FEDERAL RESERVE BANK OF ST. LOUIS



February 1967

CONTENTS

	Page
Changing Credit Conditions	2
The Federal Budget and Economic	
Stabilization	5
Annual Report of Operations of the	
Federal Reserve Bank of St. Louis	13
Bank Deposit Growth in the Eighth	
Federal Reserve District	20

eview

Volume 49

Number 2

Changing Credit Conditions

A GREAT CHANGE has occurred in credit conditions in the past two or three months. Time and savings deposits in commercial banks and other financial intermediaries have risen significantly; the nation's money supply has stopped declining; most interest rates have declined sharply; and credit has apparently become more readily available. These developments may be most appropriately appraised by comparing recent experience with somewhat longer-run trends and by considering changes in specific factors underlying expansion of money and credit, such as Federal Reserve actions.

Federal Reserve Credit and Reserve Expansion

Federal Reserve credit, as measured by System holdings of securities plus member bank borrowings from the System, has grown very rapidly since October. This indicator of monetary action grew at an annual

rate of 12 per cent from October to January after increasing at only a 4 per cent rate from April to October (adjusted for changes in requirements for reserves on time deposits). This credit increased 8 per cent in the 12 months ended in April 1966 and at an average 9 per cent rate from 1961 to 1965.

The recent rapid rate of increase in Federal Reserve credit was large enough to provide a 5 per cent rate of growth in total reserves of member banks from October to January. Reserves for member banks are cash in vault and deposits in Reserve Banks, and, since banks must support their deposits with reserves, the volume of reserves is a restraint on the volume of bank deposits. From April to October total reserves had decreased at an annual rate of about 2 per cent

following a 5 per cent increase in the year ended in April.

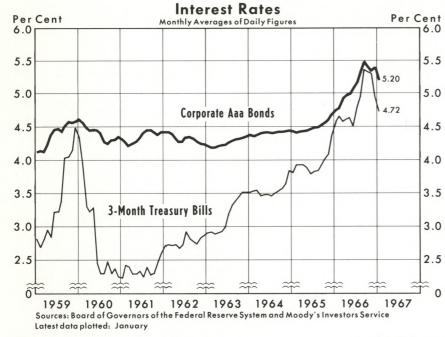
Most of the gains in reserves were used to support Government and time deposits. Reserves available to support private demand deposits (the major component of the money supply) have shown little change since October following a decrease at a 4 per cent annual rate from April to October and a 5 per cent increase in the preceding year.

Money Stock

The nation's money stock—private demand deposits plus currency held by the public—showed little net change from October to January. From April to October money declined at a 1.5 per cent rate. Money increased 6 per cent in the 12 months ended in April 1966 and at an average 3 per cent rate from 1961 to 1965.

Money Stock





Other Banking Developments

The volume of large certificates of deposit at major commercial banks rose markedly (almost \$3 billion) from late December to early February. By contrast, these CD's fell \$3 billion from late August to December after rising only moderately from the end of April to August. In the year ending last April CD's went up 20 per cent. Movements in market interest rates relative to the legal maximum of 5½ per cent

payable on CD's have probably been the chief factor fostering the fluctuation of growth trends.

Reflecting both the CD fluctuations and continued growth in other time deposits, total time deposits in commercial banks rose about \$5 billion or at a 19 per cent annual rate from early December to early February. These deposits had changed little from late August to December after rising 12 per cent in the previous year. Preliminary data from other financial institutions indicate that their savings accounts have also risen markedly in the past three months.

With their greater role in the intermediation of funds since December, commercial banks, savings and loan associations, and other institutions have improved their liquidity and have had somewhat more resources to lend and invest. Loans to business

by large banks, for example, rose at a 25 per cent annual rate from late December to early February after remaining relatively stable from August to December and rising 20 per cent in the year ended in August.

Interest Rates

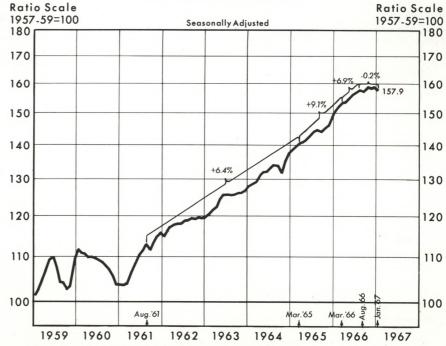
Most interest rates have moved low4.0 er in recent months after rising sharply
in the last half of 1965 and the first
3.5 three quarters of 1966. Yields declined
moderately from September to No3.0 vember, perhaps in part as a technical
reaction to the marked rise that oc2.5 curred during the summer.

In December and January the decrease in interest rates accelerated. The lower rates probably reflected in part a lessening in the demands for

credit. Sales and production have risen at slower rates in recent months, and demands for credit usually parallel these developments. Seasonally, there has generally been a smaller demand for credit in January than in the fall when crops move to market and inventories are expanded for Christmas.

It is not apparent that the renewed intermediation role of the commercial banks since December and the consequent increase of bank credit provides an ex-

Industrial Production



Percentages are annual rates of change between months indicated. Latest data plotted: January preliminary planation of the general downward movement of interest rates. Rather, the market interest rate decline relative to the rates banks are permitted to pay on time deposits explains the growth of bank credit and presumably an eclipse of some other avenues of financial intermediation.

Despite the decline since last September interest rates still remain at high levels relative to most past periods.

SELECTED INTEREST RATES

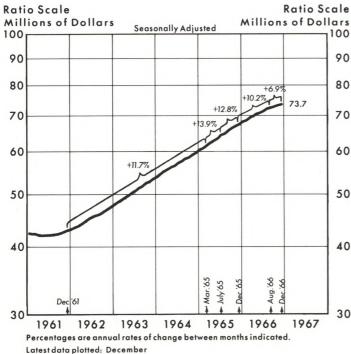
Averages of Daily Yields

	1950	1965	September 1966	February 17, 1967
3-month Treasury bills	1.22%	3.95%	5.36%	4.62%
Long-term Government bonds	2.32	4.21	4.79	4.49
Highest-grade corporate bonds	2.62	4.49	5.49	5.01
4- to 6-month commercial	1.45	4.38	5.89	5.38

Consumer Credit Developments

Consumer instalment debt has continued to increase in recent months, but much less rapidly than a year ago. From August to December this indebtedness rose at a 7 per cent annual rate compared with a 13 per cent rate of increase in the like period a year earlier. This slowing in the rate of growth of consumer debt has been rather steady for a year and a half. Around mid-1965 this debt was growing at about a 14 per cent annual rate. From the summer of 1965 to

Consumer Instalment Credit



the end of the year the rate was about 13 per cent, while from then to late summer 1966 growth was at a 10 per cent rate.

The recent growth rate of 7 per cent in consumer instalment credit is low compared with the 8.5 per cent rate growth in personal income in the same period and with the 12 per cent annual growth in instalment credit from 1961 to 1965. It is about the same as the rate of credit growth from 1955 to 1961. Growth in the late 1950's was sharply down from the extremely rapid 17 per cent a year increase from 1949 to 1955.

CONSUMER INSTALMENT DEBT

Annual Rates of Increase

August 1966-December 1966	6.9
December 1965-August 1966	10.2
July 1965-December 1965	12.8
March 1965-July 1965	13.9
1961-1965	12.0
1955-1961	7.1
1949-1955	16.5

Credit for the purchase both of automobiles and of other consumer goods increased less rapidly in the last four months of 1966 than a year earlier. However, the decline in the rate of growth appeared considerably earlier for automobile paper than for other consumer goods credit.

Automobile credit outstanding rose from the spring of 1965 to the end of the year at about a 15 per cent annual rate. From then to March 1966 growth was at a 10 per cent pace. From March to December automobile credit expanded at a 7 per cent rate. This recent rate of expansion compares with a 14 per cent rate in the 1961-65 period, 4 or 5 per cent from 1955 to 1961, and about a 20 per cent rate from 1949 to 1955.

AUTOMOBILE INSTALMENT DEBT

Annual Rates of Increase

August 1966-December 1966	5.9
March 1966-August 1966	7.2
December 1965-March 1966	10.0
March 1965-December 1965	14.6
1961-1965	13.8
1955-1961	4.2
1949-1955	19.8

Credit for the purchase of consumer goods other than autos showed no decline in the rate of expansion until September. This credit grew at a rate of about 14 per cent a year from the spring of 1965 to August 1966; growth then lessened to an annual

(Continued on page 24)

The Federal Budget and Economic Stabilization

THE PRESIDENT'S Council of Economic Advisers forecasts 1967 gross national product at \$787 billion in current prices, an increase of about 6.5 per cent over 1966. This increase consists of an advance of nearly 4 per cent in real output and an increase of slightly more than 2.5 per cent in prices.¹

The Council's forecast, or plan, is constructed in large measure on a Federal budget program that produces in calendar 1967 about a \$4 billion deficit on a national income accounts basis.² A 14.3 per cent increase in Federal spending and an 11.3 per cent rise in revenues underlie this projected deficit. The expected increase in revenues will result from several factors, including continued advance in total income and a proposed 6 per cent surcharge on personal and corporate income taxes effective July 1.

The Federal budget program and the Annual Report of the Council of Economic Advisers (CEA) together can be viewed as a national economic plan in the spirit of the Employment Act of 1946. The presentation of the CEA is based, in considerable measure, on the popular theory that Federal budget policy to a major degree can control total demand and thereby exert a primary influence on changes in real output and prices. Budget policy is presumably designed to achieve an optimum level of demand compatible with the goals of high employment, real growth, relative price stability, and equilibrium in the nation's balance of payments.

