methods used were generally unpalatable on intuitive grounds.

If monetary expansion is limited during any given period, market rates of interest and real rates of interest during *that* period are probably higher. Viewed over an extended period of time, it is likely, paradoxically, that if monetary expansion is moderated the rise in market rates over the period would be less than otherwise. When fiscal and monetary policies are less stimulative, total demand for goods and services rises less, and, in turn, the inflation is less. Real rates of interest would rise relative to market rates.

Continued Credit Availability

Credit has become available at very rapid rates in recent months, since late 1965, and over the past year.

Loan credit at commercial banks has become available at an estimated 12 per cent annual rate since April and at a 13 per cent rate since late last year and since last July. Business loan credit at commercial banks has become available at a 28 per cent annual rate since April, a 23 per cent rate since late last year, and an 18 per cent rate over the past year.

Even though commercial banks have made credit available at rapid rates, borrowers have found it practical to raise additional funds in the open market. Such developments do not indicate a decline in the availability of bank credit or of total credit, nor do they indicate monetary restriction. The demand for credit has been strong enough to absorb the rapid flow of credit from banks and, at the same time, to mobilize large amounts of funds in the open market. The great demand for loan funds has been augmented by the Federal Government demand for funds and by the effects of the Federal budget and monetary expansion on total demand for goods and services.

There has been an increase in the role of direct borrowing and lending in the open market. Net security flotations of corporations and state and local governments, which constitute the bulk of total borrowing by security issue, were 24 per cent greater in the first half of 1966 than in the comparable year-earlier period. Such flotations in 1965 were 4.3 per cent greater than in 1964. Borrowing in the open market by security issue accounted for about 40 per cent of the total of funds raised by nonfinancial sectors in the first quarter. By comparison, during 1965 such borrowing amounted to only about 26 per cent of the total.

Increasingly, investors have been induced to lend funds directly in the open market rather than to place them in financial institutions for intermediation. Direct lending in the open market by individuals, businesses, and state and local governments accounted for $36 billion (annual rate) in the first quarter, 40 per cent of total funds lent to nonfinancial sectors. In 1965 such private lending accounted for only $10 billion or 14 per cent of the total.

There is some evidence of a decline in the pace at which banks and other financial intermediaries combined have supplied credit and of a decline in their relative importance. This development is a counterpart to the rise in direct private lending. Financial institutions accounted for $48 billion (annual rate) or 53 per cent of total lending to nonfinancial sectors in the first quarter of 1966. This was down sharply from the pace in 1965, when such intermediation amounted to $55 billion, about 75 per cent of the total. Limitations on interest rates which institutions can pay for funds in a period of high demand for loan funds reduces the role of financial intermediaries. This means that loan funds tend to be diverted from borrowers who cannot effectively use the open market to those who can.

Rapid Increases in Reserve Availability

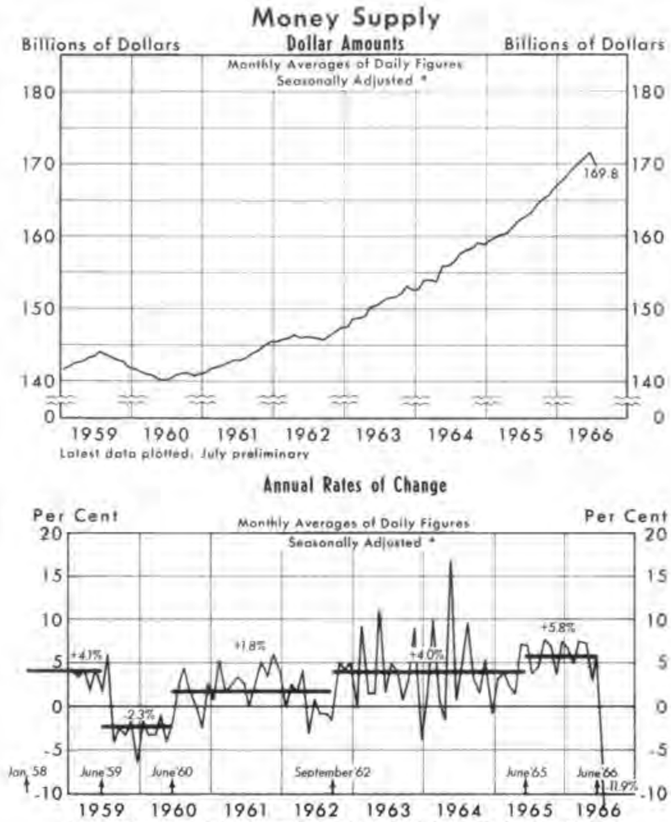
The continued expansion in reserve availability has contributed to the strong expansion in commercial bank credit. Available member bank reserves have risen at a 6.2 per cent annual rate since March, at a 5.6 per cent rate since late last year, and at a 4.7 per cent rate over the past 12 months. Reserves to support private demand deposits have become available at a 0.5 per cent annual growth rate since March, at a 1.9 per cent rate since December, and at a 3.4 per cent rate during the past year.