In contrast with the fiscal policy theory of economic stabilization there is an alternative school of thought which places primary emphasis on control of monetary variables as a vehicle for influencing total spending. It is the belief of this school that monetary factors play a dominant role in the determination of total demand.³

The theory implicit in the following presentation is that the combination of stabilization policies, rather than fiscal or monetary policy alone, in large part determines total demand. Consequently, this discussion of the Federal budget alludes frequently to the role of monetary policy in national economic developments. The purpose of this article is to summarize the proposed Federal budget program for calendar 1967 and to examine its implications as a part of total stabilization policy.

Although the Federal budget receives considerable attention at this particular time of year, it seems that in the interest of a dynamic and effective stabilization policy, or even of a neutral policy, the budget program should be reviewed continuously throughout the year. Evaluations are made privately on a continuous basis, but an official midyear budget review (with revised projections) was not released to the public in 1966. To assure a free and fully-informed discussion and interchange of ideas both inside and outside of Government, it would be desirable to have official revised projections frequently, possibly on a quarterly basis.4 A midyear review in July or August after Congress has made most of its decisions would seem more reliable for the ensuing year than the 12month forecast made in January. The CEA Report focuses primarily on the immediate 12 months, while

¹ Annual Report of the Council of Economic Advisers (January 1967), pp. 62-63.

²The national income accounts budget summarizes the receipts and expenditures of the Federal Government sector as an integrated part of the recorded activities of all sectors of the economy. For expanded discussion of this and other fiscal measures, see the appendix, "Budget Concepts and Definitions," p. 11.

³The 1967 Report pays considerable homage to the role that monetary policy played in restraining total demand in 1966. The appearance of such an acknowledgment distinguishes the 1967 Report from previous ones, in which monetary policy was seemingly considered supportive (for fiscal policy) rather than active in affecting total demand.

⁴A similar recommendation has recently been made by the Joint Economic Committee of Congress. Although revised budget projections are not made available, data on realized expenditures and revenues are readily available. See, e.g., the Survey of Current Business. For a brief quarterly analysis of these data, see "Federal Budget Trends," a release of the Federal Reserve Bank of St. Louis.

the Budget concentrates on the 12-month period beginning next July 1. 5

To form a basis for a discussion of budget policy in future months, this article summarizes and evaluates economic developments, budget conditions, and monetary developments in calendar 1966. The budget program through June 1968 is then summarized and analyzed within a framework emphasizing total stabilization policy. An appendix is provided that discusses alternative budget measures.

Budget Policy and Economic and Monetary Conditions in 1966

Real economic activity advanced rapidly in 1966, but advances were constrained by the size of the labor force and limitations on plant capacity. Employment, production, and income all increased, though less rapidly than in 1965 when some economic slack remained. As a result of total demand pressing on available resources, prices rose significantly, particularly early in the year. In an attempt to limit excessive total demand and price increases, monetary expansion was restricted beginning in the spring. Intense demands for credit produced rising interest rates early in the year, while limitations on credit expansion accelerated the rise during the summer.

The Federal budget, on balance, was a strong force underlying the buoyant economic situation in 1966. Government expenditures grew rapidly as spending for defense and health, education, and welfare programs rose sharply. Federal revenues also increased rapidly, partly in response to rising money incomes but also in some measure because of increases in tax rates.

Resource Transfers in 1966

Total income and output showed advances substantial enough to keep the economy at high employment during 1966. Real output (GNP in constant

dollars) rose 4.1 per cent in the year ended in the fourth quarter of 1966, with the advance most rapid in the first quarter.

The year 1966 was marked by the necessity to allocate resources to military use more rapidly than total available resources were growing. Such a transfer of resources is facilitated if there is a considerable quantity of unused resources in the economy, as was the case at the outbreak of the Korean conflict. The Vietnam war was escalated at a time when there was very little slack in the economy.

At times of high employment and near-capacity levels of output, a resource transfer from civilian use to military use is normally effected by either tax increases or a system of Government controls. Neither route was followed with respect to the Vietnam build-up in late 1965 and 1966. Instead, the price mechanism was utilized to effect the resource transfer, i.e, the Federal Government bid away goods and services from civilian use for the war effort.

SELECTED EXPENDITURES AS A PER CENT OF GNP

Quart	er	National Defense	Consumer Durable Goods	Residential Structures
1964	1	8.1	9.3	4.6
	2	8.2	9.5	4.4
	3	7.8	9.6	4.3
	4	7.5	9.1	4.1
1965	1	7.3	9.9	4.2
	2	7.3	9.6	4.2
	3	7.4	9.7	4.0
	4	7.5	9.7	3.9
1966	1	7.6	9.7	4.0
	2	7.8	9.2	3.8
	3	8.3	9.4	3.3
	4	8.6	9.2	2.9

Source: U. S. Department of Commerce.

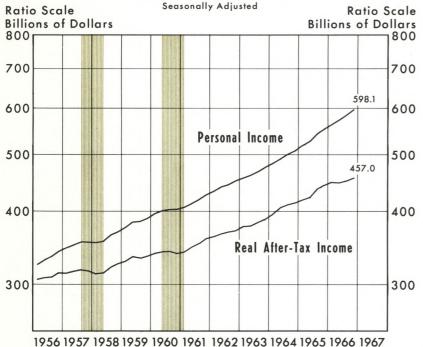
Overall price increases thus operated as a silent tax in the absence of more restrictive fiscal or monetary actions. The growth of real after-tax personal income slowed as prices rose faster relative to money incomes than previously. Associated with the slowdown in the growth of real spendable income was a decline in real demand for civilian goods, in particular for automobiles and housing.

In response to excessive dollar demand for goods and services, and thereby for loan funds, and to some extent to restriction on monetary expansion beginning in the spring of 1966, interest rates rose. This increase in the price of credit helped to effect the transfer of resources by discouraging demand for those goods where capital and interest are important

⁵Since there is some evidence to support the view that the budget affects economic activity with some lag, see, e.g., Albert Ando and E. Cary Brown, "Lags in Fiscal Policy," Stabilization Policies, Research Studies prepared for the Commission on Money and Credit (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963), it would seem that the budget for fiscal 1968 (year ending June 30, 1968) must afford a basis for an economic plan for a year beginning in, say, October 1967 or January 1968. If the primary concern of the Economic Report is the state of the economy in calendar 1967, it would seem that the budget for the year ending June 30, 1967, is more relevant than the budget for the year ending June 30, 1968.

⁶ For an extended discussion of economic developments in 1966, see the December 1966 issue of this *Review*.

Personal Income Quarterly Totals at Annual Rates



Note: Real after-tax income is personal income adjusted for tax changes and by the implicit price deflator for personal consumption expenditures.

Source: U.S. Department of Commerce Shaded areas represent periods of business recession as defined by the National Bureau of Economic Research.

Latest data plotted: 4th quarter preliminary

elements of total cost, e.g., housing and commercial and industrial buildings.

The resultant rise in interest rates affected housing more than if the resource transfer had been effected by taxes. Housing probably would have been affected if incomes had been reduced by tax increases, but the extent would probably have been less. Interest rates would not have risen so rapidly, and the cost of new housing services would not have increased as much if a more restrictive course of fiscal action had been followed.

Any transfer of resources in a high-employment economy involves a cost, and some groups gain at the expense of others. However, transfer by tax increases permits the effects to be planned and regulated while maintaining the advantages of free markets. The price inflation mechanism causes inequities that are often unpredictable and creates distortions that may be in conflict with national goals of efficient resource allocation and equilibrium in the balance of payments.

Stabilization Policy in 1966

The fiscal actions that were supposed to restrain demand in 1966—social security tax increases, speedup in the collection of individual and corporate in-

come taxes, and rescission of scheduled excise tax cuts-came too late to thwart the inflationary pressures of the first quarter.7 In fact, there is some question whether the 1966 first quarter experience could have been avoided (or offset) by budget actions as late as January and February of that year. Because of lags in the effect of stabilization policies, the stage may have been set for an inflationary period by a very stimulative fiscal situation in late 1965 supplemented by rapid monetary expansion in late 1965 and early 1966. The Vietnam buildup in the last half of 1965 was accompanied by excise tax reductions and a large retroactive increase in social security benefits. The money stock expanded at a 6 per cent annual rate from April 1965 to April 1966. Other key monetary variables, such as commercial bank credit and member bank reserves, also increased very rapidly during the year ending in April 1966. This combination of monetary and fiscal forces may have been sufficient to cause the first quarter 1966 excesses and the carryover with respect to prices in the second quarter (even though the advance

of GNP slowed substantially in that quarter).

The restrictive budget measures that were effected —increased social security taxes, accelerated tax collections, and rescinded excise taxes—may have helped to slow the economy after the unsustainable advance in the last half of 1965 and the first quarter of 1966. These fiscal actions represented restraining factors in addition to the April turnaround in monetary growth and the implicit tax increase through inflation. Although Government expenditures rose substantially in the first half of 1966, these increases were more than offset by the increase in tax revenues, and the national income accounts (NIA) budget showed a surplus of \$3.1 billion compared with a \$1.4 billion deficit in the last half of 1965.