The reserve expansion has been made possible by purchases of U. S. Government securities by the Federal Reserve and by an increase in member bank borrowing. Federal Reserve holdings of U. S. Government securities have risen at an 8 per cent annual rate since March. Member bank borrowing has risen 39 per cent or by $215 million. Bank borrowing from the Federal Reserve has been in response to strong demand for credit, a discount rate below market interest rates, and the increasing difficulty individual banks have found in securing CD funds within the rate limitations imposed by the Federal Reserve Board's Regulation Q.

The fast pace at which reserves have continued to be made available to the banking system has provided upward pressure on the amount of bank credit which was available. By making sufficiently rapid increases in credit, the banks have apparently been able to keep their excess reserves down to desired levels. Excess reserves of member banks have fluctuated around the $350 million level so far in 1966. In the last quarter of 1965 excess reserves averaged $390 million. Because interest rates have risen, increasing the opportunity costs of holding nonearning assets, the banking system's demand for excess reserves has probably declined.

Rapid Expansion in the Availability of Money

Reflecting the sharp expansion in bank credit and the somewhat reduced intermediation role of the commercial banks, the stock of money rose rapidly through the winter and spring. The money supply rose at a 6.3 per cent annual rate from November to May. This rate of increase was much greater than the 2.6 per cent rate from 1960 to 1964, a period of relative price stability. An apparent decline in the money supply from May to July may have been due in large measure to an unusually large building up of Treasury balances in the commercial banks.



Bars on chart are periods of no marked and sustained changes in the rates of change. Percentages are annual rates of change between months indicated.
*Seasonal adjustment for data since January 1963 computed by Federal Reserve Bank of St. Louis using data ending May 1966. Earlier figures seasonally adjusted by the Board of Governors.
Latest data plotted: July preliminary

Demands for money are sometimes viewed as deriving from both transactions needs and store-of-value demand. Desired money balances have probably not risen so rapidly as the money stock. While the continuing business expansion has probably been accompanied by an increase in the requirements for money to be used for transactions, desired money balances to hold as assets have probably edged downward relative to income. Interest rates have risen sharply, increasing the alternative costs of holding idle money.

Conclusions

Total demand for goods and services rose strongly in the second quarter, though there was a temporary moderation from the rate of advance during the preceding year. The increase in real product slowed as the "trade-off" between increases in real product and rising prices became more unfavorable.

The strong total demand situation, buoyed by a stimulative Federal budget and by rapid monetary expansion, was accompanied by marked increases in the demand for credit. The commercial banking system made credit available at very rapid rates. Sharp increases in bank credit have been facilitated by the rapid rate of increase in reserve availability. Despite the rapid rates of increase in commercial bank credit, demands expanded even faster, and interest rates rose further. Borrowers have turned increasingly to the open market to obtain funds.

The rise in market interest rates has been less rapid than the rate of inflation. As a result, interest rates adjusted for price increases have probably not risen. Restrictive fiscal policies or less rapid monetary expansion are means by which a rise in total demand may be limited. Reduced monetary expansion is probably accompanied in the short run by higher market interest rates. Over a longer period, however, such a policy, by reducing the rate of increase in total demand, tends also to limit increases in interest rates.

The Federal Budget: A Midyear Review

MORE THAN SIX MONTHS have passed since the Federal budget plan for the eighteen month period ending June 30, 1967, was presented to Congress. We are now better able to evaluate the budget plan as presented at that time in view of developments in the first half of calendar 1966.[1] Since January the financial press and other observers have stressed various aspects of the budget, in particular emphasizing opinions or developments regarding trends in either receipts or expenditures. Public statements or analyses of the budget have seldom been made that have given simultaneous consideration to both sides of the budget, i. e., receipts and expenditures, and thereby to the net impact of the budget on production and prices.

Federal receipts and expenditures both rose rapidly during the first half of calendar 1966. This observation applies to any one of the commonly used budget measures, viz., the administrative, cash, national income accounts, or high-employment budgets.[2] While for the most part these increases were anticipated in the January budget plan, the rates of expansion were larger than expected.

This article focuses on the effect of the Federal budget on the economy during the first half of calendar 1966 and the prospects for its impact during the rest of the year. Emphasis is on the national income accounts (NIA) budget and its variant, the high-employment budget.[3] These budgets are better suited to measuring the Federal Government's net contribution to total demand than either the administrative or consolidated cash budgets.[4]

Expenditures

Expenditures in the NIA and high-employment budgets in the first half of calendar 1966 conformed substantially to projections in the January budget. Defense spending ran higher than projected but was offset by lower-than-expected nondefense expenditures.

FEDERAL BUDGET: NATIONAL INCOME ACCOUNTS BASIS

Seasonally Adjusted Annual Rates

(Billions of Dollars)

	1st Half 1966		2nd Half 1966	
	January 1966 Estimate	Actual (Preliminary)	January 1966 Estimate	August 1966 Estimate
Actual budget				
Receipts	133.5	136.0	139.5	142.5
Expenditures	135.3	135.2	141.5	146.2
Surplus (+) or deficit (—)	— 1.8	+ .8	— 2.0	— 3.7
High-employment budget				
Receipts	135.0	136.6	140.8	142.5
Expenditures	135.3	135.2	141.6	146.2
Surplus (+) or deficit (—)	— .3	+ 1.4	— .8	— 3.7

NOTE: Estimates prepared by Federal Reserve Bank of St. Louis. January estimates are based on data presented in the January 1966 budget document. August estimates are based on actual first half data and judgments about the second half.

[1] This article does not reflect the recent Department of Commerce revisions of national income accounts data. The earlier data are used so that the current and prospective Federal budget developments can be evaluated against the background of the January budget message. The conclusions are unaffected by the recent revisions.

[2] For a brief discussion of these alternative budget measures, see "Budget Policy in a High-Employment Economy," in the April 1966 issue of this *Review*.

[3] The high-employment budget is an estimate of receipts and expenditures in the Federal sector of the national income accounts which would prevail at a high level of resource use with given tax and expenditure laws. The employment or resource use assumption used here is that of the President's Council of Economic Advisers. The Council defines a high-employment level of economic activity as that level of gross national product (GNP) that results from assuming a 3.50 per cent annual rate of growth in real GNP from a mid-1955 (full-employment) base through 1962 and a 3.75 per cent rate thereafter. For further details see the 1966 *Annual Report of the Council of Economic Advisers*, pp. 39-42.

[4] The general unreliability of the administrative and cash budgets for this purpose is well known, but this criticism is especially pertinent in 1966. The Government is engaged in an unusual amount of financial transactions and is revising time schedules for tax payments without changing rates. Such actions have an important bearing on money and capital markets but probably have little net effect on total demand. The national income accounting framework provides a measure relatively free of financial and timing effects.

High-employment expenditures in the national income accounts were at an annual rate of $135.2 billion in the first half, virtually the same as the $135.3 billion forecast implicit in the January budget. Defense expenditures were at a rate of near $56 billion, almost $2 billion above what was originally expected.

Prospects for the second half of the year depend critically on the course of the Viet Nam war. According to the January budget, the rise in defense spending was expected to slow in the second half of calendar 1966. Expectations regarding the war have changed, and defense expenditures are currently expected to rise about $2 billion each quarter for the remainder of 1966, to rates of about $59 and $61 billion per year in the third and fourth quarters.

If nondefense expenditures, e. g., the new medicare program and pay increases to Government employees, increase slightly more than planned in January, expenditures in the second half will be at an annual rate of about $146.2 billion compared with the original estimate of $141.6 billion.