During the second half of 1966 Federal expenditure increases outpaced the growth in receipts, resulting in a \$2.7 billion deficit in the NIA budget. Expenditures for the Vietnam war continued to rise, and some

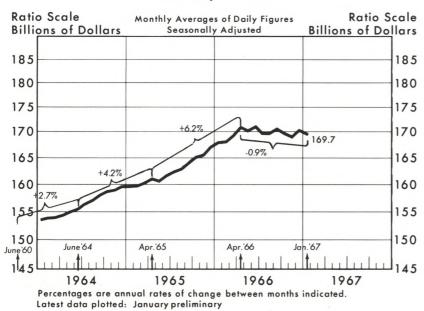
⁷Normally a change in collection procedures is not viewed a restrictive action because individuals and firms supposedly react to changes in liabilities rather than collections. The speedup is mentioned here, however, because the 1966 CEA Report listed this action as restrictive in its effect on total demand. See pp. 53-54.

domestic nondefense expenditures also rose, particularly those related to the medicare program. No direct tax increases became effective in the second half, although in October the investment tax credit was rescinded and depreciation allowances for tax purposes were tightened. These measures probably had little effect on tax revenues in 1966, although they may have affected total demand via investment decisions.

For the year 1966 the NIA budget ran a small \$0.2 billion surplus, and since the economy was at full employment the high-employment budget showed the same result.8 On this high-employment basis, this small budget surplus in 1966 indicated the most stimulative budget in more than a decade. The high-employment budget ran about an \$8 billion average surplus from 1961 to 1965.

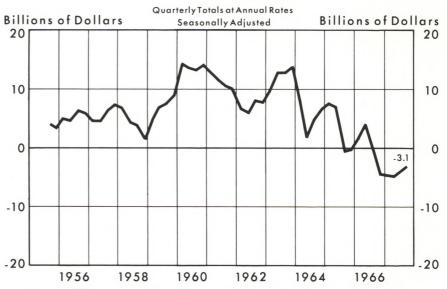
The stimulative budget situation in 1966 was accompanied by very restrictive monetary actions after April. The money stock showed little change from then to late fall. With loan demand fueled by rapid growth in total demand for goods and services, interest rates rose rapidly until September.

Money Stock



High-Employment Budget

(+) Surplus; (-) Deficit



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

Latest data plotted: 1967 estimated for half years by Federal Reserve Bank of St. Louis from Fiscal 1968 Budget

Budget Program for Fiscal 1967-68

The economic outlook for 1967 depends in large measure on the course of recent, present, and future monetary and fiscal developments. Such developments in turn are influenced by the unfolding of economic events. A forecast of economic conditions and policy must take into account this simultaneity. Presumably the Council's forecast is based on this simultaneous interaction. This section discusses in some detail the

budget program for the 18-month period ending June 30, 1968 and examines budget policy in light of expected economic and monetary conditions.

The Budget Program: A Factual Summary

Budget plans for the next 18 months indicate a larger average deficit than in calendar 1966. This conclusion obtains for the national income accounts budget, considered to be the most complete and reliable measure of the Federal Government's activities and their economic impact.

The following summary of the fiscal program for the remainder of fiscal 1967 and fiscal 1968 is presented as general background and centers on the NIA

 $^{^8\}mathrm{For}$ further discussion of the high-employment budget, see the appendix.

budget. Fiscal year figures are given because the budget document is presented on that basis.

New Obligational Authority. Obligational authority on a cash budget basis, i.e., authority provided by Congress to obligate the Federal Government to pay out money, increases to an estimated \$194.2 billion in fiscal 1968 from \$190.4 billion in fiscal 1967. This fiscal measure is considered by some to be a key variable in any analysis of the Federal budget. The reason for this is that expenditures must be preceded by granting of obligational authority by Congress.

The \$3.8 billion increase in obligational authority planned for fiscal 1968 compares with an increase of \$27.3 billion in the previous fiscal year. Last year's January budget plan (i.e., for fiscal 1967) called for a \$3.5 billion increase in new obligational authority. These plans went awry, partly because of supplemental appropriations requested in January 1967 for Vietnam, but also because of larger-than-expected appropriations for housing, community development, health, education, and welfare.

Expenditures. Federal NIA expenditures in fiscal 1968 are estimated to increase 10.2 per cent over fiscal 1967, which in turn is expected to be 16.1 per cent above fiscal 1966. Fiscal 1967 expenditures are estimated at \$153.6 billion, 7.6 per cent above the figure projected a year ago for the fiscal 1967 period.

Fiscal 1968 expenditures include increases over presently estimated 1967 expenditures of \$5.8 billion or 8.5 per cent for defense and \$9.8 billion or 11.5 per cent for non-defense spending including expand-

ed social security benefits. The increases in fiscal 1967 over fiscal 1966 are 20.9 per cent for defense and

CHANGES IN OBLIGATIONAL AUTHORITY Cash Budget

	Fiscal 1966 to Fiscal 1967		Fiscal 1967 to Fiscal 1968	
	Billions of Dollars	Per Cent	Billions of Dollars	Per Cent
Defense	8.6	12.5	2.2	2.8
International and space	-1.1	10.1	0.3	3.1
Domestic	19.8	23.7	1.3	1.3
Health, labor, and welfare	10.8	27.9	3.7	7.5
Education, housing and community development, national resources, commerce, and trans-				
portation	6.6	36.1	3.0	—12.1
Interest on public debt	1.4	11.6	0.7	5.2
Other*	1.1	7.7	0.2	—1.3
Total	27.3	16.7	3.8	2.0

^{*}Agriculture, veterans' benefits and services, general government, civilian and military pay increases. Source: The Budget of the United States Government for the Fiscal Year Ending June 30, 1968, p. 44.

CHANGES IN FEDERAL SPENDING National Income Accounts Budget

Per Cent
8.5
-2.3
13.1
18.4
6.4
1.9
14.3
10.2

^{*}Agriculture, veterans' benefits and services, general government, civilian and military pay increases.

Source: The Budget of the United States Government for the Fiscal Year Ending June 30, 1968, p. 43.

CHANGES IN FEDERAL RECEIPTS National Income Accounts Budget

	Fiscal 1966 to Fiscal 1967		Fiscal 1967 to Fiscal 196	
	Billions of Dollars	Per Cent of 1966 Receipts	Billions of Dollars	Per Cent of 1967 Receipts
Changes due to changes in tax law	7.0	5.3	5.8	3.9
Personal income	1.2	0.9	3.4	2.2
Corporate income	_	_	1.9	1.3
Excise and other	_	_	5	0.3
Social security	5.8	4.4	1.0	0.7
Changes due to growth in economy	10.2	7.7	11.5	7.7
Total	17.2	13.0	17.3	11.6

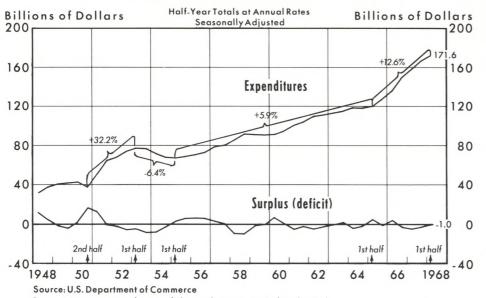
Source: Estimated by Federal Reserve Bank of St. Louis from The Budget of the United States Government for the Fiscal Year Ending June 30, 1968.

12.5 per cent for nondefense programs.

Receipts. Federal NIA receipts are expected to rise less rapidly than expenditures from fiscal 1967 to fiscal 1968, thereby increasing the deficit. Increases in receipts were large in fiscal 1966 and even larger in

⁹ See the writings of Murray L. Weidenbaum, e.g., "The Timing of the Economic Impact of Government Spending," *National Tax Journal* (March 1959), pp. 79-85.

National Income Accounts Budget



Percentages are annual rates of change between periods indicated.

Latest data plotted: 1967 and first half 1968 estimated by Federal Reserve Bank of St. Louis from Fiscal 1968 Budget.

fiscal 1967. Such increases have resulted primarily because this was a period of rapidly expanding money incomes and inflation. Receipts were also accelerated, however, by faster collections and increases in social security tax rates during this period.

NIA receipts are anticipated to increase by \$17.3 billion or 11.6 per cent in fiscal 1968 over the previous fiscal year. Growth in receipts will result mainly from continued economic expansion but will also reflect the proposed 6 per cent surcharge on personal and corporate income effective July 1, 1967 and a scheduled increase in social security tax rates on January 1, 1968.

Budget Policy in its Economic Setting

Budget plans for calendar 1967 are predicated on a forecast of sluggish growth in private demand in the first half of the year with a resumption of more rapid growth in the second half. The purpose of this section is to examine Federal budget plans within the economic setting expected in calendar 1967.

An evaluation of the Federal budget plan at this particular time is replete with problems. The Council of Economic Advisers probably has access to more information than anyone else at the time of the budget's preparation. Consequently, this examination of the budget centers more on assumptions than on the internal consistency of the proposed total economic plan.

The economic plan, as presented in the Fiscal 1968 Budget and the CEA Report, is to keep the economy on a full-employment growth path with relative price stability. The budget is presumably designed to provide just the right amount of fiscal stimulus or restraint at the appropriate time. The success of the proposed budget program depends on the vagaries of private demand and the response of private demand to monetary and fiscal actions. Fundamental to success is whether budget policy is sufficiently flexible to move in accordance with changing economic and monetary conditions.

The budget program for the first half of calendar 1967 is essentially determined. Forces governing the course of expenditures and receipts are already in motion. The CEA indicates

that the sizable stimulus of a \$5 billion NIA deficit will be appropriate in its timing and magnitude of impact on an economy characterized by weakening private demand.

Included in the budget program for the second half of 1967 is a proposed surtax which is supposed to provide restraint on strengthening private demand at that time. Such plans provide flexibility in that the surtax proposal could be dropped if economic conditions do not warrant fiscal restraint. Furthermore, if inflationary pressures intensify, the surtax rate could be increased above that which is proposed.