Receipts

Federal receipts grew very rapidly during the first half of the year. In the national income accounts (where corporate taxes are accrued) receipts totaled $136.0 billion (annual rate), $2.5 billion more than anticipated.[5]

There are two possible causes of an unexpectedly rapid increase in tax collections. First, receipts might increase faster than expected because dollar income of the public advances more rapidly than expected. To the extent this is the case, the higher receipts should not be interpreted as fiscal restraint but as a reflection of rapid economic expansion in dollar terms, and might be (although not necessarily) a result of a very stimulative fiscal situation.

A second possible cause for the higher-than-expected receipts is that budget and economic advisers underestimated the tax rates that would be in force or the proceeds that would flow from assumed tax rates and income of the public. To the extent there was such underestimation, the budget might be said to have been more restrictive in the sense that after-tax incomes were less than anticipated.

With respect to receipts data for the first half of 1966, which cause is consistent with the data? Gross national product in the first half of the year appears to have been about $5.5 billion higher than anticipated last January. This implies that approximately $1.1 billion of the $2.5 billion more-than-anticipated receipts were not evidence of fiscal restraint. This leaves approximately $1.4 billion which may be ascribed to an underestimation of the tax rates which would prevail or the proceeds which would flow from given tax rates and given private income, and to that extent the budget was less stimulative than anticipated in January.

It appears that the chief tax component which gave rise to the underestimate was the social security tax. Social security receipts rose about $6.5 billion or over 25 per cent from the last half of 1965 to the first half of 1966. Personal taxes and corporate taxes rose less rapidly.

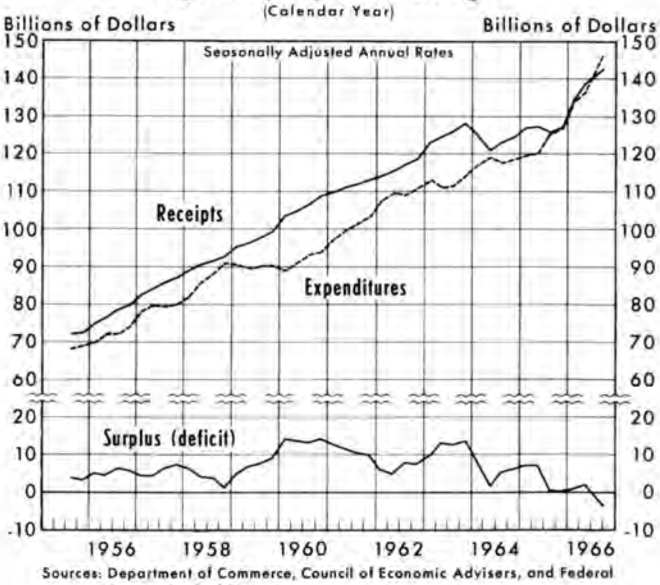
Receipts during the remainder of 1966 are expected to continue to rise as economic activity expands. At present, no changes in tax rates are scheduled to take effect during the second half of the year. Receipts are expected to be about $142.5 billion during the second half compared with $136.6 in the first half, reflecting trend growth in the economy.

The Budget and the Economy

What was the net impact of the Federal budget on the economy during the first half of the year, and what are the prospects for the remainder of the year? A convenient summary measure of the direction in which the Federal budget is influencing the economy is the high-employment budget surplus or deficit.

High-Employment Budget

(Calendar Year)



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

Latest data plotted: 2nd quarter preliminary, last half 1966 estimated by Federal Reserve Bank of St. Louis

[5] The importance of accruing corporate taxes is that budget figures are not influenced by changes in tax payment schedules. Rather, budget receipts reflect changes in tax rates and the level of economic activity.

It now appears that high-employment expenditures of $135.2 billion (annual rate) and high-employment receipts of $136.6 yielded a $1.4 billion surplus in the first half. Projections in January were for a $0.3 billion deficit. On balance then, fiscal actions in the first half of the year might be described as stimulative, but less so than originally expected.[6]

In summary, the high-employment budget is expected to show a deficit of about $4 billion in the second half. Thus, the budget is expected to be "more stimulative" by about $5 billion during the second half.

These figures, in and of themselves, say nothing about the appropriateness of fiscal policy. An evaluation of the appropriateness of fiscal policy requires estimates of saving and investment plans in the private sector of the economy and the possible course of monetary expansion.

During the first half of the year total demand rose faster than real production, and the average level of prices rose at a 3.2 per cent annual rate from the second half of 1965. Given the growth of bank credit, reserves, and the money supply and the saving and investment plans of the private sector, budget policy was apparently unduly stimulative. Obversely, given the stance of budget policy and the saving-investment plans of the private sector, the growth of bank credit and money might be described as having been unduly stimulative. However, with the advantage of hindsight, it can be said unequivocably that the *combination* of monetary and fiscal actions was excessively expansionary during the first half of 1966 if relative price stability was a goal of policy.

Investment and High-Employment Saving

(Calendar Year)

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

Latest data plotted: 2nd quarter preliminary, last half 1966 estimated by Federal Reserve Bank of St. Louis

[6] The term "stimulative" is an ambiguous one. To refer to a particular budget surplus or deficit as stimulative implies some historical reference. The question is—which one? The first half high-employment surplus of $1.4 billion seems small, or "stimulative," when compared with the average surplus of $7.7 billion from 1955 through the first half of 1965. When compared with the $0.3 billion surplus in the preceding half, i. e., the second half of 1965, the first half surplus of $1.4 billion was "slightly restrictive."

Another term, "fiscal stimulus," used by the Council of Economic Advisers, seems to be an operationally useful summary of the direction in which fiscal actions are pushing. This term refers to the change in the high-employment surplus from the preceding period and is thus a period-to-period measure of fiscal actions. "Fiscal stimulus" is not meant to connote whether fiscal actions are stimulative or restrictive. At most it indicates that fiscal actions are becoming more or less stimulative (or more or less restrictive).

INVESTMENT AND HIGH-EMPLOYMENT SAVING

Seasonally Adjusted Annual Rates

(Billions of Dollars)

	1st Half 1965 Actual	2nd Half 1965 Actual	1st Half 1966 Preliminary	2nd Half 1966 Estimated[1]
Investment				
Inventory investment	7.6	8.9	9.1	8.0
Residential construction	27.9	27.5	28.0	26.8
Other fixed investment	67.6	71.9	76.4	81.7
Net foreign investment	4.2	4.4	3.7	3.5
Total	107.3	112.7	117.2	120.0
Saving				
Gross private high-employment saving	107.8	112.4	112.4	119.0
(Gross private actual saving)	(104.9)	(110.6)	(111.6)	(118.2)
State and local saving	1.1	2.4	3.5	3.8
Subtotal	108.9	114.8	115.9	122.8
Federal high-employment surplus	7.2	.3	1.4	— 3.7
Total	116.1	115.1	117.3	119.1
Inflationary (+) or deflationary (—) gap	— 8.8	— 2.4	— .1	+ .9
Memorandum				
Change in GNP deflator (annual rate of change)	2.2	2.2	3.2	?

NOTE: These figures do not reflect the recent Department of Commerce revisions of the national income accounts data. However, the change in the inflationary or deflationary gap is basically unaltered by the revision.

[1] Estimates for 2nd half 1966 assume some easing in private demand for goods and services (relative to the first half), continued growth in the money stock at a 4.5 to 5.0 per cent annual rate, a continued rise in interest rates, and further increases in defense spending.

Any evaluation of fiscal plans for the second half of the year is replete with problems. A complete analysis requires information about expected monetary expansion and the saving-investment plans of private economic units. If, in fact, private savings should increase rapidly (which would follow from an easing in private demand for goods and services), the economy might be able to absorb the expected increase in defense spending without incurring a more rapid rise in the general level of prices. It appears, however, that the current economic situation is sufficiently buoyant and the growth in bank credit and money sufficiently rapid, that budget policy should assume a more restrictive stance than is currently planned.

KEITH M. CARLSON

BULK MAILINGS of this bank's **REVIEW** *for classroom use will be made monthly during the school year to teachers requesting this service. Requests should be directed to: Research Department, Federal Reserve Bank of St. Louis, P. O. Box 442, St. Louis, Missouri 63166.*

Agriculture After Midyear

Cash Receipts

CASH FARM RECEIPTS in the Central Mississippi Valley states[1] during the first five months of the year were up 15 per cent from the corresponding period a year earlier, the same as in the nation (Table I). Each of the Valley states shared in the increase. Such receipts rose 6 per cent from a year earlier in Arkansas, 7 per cent in Mississippi, 9 per cent in Tennessee, 22 per cent in Missouri, and 25 per cent in Kentucky. In Illinois and Indiana, parts of which are in the Eighth Federal Reserve District, such receipts were up 22 and 25 per cent, respectively.