The 1966 experience suggests that budget policy was not sufficiently flexible to counter movements in private demand. During the first quarter of 1966, when it was quite obvious that further monetary or fiscal restraint was required, budget policy fell short as an instrument of stabilization. Fiscal restraint was not forthcoming because of the slow and cumbersome nature of the budget machinery. It was not possible to implement a tax increase because of the slowness of the Congressional process. Furthermore, most Government spending programs are of the type that cannot be slowed or speeded in accordance with the desire of the policymaker. Because of the relative inflexibility of fiscal policy, it was necessary for monetary policy to carry the burden of stabilization in 1966.

Taking these considerations into account, it appears that monetary policy may again be assigned a critical role in the total of stabilization policy in 1967. Monetary policy is flexible in its implementation, though

there is a question about flexibility in its impact. Incomplete knowledge of the magnitude and timing of monetary actions on economic activity indicates that it should be used carefully as a tool of stabilization policy.¹⁰

Uncertainty about the length and variability of time lags in the implementation and effect of monetary and fiscal policy suggests that stimulus or restraint be applied in moderate doses when the economy is at high employment. Large adjustments in policy variables may cause instability, which is precisely what policy-makers are trying to avoid.

The economic situation in early 1967 is believed to dictate a need for more stimulative economic policy. An indication that the fourth quarter 1966 increase in GNP contained some involuntary accumulation of inventory portends further slowing of production and attempts to reduce inventory. Since fiscal and monetary policies tend to affect total demand with lags, excessive stimulation in the next few months might be too late to avert a slowdown in the first half of 1967 but might create serious inflationary problems in the second half. On the other hand, insufficient stimulation might cause the slowdown to continue well into the second half.

KEITH M. CARLSON

APPENDIX

Budget Concepts and Definitions

The fiscal activities of the Federal Government can be summarized in several ways. Some alternative budget concepts and the relationships between them are discussed in this appendix. A table reconciling these budget concepts is given, with data for fiscal 1966-68 used for illustration.

Administrative Budget

The administrative budget is the basic planning document of the Federal Government, covering receipts and expenditures of funds that it owns. Its main purpose is to serve as a guide to executive and legislative program planning, review, and enactment. The administrative budget is in fact the only Federal "budget" in the sense of a financial plan. All other "budgets" discussed here are summary statements of receipts and expenditures classified in various ways for purposes other than administrative planning.

Those agencies for which Congress makes regular appropriations are included in the administrative budget. Public enterprises¹ are included while trust funds² and Government-sponsored agencies³ are not.

Expenditures and receipts are generally recorded on a cash basis, i.e., on the date of actual receipt or payment. Interest expense is on an accrual basis.

Cash Budget

The consolidated cash budget is a summary statement

of cash flow between the Federal Government and other sectors of the economy. Included are activities of the regular Government agencies found in the administrative budget plus the activities of trust funds and Government-sponsored agencies. Because activities of some agencies (e.g., the post office) are recorded on a net basis, the full magnitude of cash flows between the Federal Government and other sectors of the economy is not measured by the cash budget.

The cash surplus or deficit serves as a measure of the direct impact of Federal Government spending and taxation on the financial assets of the private sector of the economy (including state and local governments). Surpluses or deficits in this budget indicate changes in the public debt and/or changes in the Treasury's cash balance.

National Income Accounts Budget

The national income accounts budget summarizes the receipts and expenditures of the Federal Government sector as an integrated part of the recorded activities (i.e., the national income accounts) of all sectors of the economy. Primary differences between the cash budget and the national income accounts budget are (1) on the expenditure side, spending is recorded when delivery is made to the Government, and purchases and sales of existing real and financial assets are excluded, and (2) on the receipts side, taxes are in large measure recorded when the tax liability is incurred.

High-Employment Budget

The high-employment budget is an estimate of expenditures and revenues in the Federal sector of the national

¹⁰ Some evidence has recently been presented to support the view that monetary actions may affect total demand quite quickly via portfolio behavior of holders of liquid assets. See Donald P. Tucker, "Dynamic Income Adjustment to Money Supply Changes," American Economic Review (June 1966), pp. 433-449.

¹Commodity Credit Corporation, Federal National Mortgage Association, Export-Import Bank, etc.

²Federal Old-Age and Survivors Insurance, Unemployment Trust Fund, Highway Trust Fund, etc.

³ Federal Home Loan Banks, Federal Land Banks, Federal Intermediate Credit Banks, and Banks for Cooperatives.

income accounts for a level of high employment.⁴ It is an attempt to correct the distortion introduced by the impact of the economy itself (through the effect of changing levels of economic activity on Government expenditures and tax receipts) on the realized surplus or deficit. The smaller the surplus or greater the deficit in this budget, the more stimulative is the impact of Federal fiscal activities and the less is the dependence on private demand to maintain high employment.

Incurring obligations does not necessarily mean immediate cash expenditures. When the Government buys goods and services produced by the private sector, the lag of expenditures behind obligations may be substantial. In the case of items not usually kept in inventory, like military hardware, it usually takes time for private producers to draw plans, negotiate subcontracts, produce, and deliver the product.

New Obligational Authority

Another measure of particular importance in evaluating the impact of the Federal Government on the economy is "new obligational authority." This is legislation by Congress permitting a Government agency or department to commit or obligate the Government to certain expenditures. Congress does not vote on expenditures; it determines new obligational authority. Before funds can be spent, an agency must submit and have approved by the Bureau of the Budget an apportionment request. This determines the rate at which obligational authority can be used. An agency usually incurs obligations, i.e., commits itself to pay out money, after apportionment by the Bureau of the Budget.

RECONCILIATION OF VARIOUS MEASURES OF FEDERAL RECEIPTS AND EXPENDITURES

Billions of Dollars			
	Fi	scal Year	
	1966	1967	1968
	Actual	Estimate	Estimate
RECEIPTS			
Administrative budget receipts	104.7	117.0	126.9
Plus: Trust fund receipts	34.9	44.9	48.1
Less: Intragovernmental transactions	4.5	6.2	6.5
Receipts from exercise of monetary authority	.6	1.1	.5
Equals: Federal receipts from the public	134.5	154.7	168.1
Less: Cash transactions excluded from Federal			
receipts account (District of Columbia,			
financial transactions, etc.)	1.3	1.8	2.0
Plus: Items added to Federal sector account			
but not in cash receipts (netting			
differences, timing differences, etc.)	6	_ 3.1	1.0
Equals: Federal receipts, national income accounts	132.6	149.8	167.1
Plus: Adjustment for tax receipts because of			
deviation of economy from high employment	.3	.2	0
Equals: High-employment receipts	132.9	150.0	167.1
EXPENDITURES			
Administrative budget expenditures	107.0	126.7	135.0
Plus: Trust fund expenditures	34.9	40.9	44.5
Less: Intragovernmental transactions	4.5	6.2	6.5
Debt issuance in lieu of checks and			
other adjustments	4	.6	.7
Equals: Federal payments to the public	137.8	160.9	172.4
Less: Cash transactions excluded from Federal			
expenditures account (District of Columbia,			
financial transactions, etc.)	7.3	8.7	5.0
Plus: Items added to Federal sector account but			
not in cash payments (netting differences,			
timing differences, etc.)	1.8	1.5	1.8
Equals: Federal expenditures, national income accounts	132.3	153.6	169.2
Plus: Adjustment for expenditures because of			
deviation of economy from high employment	0	0	0
Equals: High-employment expenditures	132.3	153.6	169.2
SURPLUS OR DEFICIT			
Administrative budget	-2.3	-9.7	-8.1
Cash budget	-3.3	-6.2	-4.3
National income accounts budget	+ .3	-3.8	-2.1
High-employment budget	+ .6	-3.6	-2.1

Sources: The Budget of the United States Government for the Fiscal Year Ending June 30, 1968 and Federal Reserve Bank of St. Louis.



⁴The President's Council of Economic Advisers defines a high-employment level of economic activity as that level associated with a 4 per cent unemployment rate. The highemployment budget could be computed for other budget concepts, but, for an analysis of the economic impact of the budget, the national income accounts basis seems most appropriate. For a description of techniques and procedures for calculating high-employment budget estimates, see Nancy H. Teeters, "Estimates of the Full-Employment Surplus, 1955-1964", The Review of Economics and Statistics, XLVII (August 1965), pp. 309-321.

Annual Report of Operations of the Federal Reserve Bank of St. Louis

N ADDITION TO RESPONSIBILITIES involving the formation of monetary policy, the Federal Reserve Bank performs supervisory functions and a variety of services for the public, the United States Government, and commercial banks. Background information on monetary actions is frequently provided in this *Review* (for an analysis of 1966 see the December issue). Supervision by the Federal Reserve Bank is exercised principally through examination of state-chartered member banks. This review of the year concentrates on the service functions of the bank.

Among its service operations, the bank furnishes currency for circulation, facilitates the collection and

clearing of checks, handles the legal reserve accounts of member banks, and acts as fiscal agent of the Government. Most operations of the bank — including those at the branches in Little Rock, Louisville, and Memphis — increased in 1966, reflecting growth in economic activity in the Central Mississippi Valley.¹

Money Operations. Supplying coin and currency to commercial banks and thereby to the general public is carried out through the Money Department of the bank. Its major activities include receiving, sorting, counting, wrapping, storing, paying out, and shipping coin and currency. Money handling operations in 1966 rose from year-earlier levels. Both the number of pieces

and the average denomination of coins and bills handled were up, resulting in a sizable increase in dollar volume.