Table I

CASH FARM RECEIPTS

Central Mississippi Valley

January-May 1966 as Per Cent of January-May 1965

	Crops	Livestock	Total
Arkansas	81.7	121.0	106.1
Kentucky	126.6	124.6	125.4
Mississippi	87.6	121.8	107.3
Missouri	115.1	123.2	121.6
Tennessee	83.7	121.2	109.3
5 State Total	99.5	122.5	115.0
Illinois	119.7	123.5	121.7
Indiana	131.8	122.0	125.4
United States	105.5	120.7	115.2

Source: USDA.

In the Valley states combined, the increased receipts during early 1966 were attributable to greater returns from livestock products. Each of the five states had sizable gains in such sales from year-earlier levels, and the gain for the area was 23 per cent, slightly greater than for the nation. While receipts from crop sales in the Valley were about unchanged from year-earlier levels, individual states experienced sizable changes. Crop sales declined 18 per cent in Arkansas, 16 per cent in Tennessee, and 12 per cent in Mississippi but rose 27 per cent in Kentucky and 15 per cent in Missouri from year-earlier levels. Crop sales were higher in Illinois and Indiana during these early months than a year ago, reflecting higher marketings of carry-over crops than in the previous year. Crop sales nationally in the first five months were 6 per cent above 1965 levels.

[1] The Central Mississippi Valley, as used here, includes Arkansas, Kentucky, Mississippi, Missouri, and Tennessee.

The larger receipts for livestock products this year resulted from higher prices. Prices in the first half of the year averaged 19 per cent higher than a year earlier (Table II). Greatest gains were in the prices of meat animals, which were up 24 per cent. Both hog and beef cattle prices were well above year-earlier levels as meat supplies per capita declined somewhat in the face of strong demand. Prices of most other livestock products were also higher.

Table II

PRICES RECEIVED FOR FARM PRODUCTS

	Per Cent Change[1] January-June 1965 to January-June 1966
All farm products	9.3
All crops	— 1.6
Food grains	6.3
Feed grains and hay	— 3.0
Cotton	— 3.4
Tobacco	9.9
Livestock and products	18.5
Meat animals	24.0
Dairy products	7.8
Poultry and eggs	15.6
Wool	6.1

[1] Change of USDA monthly average data.

Average crop prices were down about 2 per cent in the first half of this year, reflecting lower prices for feed grains, hay, and cotton. Partially offsetting these declines were higher prices for food grains and tobacco.

Agricultural income in the Central Mississippi Valley states in the second half of the year is likely to be about the same as a year earlier. Prices of several important farm products may average lower in the second half than in the first half of 1966. Increased meat production is expected to bring a decline in prices from the average of the first half which may more than offset increased volume. An expected sharp decrease in cotton and tobacco production and lower cotton prices will probably reduce crop receipts. This reduction may not be completely offset by increased Government payments. Net income of farmers, however, will probably remain favorable.

Crops

Acreage devoted to most major crops in the five-state area exceeds that of last year (Table III). Corn acreage is up slightly, with increases in Kentucky and Tennessee of 8 per cent and 2 per cent, respectively, nearly offset by declines in other Valley states. In Illinois and Indiana corn acreage is up 6 per cent compared with 3 per cent in the nation. Wheat acreage is slightly greater in both the Valley and the nation than last year. Rice, produced primarily in the southern portion, is up 9 per cent in both the Valley and the United States. The amount of land planted to soybeans climbed 13 per cent in the Valley compared with an increase of 7 per cent in the nation.