Coin handling continued to rise sharply in 1966, reflecting a greater availability of supplies following the severe shortage in 1964. The number of pieces handled rose from a low of 227 million in 1964 to 318 million in 1965 and to 387 million in 1966, increases of 40 and 22 per cent for 1965 and 1966, respectively. The dollar value rose 10 and 46 per cent in these years. Coin handled in 1966, however, was still well below the 1961 peak, when 490 million pieces valued at \$48 million were counted and sorted. Since the coin

VOLUME OF OPERATIONS¹

	Dollar Amount (Millions)		Per C	ent Change	
				Annual Rate	
	1966	1965	1965-66	1956-66	
Coin counted	39.5	27.0	46.3	2.0	
Currency counted	1,508.9	1,421.9	6.1	2.4	
Checks collected ²	113,825.9	102,900.2	10.6	7.2	
Noncash collection items	626.0	566.2	10.6	6.1	
Transfers of funds	135,844.9	109,066.4	24.6	12.6	
U.S. Savings Bonds handled ³	669.5	624.3	7.2	—1.2	
Other Government securities handled ³	17,168.1	16,282.6	5.4	8.0	
U.S. Government coupons paid	154.6	136.6	13.2	8.2	
Loans to member banks—					
daily average outstanding	31.8	15.3	107.8		
		umber			
		illions)			
		10/5			

	(Millions)			
	1966	1965		
Coin counted	387.3	317.5	22.0	0.9
Currency counted	224.3	218.8	2.5	0.9
Checks collected ²	266.7	244.6	9.0	6.7
Noncash collection items	.835	.587	42.2	5.5
Transfers of funds	.214	.200	7.0	4.9
U.S. Savings Bonds handled ³	9.270	8.784	5.5	2.8
Other Government securities handled ³	.665	.564	17.9	10.5
U. S. Government coupons paid	.755	.733	3.0	1.9

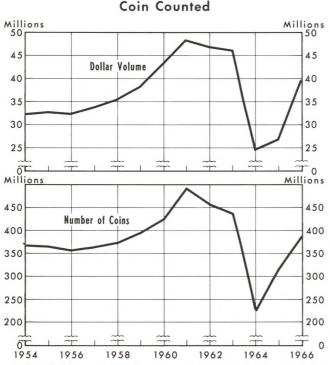
¹Total for the St. Louis office and the Little Rock, Louisville, and Memphis branches.

¹Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee. With the exception of Arkansas, only a portion of each of these states is in the Eighth Federal Reserve District. For a review of district economic activity during 1966, see the January 1967 issue of this *Review*.

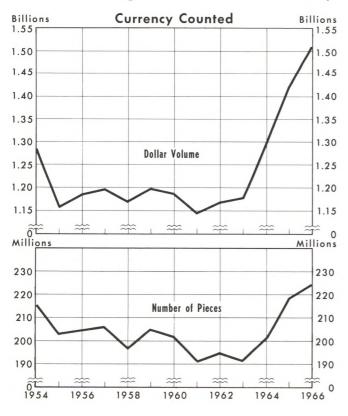
² Excludes Government checks and money orders.

³ Issued, exchanged, and redeemed.

shortage still existed in the early part of 1966, the operations for the year as a whole were less than at any time during the 1960-63 period.



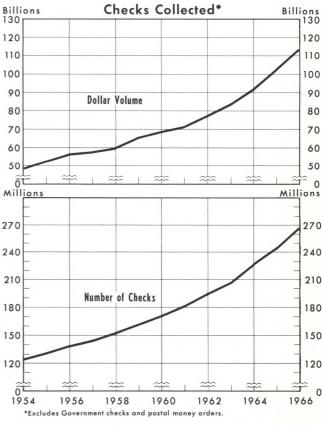
The dollar value of currency handled rose to \$1.5 billion in 1966, 6 per cent above the year-earlier level. The value of currency counted has increased at an annual rate of 8.6 per cent since 1963 after virtually



no change from 1955 to 1963. The number of pieces counted and sorted totaled 224 million in 1966, 2.5 per cent more than a year earlier. Pieces handled have increased at an annual rate of 5.5 per cent since 1963 in contrast to a moderate decline during the previous eight years.

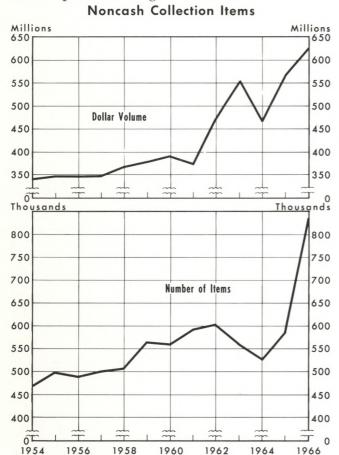
Check Collections. Federal Reserve Banks receive checks from member banks, other Federal Reserve offices, and Government agencies for collection. Checks received may be drawn on banks in the Eighth District that remit at par, all par-remitting banks in other districts, Federal Reserve Banks, and the United States Treasury.

The number of checks passing through the bank rose from 245 million in 1965 to 267 million in 1966, an increase of 9 per cent. Since the average check drawn was for a greater amount, dollar volume of these collections rose 11 per cent to \$114 billion in 1966. The number and dollar value of checks collected increased every year from 1956 to 1966. The number rose at an average rate of 6.7 per cent per year, and the dollar value, at a 7.2 per cent rate.



Noncash Collections. In addition to maintaining facilities for check collections, Federal Reserve Banks handle numerous other items for collection. These noncash collections include drafts, promissory notes, bonds and bond coupons, and various other docu-

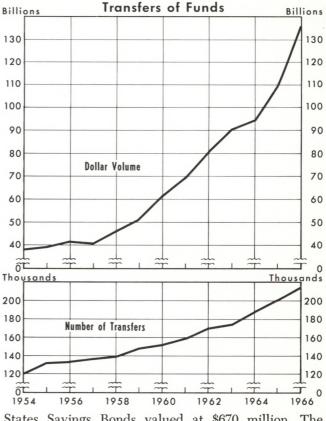
ments. The combined dollar value of these collections was up 11 per cent from 1965 to 1966 and at a 6 per cent average rate from 1956. The number of items jumped 42 per cent from 1965 to 1966 and have risen at a 5.5 per cent average rate since 1956.



Transfer of Funds. Wire transfers of funds are largely movements of member bank balances between Federal Reserve Banks, resulting for the most part from Federal funds transactions, check collection settlement, and transfers in connection with transactions in U. S. Treasury obligations. This bank participated in 214,000 such transfers in 1966, up 7 per cent from the previous year. The dollar value, totaling \$136 billion, was up 25 per cent.

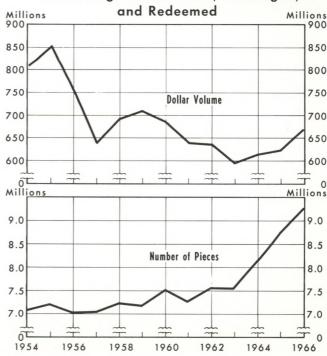
Fiscal Agency Operations. Each Federal Reserve Bank acts as depository and fiscal agent of the United States Government. The Reserve Banks carry the principal checking accounts of the Treasury, issue and redeem Government securities, administer the Treasury tax and loan deposit accounts at commercial banks, and perform various other Government financial duties.

In its capacity as fiscal agent, the bank in 1966 issued, exchanged, and redeemed 9.3 million United



States Savings Bonds valued at \$670 million. The number of bonds was up 5.5 per cent from a year earlier, and their value was up 7 per cent. From 1956 to 1966 dollar volume declined at a 1.2 per cent annual rate, while number of pieces increased at a 3 per cent rate. Other Government securities issued,

U.S. Savings Bonds Issued, Exchanged,



DIRECTORS AND OFFICERS

Directors

Chairman of the Board and Federal Reserve Agent

FREDERIC M. PEIRCE, President General American Life Insurance Company St. Louis, Missouri

Deputy Chairman of the Board

SMITH D. BROADBENT, JR. Broadbent Hybrid Seed Co. Cadiz, Kentucky

Bradford Brett, President, The First National Bank of Mexico, Mexico, Missouri

CECIL W. CUPP, Jr., President, Arkansas Bank and Trust Company, Hot Springs, Arkansas

HARRY F. HARRINGTON, Chairman of the Board, The Boatmen's National Bank of St. Louis, St. Louis, Missouri ROLAND W. RICHARDS, Senior Vice President, Laclede Steel Company, St. Louis, Missouri

WILLIAM KING SELF, President, Riverside Industries, Marks, Mississippi

Sherwood J. Smith, Vice President, Whirlpool Corporation, Evansville, Indiana

Mark Townsend, Chairman of the Board Townsend Lumber Company, Inc. Stuttgart, Arkansas

Member, Federal Advisory Council

A. M. Brinkley, Jr., Chairman of the Board and Chief Executive Officer Citizens Fidelity Bank and Trust Company Louisville, Kentucky

Officers

DARRYL R. FRANCIS, President
DALE M. LEWIS, First Vice President

LEONALL C. ANDERSEN, Vice President
MARVIN L. BENNETT, Vice President
JOHN F. BREEN, Vice President
GERALD T. DUNNE, Vice President
WOODROW W. GILMORE, Vice President
DONALD L. HENRY, Vice President
HOMER JONES, Vice President
STEPHEN KOPTIS, Vice President
JOHN W. MENGES, Vice President
HOWARD H. WEIGEL, Vice President and Secretary
JOSEPH C. WOTAWA, Vice President
ORVILLE O. WYRICK, Vice President
GEORGE W. HIRSHMAN, General Auditor
F. GARLAND RUSSELL, JR., Counsel and Assistant Secretary

NORMAN N. BOWSHER, Assistant Vice President EARL H. CHAPIN, Assistant Chief Examiner EDGAR H. CRIST, Assistant Chief Examiner GEORGE W. DENNISON, Assistant Vice President J. M. GEIGER, Assistant Vice President JOHN J. HOFER, Assistant Vice President WILBUR H. ISBELL, Chief Examiner WILLIS L. JOHNS, Assistant Vice President RICHARD O. KALEY, Assistant Vice President EUGENE A. LEONARD, Assistant Vice President WILLIAM R. MUELLER, Assistant General Auditor PAUL SALZMAN, Assistant Vice President W. E. WALKER, Assistant Vice President

LITTLE ROCK BRANCH

Directors

- Ross E. Anderson, Chairman of the Board, The Commercial National Bank of Little Rock, Little Rock, Arkansas
- Jake Hartz, Jr., President, Jacob Hartz Seed Co., Inc., Stuttgart, Arkansas
- LOUIS E. HURLEY, President, The Exchange Bank & Trust Company, El Dorado, Arkansas
- REEVES E. RITCHIE, President, Arkansas Power & Light Company, Little Rock, Arkansas
- ELLIS E. SHELTON, President, The First National Bank of Fayetteville, Fayetteville, Arkansas
- Carey V. Stabler, President, Little Rock University, Little Rock, Arkansas
- WAYNE A. STONE, President, Simmons First National Bank of Pine Bluff, Pine Bluff, Arkansas

Officers

JOHN F. Breen, Vice President and Manager

JOHN K. WARD, Cashier

JOHN W. DRUELINGER, Assistant Cashier

MICHAEL T. MORIARTY, Assistant Cashier

LOUISVILLE BRANCH

Directors

- LISLE BAKER, JR., Executive Vice President, The Courier-Journal & Louisville Times Company, Louisville, Kentucky
- Paul Chase, President, The Bedford National Bank, Bedford, Indiana
- WM. G. DEATHERAGE, President, Planters Bank & Trust Co., Hopkinsville, Kentucky
- C. Hunter Green, Vice President, Southern Bell Telephone and Telegraph Company, Louisville, Kentucky
- JOHN H. HARDWICK, Chairman and President, The Louisville Trust Company, Louisville, Kentucky
- J. E. MILLER, Executive Vice President, Sellersburg State Bank, Sellersburg, Indiana

RICHARD T. SMITH, Farmer, Madisonville, Kentucky

Officers

Donald L. Henry, Vice President and Manager

JAMES E. CONRAD, Cashier

ROBERT E. HARLOW, Assistant Cashier (Effective March 1, 1967) Louis A. Nelson, Assistant Cashier

MEMPHIS BRANCH

Directors

- LEON C. CASTLING, President, First National Bank at Marianna, Marianna, Arkansas
- Sam Cooper, President, HumKo Products Division, National Dairy Products Corporation, Memphis, Tennessee
- WILLIAM L. GILES, President, Mississippi State University, State College, Mississippi
- W. W. Hollowell, President, The First National Bank of Greenville, Greenville, Mississippi
- ALLEN MORGAN, President, The First National Bank of Memphis, Memphis, Tennessee
- CON T. WELCH, President, Citizens Bank, Savannah, Tennessee
- James S. Williams, Assistant Vice President, American Greetings Corporation, Osceola, Arkansas

Officers

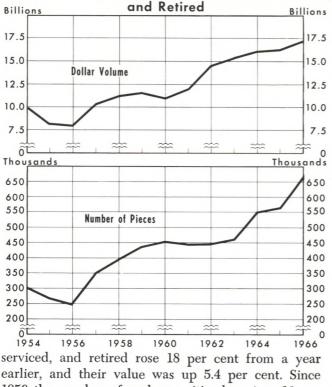
JOHN W. MENGES, Vice President and Manager

BENJAMIN B. MONAGHAN, Cashier

PAUL I. BLACK, JR., Assistant Cashier

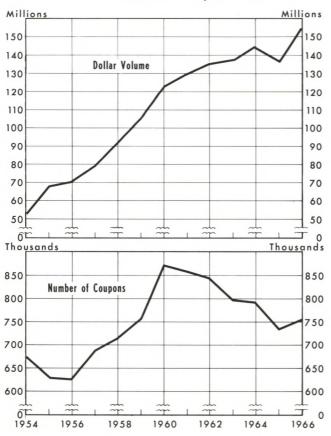
JOSEPH P. GARBARINI, Assistant Cashier

Other Government Securities Issued, Serviced,



1956 the number of such securities has risen 10 per cent per year, and the dollar volume, at an 8 per cent

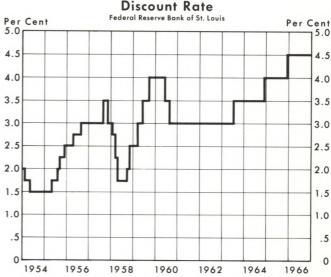
U.S. Government Coupons Paid



rate. Government coupons paid in 1966 were up 3 per cent in number and 13 per cent in dollar value.

Loans. Federal Reserve credit is generally extended on a short-term basis to a member bank to enable it to adjust its asset position when necessary because of developments such as withdrawal of deposits or short-run requirements for credit beyond those which can reasonably be met by use of the bank's own resources. Federal Reserve credit is also available for longer periods when necessary to assist member banks in meeting unusual situations resulting from national, regional, or local difficulties or from exceptional circumstances involving particular member banks.

The discount rate, the rate charged member banks which borrow from a Federal Reserve Bank, is established by the bank's directors, subject to review and determination by the Board of Governors. The last rate change was an increase from 4 to 4½ per cent in December 1965.²



Average borrowing by member banks from the Federal Reserve Bank of St. Louis was much higher in 1966 than in other recent years. Average credit outstanding to member banks in the Eighth District in 1966 was \$32 million, up from \$15 million in 1965 and from about a \$5 million average in the 1961-64 period. In comparison, loans to member banks averaged about \$19 million during the 1955-60 period. The greater borrowings in 1966 reflected a sharp rise in short-term market interest rates relative to the dis-

²The rate charged under Sections 13 and 13a of the Federal Reserve Act on advances secured by U. S. Government securities and discounts of and advances secured by eligible paper. The rate charged on advances secured by collateral other than Government securities and "eligible" paper is one-half of one per cent higher than the normal discount rate. The Board of Governors has recommended elimination of this "penalty" discount rate.

count rate and a strong demand for commercial bank credit. The rise in short-term interest rates resulted primarily from a huge demand for funds accompanying a stimulative Federal budget and a strong demand for goods and services.

Loans to Member Banks



Statements. Total assets of the Federal Reserve Bank of St. Louis were \$2.6 billion at the end of 1966, an increase of 1.6 per cent from a year earlier. The rise in assets was largely matched by increases in notes outstanding (currency) and member bank deposits (reserves).

Net earnings, before payments to the United States Treasury, rose to \$56 million in 1966, up 19 per cent from 1965. The rise in earnings reflected primarily the higher average interest rates on bank earning assets. Dividends to member banks, set by law at 6 per cent of paid-in capital, were up 5 per cent. Payments to the Treasury (interest on Federal Reserve notes) of \$55 million were 21 per cent above a year earlier.

COMPARATIVE STATEMENT OF CONDITION

Thousands of Dollars

Assets	December 31, 1966	December 31, 1965
Gold certificate reserves	534,492	527,575
Federal Reserve notes of other banks	29,701	42,029
Other cash	31,278	7,128
Discounts and advances	2,400	1,394
U.S. Government securities	1,490,875	1,546,710
Uncollected items	479,437	412,676
Other assets	50,178	40,003
Total assets	2,618,361	2,577,515
Liabilities and Capital Accounts		
Federal Reserve notes (net)	1,471,034	1,450,866
Deposits:		
Member banks-reserve accounts	727,057	690,741
U.S. Treasurer-general account	599	55,282
Other	11,814	14,589
Deferred availability cash items	360,611	320,883
Other liabilities and accrued dividends	7,748	6,894
Total capital accounts	39,498	38,260
Total liabilities and capital accounts	2,618,361	2,577,515

COMPARATIVE PROFIT AND LOSS STATEMENT

Thousands of Dollars

	1966	1965
Total earnings	68,176	58,246
Net expenses	11,809	11,053
Net earnings	56,367	47,193
Net additions (+) or deductions (-)	44	+39
Net earnings before payments to U.S. Treasury	56,323	47,232
Distribution of net earnings:		
Dividends	1,168	1,110
Interest on Federal Reserve notes	54,536	44,935
Transferred to surplus	619	1,187
Total	56,323	47,232



Bank Deposit Growth in the Eighth Federal Reserve District

SUBSTANTIAL VARIATION EXISTS in the growth rate of bank deposits among regions as well as among individual banks within a region. This article reviews the growth trends of banks in the Eighth Federal Reserve District since 1950. Deposit growth rates are presented for all insured banks in each metropolitan area, for the nonmetropolitan areas of the district, and for each individual bank with over \$25 million in deposits. Possible reasons for the variation in growth trends are examined.