Table III

CROP ACREAGE

Central Mississippi Valley

1966[1] as Per Cent of 1965

	Corn	Wheat	Rice	Soybeans	Tobacco	Cotton
Arkansas	82.5	98.0	109.0	108.0	......	74.0
Kentucky	108.0	101.2	......	109.9	87.2	71.9
Mississippi	94.0	111.1	110.0	121.0	......	70.0
Missouri	99.0	102.0	108.5	112.0	84.6	73.3
Tennessee	102.0	94.9	......	119.0	89.9	77.9
5 State Total	100.4	101.5	109.1	112.5	87.8	72.8
Illinois	106.0	89.0	......	100.0	......	60.0
Indiana	106.0	90.0	......	99.0	88.1	......
United States	103.0	101.2	109.0	106.8	100.8	74.7

[1]Indicated as of July 1.
Source: USDA.

Major exceptions to increased acreage of important crops in the five-state area are tobacco and cotton, which are down 12 and 27 per cent, respectively. The decline in tobacco acreage is shared by all Valley states. Nationally, however, tobacco plantings exceeded the 1965 level by about 1 per cent. Cotton acreage was reduced throughout the nation, reflecting both the Federal cotton program and a relatively poor planting season.

Crop conditions in the Central Mississippi Valley have been below average for the season. Corn has suffered from hot, dry weather which extended throughout the Corn Belt during June and early July. Soybean planting was late over most of the area, and a large portion has poor stands. Cotton is average to good in the southern portion of the Valley and fair to poor in the upper portion of the cotton area. Tobacco growth in Kentucky is generally slow and, like corn, has been retarded by lack of moisture. Harvesting conditions were favorable for small grain, especially wheat, and production was up over most of the Valley area, although wheat production in the United States was down (Table IV).

Table IV

CROP PRODUCTION

Central Mississippi Valley

1966[1] as Per Cent of 1965

	Corn	Wheat	Rice	Tobacco
Arkansas	62.5	124.4	103.9	......
Kentucky	93.9	101.2	......	88.9
Mississippi	89.3	127.0	115.9	......
Missouri	90.8	122.4	96.2	93.2
Tennessee	98.1	105.0	......	94.5
5 State Total	92.0	119.9	104.8	90.2
Illinois	103.7	97.8	......	......
Indiana	104.9	108.5	......	87.5
United States	101.2	96.0	105.4	102.9

[1]Indicated as of July 1.
Source: USDA.

Weather conditions in the area have been generally unfavorable. Excessive rainfall during the early planting season was followed by extremely hot, dry weather. Wet soil held up corn and cotton planting well beyond usual planting dates over much of the area. As the season advanced some intended cotton acreage was diverted to soybeans and other crops. Prolonged dry weather during June and early July reduced soil moisture to such an extent that plant growth has been retarded. Hence, most crops are later than normal, and production will depend on rainfall during the remainder of the growing season and the timing of autumn frost.

Prospects for Second Half 1966

Both crop and livestock conditions in the Central Mississippi Valley point to little change in farm receipts in the remaining months of 1966 relative to year-earlier levels.

Meat supplies are expected to be greater, but a decline in prices will probably more than offset the increased volume. Gross returns will probably decline. Hog slaughter is on the upswing after a two-year decline. The late summer and autumn slaughter will come from the spring pig crop. Spring farrowings totaled 47.0 million, up 10 per cent from a year earlier. In June the inventory of hogs was 7 per cent greater than a year earlier. Beef and poultry supplies are also expected to remain above year-earlier levels for most of the second half of 1966.

Although indicated production of some important crops is above year-earlier levels, cash receipts in the Mississippi Valley area will probably be somewhat less. Receipts from tobacco and cotton are likely to be down. The large decline expected in cotton production, coupled with a reduction in the Government loan rate, point to a sizable drop in receipts from this crop (Table V). These prospective declines may be

Table V

PRICE SUPPORT LEVELS

	Loan		Payment		Total	
	1965	1966	1965	1966	1965	1966
Corn (bu.)	$1.05	$1.00	$ .20	$ .30	$1.25	$1.30
Wheat (bu.)	1.25	1.25	.75	[1]	2.00	[1]
Rice (cwt.)	4.50	4.50	......	......	4.50	4.50
Soybeans (bu.)	2.25	2.50	......	......	2.25	2.50
Tobacco (lb.)	.595	.606	......	......	.595	.606
Cotton (lb.)	.2900	.2100	.0435	.0942	.3335	.3042

[1] Total support on domestic food wheat will equal 100 per cent of July 1966 parity.

offset by some increases in receipts from soybeans and rice and larger Government payments.