Total deposits of member banks in the Eighth Federal Reserve District rose 5.3 per cent during the past year. Member bank deposits in the nation rose 5.4 per cent, while deposits of all commercial banks rose about 6 per cent. Commercial bank deposits both in the Eighth District and in the nation grew somewhat less than in most other recent years. District bank deposits rose at an average rate of 3.8 per cent per year during the 1950-60 period and at an 8 per cent rate from mid-1960 to mid-1966. Commercial bank deposits in the nation rose at average rates of 3.9 per cent and 8 per cent, respectively, during the two periods.

The volume of demand deposits nationally is largely determined by Federal Reserve actions in providing reserves to support these deposits. Using reserves as a base, the banking system creates deposits through the addition of loans and investments to bank assets.¹

During the first half of the 1960's time and savings deposits at commercial banks grew rapidly. Time deposits in the district rose at a 16 per cent rate from mid-1960 to mid-1966 after increasing at a 7 per cent rate in the 1950-60 period. In the nation time deposits increased at a 15 per cent rate during the 1960-66 period compared with an annual growth rate of 6 per cent in the 1950's. The substantial growth in time and savings accounts in the more recent period is the result of increased aggressiveness by commercial banks in seeking funds to meet a rising demand for credit. Reflecting this increased competition for funds were more liberal interest rates paid on time and savings deposits and the issue of unsecured notes, subordinated debentures, and an increasing variety of certificates of deposit.

Demand deposits have grown less rapidly than time and savings deposits. Demand deposits at district banks increased at a 2.8 per cent annual rate during the 1950-60 period and at a 3.6 per cent rate from 1960 to 1966. In the nation demand deposits rose at rates of 2.7 and 3.7 per cent, respectively.

Deposit Growth Among District States

Differences in the growth rates of deposits in various areas are influenced by numerous economic forces including income, saving, interbank competition, and competition between banks and other financial institutions. Demand deposits are generally held as a convenient means for settling day-to-day trans-

Holders of demand deposits may convert them to time or savings deposits, which have lower legal reserve requirements. In this case, banks will find that they have excess reserves and can create additional deposits. On the other hand, if time and savings deposit holders choose to convert their deposits to demand deposits or transfer them to other

financial institutions, commercial banks will be short of reserves and must reduce their assets in order to bring deposits back to levels consistent with reserves.

¹Proceeds of loans and investments are credited to customers' deposit accounts and remain as deposits until the loan is repaid even though they are spent, unless some holder to which the funds have passed converts them to time or savings deposits or withdraws them as cash. This process of lending and investing and of deposit creation, in the banking system as a whole, can continue as long as bank reserves are sufficient to meet legal reserve requirements.

Legal reserves of Federal Reserve member banks include cash in the vault plus deposits at the Federal Reserve Bank. Reserve requirements were as follows as of December 31, 1966: 16½ per cent on net demand deposits at reserve city banks, 12 per cent on net demand deposits at country banks, 4 per cent on savings deposits and on other time deposits up to \$5 million, and 6 per cent on time deposits in excess of \$5 million.

actions and as a means of storing wealth. Although changes in these deposits in the nation are largely determined by the Federal Reserve in supplying reserves to the banking system, growth of demand deposits in a local area is likely to be related to the growth of both income and wealth of the community.

Time and savings deposits, in addition to their relationship to income and wealth, are perhaps associated with the convenience and competitive features of banks relative to other savings mediums. Thus, such deposit growth in an area may be associated with the number of banking offices, rates of interest paid by banks relative to other financial intermediaries, and other alternative opportunities for investing savings.

All areas of the district have had sizable gains in total deposits since 1950. In the portions of states within the Eighth District,² the rate of increase during the 1950-60 period ranged from 3.1 per cent per year in Indiana to 5.2 per cent in Mississippi (Table I). During the 1960-66 period Arkansas had the most rapid increase, with total deposits rising at a rate of 10 per cent per year, while Illinois, with a rate of 7 per cent, had the lowest rate of gain. In every state of the district growth of time and savings deposits was considerably more rapid than that of demand deposits. Also, variation among states in the rate of growth of time and savings deposits was greater than for demand deposits.

As indicated earlier, growth of time and savings deposits is influenced by rates of interest paid. Four states in the district—Arkansas, Indiana, Mississippi, and Tennessee—limit rates paid on such accounts. Maximum rates payable in these states in recent years have generally been below the national Regulation Q limits.³ Furthermore, many banks pay consider-

²The Eighth District includes all of Arkansas, all of Missouri except the western tier of counties, the southern third of Illinois, the southern fourth of Indiana, the western half of Kentucky, the western third of Tennessee, and the northern half of Mississippi.

Table I

DEPOSIT GROWTH AT EIGHTH DISTRICT INSURED BANKS

Annual Rates of Increase

	Total D	Deposits	Time D	eposits1	Demand Deposits ¹		
	1950-60	1960-66	1950-60	1960-66	1950-60	1960-66	
State portions:							
Arkansas	4.4	9.9	11.2	17.1	2.9	5.7	
Illinois	3.7	6.9	5.2	11.9	2.7	3.3	
Indiana	3.1	8.9	3.9	14.5	2.3	4.9	
Kentucky	4.0	7.5	7.7	18.9	3.3	3.2	
Mississippi	5.2	8.4	12.6	17.0	2.9	5.3	
Missouri	3.4	7.3	5.6	15.8	2.8	2.3	
Tennessee	4.3	9.3	9.4	14.7	2.5	5.0	
Eighth District	3.8	8.0	6.8	15.5	2.8	3.6	

¹Deposits of individuals, partnerships, and corporations.

ably less than the maximum rates permitted. At midyear 1966 one-fourth of all insured commercial banks in the district were paying less than 3 per cent interest on regular savings accounts, and one-eighth of the banks were paying less than that amount on other time deposits (Table II). About one-tenth of the banks paid less than 3 per cent on both savings and time deposits. On the other hand, almost one-third of the banks were paying the maximum of 4 per cent on regular savings accounts. Nearly half of the banks were paying between 4.5 and 4.9 per cent on other time deposits, while one-eighth of the banks paid 5 per cent or more on these accounts. These data indicate that for many banks in the district the opportunity may exist for attracting additional funds by increasing the rates paid on time and savings deposits.

Apparently, interest rate limitations did not adversely affect deposit growth during much of the 1950-65 period in those states which have such regulations. While time and savings deposits in the Indiana portion of the district grew more slowly

Table II

INTEREST PAID ON TIME AND SAVINGS ACCOUNTS EIGHTH DISTRICT INSURED BANKS

June 30, 1966

Percentage Distribution of Banks

Rate of Interest on Other Time Deposits ¹							
Under 3.0	3.0 - 3.9	4.0 - 4.4	4.5 - 4.9	5.0 - 5.4	Total		
9.62	_	9.14	5.78	0.61	25.15		
1.95	4.57	6.66	10.89	5.92	29.99		
0.13	_	2.29	10.49	_	12.91		
_	0.27	5.45	19.71	6.52	31.95		
11.70	4.84	23.54	46.87	13.05	100.00		
	9.62 1.95 0.13	Under 3.0 3.0 - 3.9 9.62 — 1.95 4.57 0.13 — — 0.27	Under 3.0 3.0 - 3.9 4.0 - 4.4 9.62 — 9.14 1.95 4.57 6.66 0.13 — 2.29 — 0.27 5.45	Under 3.0 3.0 - 3.9 4.0 - 4.4 4.5 - 4.9 9.62 — 9.14 5.78 1.95 4.57 6.66 10.89 0.13 — 2.29 10.49 — 0.27 5.45 19.71	Under 3.0 3.0 - 3.9 4.0 - 4.4 4.5 - 4.9 5.0 - 5.4 9.62 — 9.14 5.78 0.61 1.95 4.57 6.66 10.89 5.92 0.13 — 2.29 10.49 — — 0.27 5.45 19.71 6.52		

¹Rates paid are not necessarily the highest, but are the most common, rates paid. Source: 1966 Agricultural Loan Survey conducted by the Federal Reserve System.

³ At the end of 1966, Regulation Q specified that the maximum interest that any member bank could pay was 4 per cent on savings deposits and all multiple-maturity time deposits of less than 90 days, 5 per cent on single-maturity time deposits of less than \$100,000 and all multiple-maturity deposits of 90 days or more, and 5½ per cent on single-maturity time deposits of \$100,000 and over. Maximum rates payable by nonmember insured commercial banks, established by the Federal Deposit Insurance Corporation, were the same as the above.

than in most other areas during the 1950's, Arkansas, Mississippi, and Tennessee showed the most rapid time deposit gains in the district. Since 1960 the rate of time deposit growth in these states has approximated that of the entire district. The market rate of interest during much of the period examined was below the rates banks in these states were permitted to pay. Under such a situation, banks can effectively compete for time and savings deposits. When market rates moved above permitted bank rates, however, a greater share of funds flowed into other intermediaries or into the credit and equity markets. As a result, growth in bank deposits was hampered.

Interest rates are not the only factor affecting time deposit growth. Growth in incomes and alternative opportunities for investing savings have also been important determinants of deposit growth. However, in much of the period since 1960 bank deposits have increased more rapidly than incomes and savings. Stated somewhat differently, banks have been successful, during most of the period examined, in obtaining a greater share of the public's savings.

Deposit Growth in Metropolitan and Nonmetropolitan Areas

Since 1950 bank deposits have rapidly at banks located in non-metropolitan areas than at metropolitan banks. Total deposits at banks in the smaller cities and rural areas of the district rose at an annual rate of 9 per cent during the 1960-66 period compared with a 7 per cent rate at metropolitan banks (Table III). During the 1950's total deposits at nonmetropolitan banks increased at a 4 per cent rate, and at metropolitan area banks, at a 3 per cent rate.

AND NON Metropolitan areas:

St. Louis Louisville Memphis Little Rock Evansville

From 1960 to 1966 time deposits of nonmetropolitan area banks increased at a 16 per cent rate, and those of metropolitan area banks rose at a 15 per cent rate. During the 1950-60 period time deposits rose at an average rate of 10 per cent at nonmetropolitan banks compared with an average rate of 5 per cent at metropolitan banks. Except for the Indiana and Illinois portions of the district, nonmetropolitan areas showed an increase in time deposits in excess of the growth

of such deposits in any of the district metropolitan areas (Table III). While the growth was slower in Indiana and Illinois than in other district states during the 1950's, it was slightly above the average increase in all metropolitan areas of the district.

The rate of growth of demand deposits at metropolitan banks during the 1950-60 period was slightly greater than at nonmetropolitan banks, 3.0 per cent annually compared with 2.6 per cent. However, since 1960 this situation has reversed, with demand deposits in smaller centers increasing at a rate of 4.5 per cent annually compared with 2.7 per cent for larger city banks.

Individual Bank Growth

While some areas of the district have shown more rapid deposit growth than others since 1950, an even greater variability appears when individual banks are compared. Deposit growth at banks with deposits of \$25 million and over in 1966 was quite rapid at a very few banks in each of the large metropolitan areas. In Little Rock, Louisville, and Memphis a single bank grew two to three times as rapidly as any other bank in the particular area during the 1950-60 period (Table IV). Since 1960 the magnitude of growth variation

Table III

DEPOSIT GROWTH AT METROPOLITAN

AND NONMETROPOLITAN AREA BANKS IN EIGHTH DISTRICT

Annual Rates of Increase

	Total Deposits		Time Deposits ¹		Demand Deposits ¹	
	1950-60	1960-66	1950-60	1960-66	1950-60	1960-66
Metropolitan areas:						
St. Louis	3.1	6.8	4.1	14.0	2.7	1.8
Louisville	4.0	7.3	3.9	20.1	4.3	2.5
Memphis	4.1	9.3	8.4	14.8	2.8	4.9
Little Rock	4.9	8.8	8.5	16.4	4.3	4.9
Evansville	1.7	7.2	1.1	13.0	1.7	3.5
Springfield	4.2	8.9	6.3	21.0	3.7	4.3
Fort Smith	2.5	9.1	4.8	15.5	2.2	6.0
Pine Bluff	3.4	9.8	5.2	13.4	2.3	4.7
Total	3.4	7.4	4.7	14.9	3.0	2.7
Nonmetropolitan areas in district:						
Arkansas	4.5	10.3	13.6	17.6	2.6	5.8
Illinois	3.9	7.5	6.8	12.6	2.3	3.7
Indiana	3.7	9.9	5.8	15.2	2.3	5.8
Kentucky	4.1	7.9	13.6	17.4	2.4	4.1
Mississippi	5.2	8.4	12.6	17.0	2.9	5.3
Missouri	4.3	8.1	11.1	18.8	3.1	3.3
Tennessee	4.8	9.5	12.9	14.8	2.0	5.7
Total	4.3	8.6	10.1	16.2	2.6	4.5

¹Deposits of individuals, partnerships, and corporations.

among individual banks in these areas has lessened slightly. In the St. Louis area three banks showed extremely rapid growth (over 10 per cent yearly), while six banks grew at quite modest rates of under 2 per cent annually during the 1950-60 period.

With few exceptions the most rapidly growing banks during the 1950-60 period have also been the

fastest growing in the more recent period. In most cases the rapidly growing banks in each of the metropolitan areas were relatively small institutions in 1950, generally not more than one-tenth the size of the largest banks in the area. None of these rapidly growing banks had attained the position of largest bank in its particular area in 1966, although the gap

 $\label{eq:table_IV} \mbox{DEPOSIT GROWTH OF INDIVIDUAL BANKS IN EIGHTH DISTRICT1}$

	ME	TROPOLIT	AN AREAS	NONMETROPOLITAN AREAS				
	1950-60	1960-66		1950-60	1960-66		1950-60	1960-66
St. Louis, Missouri-Illinois Deposits \$100 million and over			Deposits over \$25 million	n		Deposits over \$25 million		
Bank A	8.4	8.2	Little Rock			Arkansas		
Bank B	2.1	7.2	Bank A	10.6	9.5	Bank A	5.0	13.3
Bank C	3.0	5.9	Bank B	3.7	9.4	Bank B	4.4	11.6
Bank D	2.9	5.4	Bank C	1.1	7.5	Bank C	3.9	11.4
Bank E	0.9	5.2	Bank D	3.8	6.8	Bank D	3.9	9.5
Bank F	1.3	4.4				Bank E	2.0	8.1
Bank G	2.7	0.8	Louisville			Bank F	2.0	7.6
						Bank G	1.9	5.2
Deposits \$50-\$100 million			Bank A	11.4	16.4	Dank C		0.1
Bank A	12.8	15.1	Bank B	3.1	7.9	Illianta and Indian		
Bank B	10.1	12.0	Bank C	3.4	6.9	Illinois and Indiana		
Bank C	3.1	8.3	Bank D	3.0	6.2	Bank A	2.5	8.5
Bank D	8.6	7.8	Bank E	3.6	4.9	Bank B	2.3	7.2
Bank E	6.0	7.1				Bank C	1.1	6.1
	0.0		Memphis			Bank D	3.8	5.1
Deposits \$25-50 million			Bank A	23.3	15.8			
			Bank B	4.4	11.7	Kentucky		
Bank A	3.0	14.4	Bank C	3.6	7.9			
Bank B	7.9	14.3	Bank D	5.7	7.7	Bank A	2.9	8.2
Bank C	9.9	11.1	Bank E	3.4	6.4	Bank B	6.4	7.8
Bank D	8.9	8.4				Bank C	7.6	7.5
Bank E	5.1	8.1	Fort Smith			Bank D	6.0	7.3
Bank F	8.7	7.5	Bank A		140	Bank E	2.9	6.3
Bank G	6.8	7.4	Bank B	6.5	14.2			
Bank H	2.4	7.3	Bank C	1.7 0.9	8.5 6.0	Mississippi		
Bank I	6.3	6.8	Dulk C	0.7	0.0	Bank A	6.9	13.0
Bank J	2.9	6.1	Pine Bluff			Bank B	7.9	11.2
Bank K	2.0	6.0	rine bion			Bank C	5.8	8.0
Bank L	4.5	5.9	Bank A	6.4	9.5	Bank D	1.2	7.7
Bank M	29.5	5.8	Bank B	1.8	9.5			
Bank N	1.0	5.8				Missouri		
Bank O	1.2	5.6	Evansville			Missouri		
Bank P	4.7	4.9	Bank A	0.8	8.5	Bank A	1.4	12.6
Bank Q	7.8	4.8	Bank B	1.5	6.6	Bank B	3.2	9.4
Bank R	4.2	4.4	Bank C	2.3	6.4	Bank C	3.3	0.9
Bank S	7.2	4.2						
Bank T	2.7	3.9	Springfield			Tennessee		
Bank U	4.0	3.3						
Bank V	0.7	2.2	Bank A	6.9	7.7	Bank A	4.5	9.3
Bank W	1.9	2.1	Bank B	2.8	6.0	Bank B	2.9	7.7

¹Includes all banks in the district with total deposits of \$25 million and over on June 30, 1966, except three banks of this size not in existence in 1950. For banks which merged during the 1950-60 and 1960-66 period the total deposits of the separate banks in 1950 and 1960 were combined and treated as if the merger had occurred at the beginning of the respective periods.

between the rapidly growing banks and their larger competitors closed considerably during the period examined.

These data indicate that small, well-managed, aggressive institutions have been able to attract an increasing proportion of the banking business of a community. While growth does not necessarily insure competition or profits, these smaller but rapidly growing banks must be providing new or improved services sought by banks' customers or meeting these demands at lower costs. Through such innovations they may exert a considerable competitive impact on other banks in the metropolitan area.

Banks in St. Louis with over \$100 million of deposits in 1966 have grown less rapidly than similar banks in other metropolitan areas of the district. Deposits of such banks in the St. Louis area have grown 5 per cent annually since 1960 compared with average rates of 9 per cent in Memphis and 8 per cent in Little Rock and in Louisville. During the 1950-60 period major St. Louis banks grew at an average annual rate of 1.7 per cent, while major banks in these other cities rose at about a 4 per cent rate.

One probable explanation for the less rapid growth of large St. Louis banks is their limited opportunity for providing banking services to the rapidly growing suburban communities. Banks in most other metropolitan areas of the district can provide such services through branches and additional offices, while banks in St. Louis are largely confined to their existing location.

WILLIAM E. PETTIGREW CLIFTON B. LUTTRELL



Changing Credit Conditions—(Continued from page 4)

rate of 12 per cent in September, 8 per cent in October, 7 per cent in November, and 9 per cent in December.

The growth of credit to purchase consumer goods other than automobiles at a 9 per cent annual rate from August to December compares with an increase at an 11 per cent rate from 1961 to 1965, an 8 per cent rate from 1955 to 1961, and a 13 per cent rate

from 1949 to 1955.

OTHER CONSUMER GOODS DEBT

Annual Rates of Increase

August 1966-	December 1966	8.8
March 1965-A	August 1966	14.3
1961-1965		10.5
1955-1961		7.6
1949-1955		12.8