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# FEDERAL RESERVE BANK OF ST. LOUIS

# Review

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FEDERAL RESERVE BANK  
OF ST. LOUIS

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## *Aggregate Demand, Interest Rates, and Monetary Restraint*

ECONOMIC ACTIVITY continued to surge upward during the summer and early fall, in both dollar and real terms; most indications are that this trend will continue during the remainder of the year. Total demand has remained strong partly in response to a very stimulative Federal budget and the rapid growth in the money supply last winter and spring. More recently, expansion of bank reserves, bank credit, and money has been reduced, while interest rate increases have accelerated.

Near-capacity resource utilization rates, together with total demand growth about twice as large as capacity growth, continue to place upward pressure on prices, including prices of loanable funds, that is, interest rates. Prior to June, interest rates, due to the great demand for loan funds, were rising in the face of rapid monetary expansion. Since that time interest rates have risen yet more rapidly as the extraordinary demand for loan funds has continued and the rate of monetary expansion has slowed.

### *Aggregate Demand*

Demand for the product of the economy by consumers, businesses, and governments has risen more rapidly than supply in recent quarters. In the year ending in the second quarter total demand rose 8.8 per cent, substantially in excess of an estimated 4 per cent increase in productive potential.<sup>1</sup> Such

<sup>1</sup>For a discussion of the problems of measuring productive potential, see the 1966 *Annual Report of the Council of Economic Advisers*, p. 40.

relatively rapid expansion of total demand is desirable when there are idle resources, but, when the economy is near full utilization of its resources, increases in total demand in excess of capacity growth give rise to upward pressure on prices. Total demand may recently have increased a little less rapidly than a year ago, but its rate of expansion is still much above the rate of growth in total supply. As a result, upward pressures on prices still prevail, and, because of the tendency of some prices to adjust up with a lag, price averages may continue to rise for a period after total demand for goods and services moderates.

Consumer spending for goods and services rose less rapidly in the second quarter than in the previous year, but preliminary data indicate a resumption of more rapid rates of expansion in the third quarter. Retail sales, a major part of consumer spending, were up about 9 per cent in August over a year earlier.

Total consumer spending through the second quarter continued to rise in conjunction with after-tax personal income. Graduated withholding of Federal income taxes lessened somewhat the growth of after-tax personal income. Consumers have responded to increased withholding rates and higher social security taxes mainly by reducing their rate of saving rather than consumption. Saving, as estimated in the national income accounts, was 5.3 per cent of after-tax income in the second quarter of 1966, and preliminary estimates indicate a lower rate in the third quarter, compared with 6.0 per cent in the second half of 1965.

Business demands for plant and equipment have risen sharply in 1966, with outlays for the year now expected to surpass those in 1965 by about 17 per cent. Plant and equipment spending during the first half of this year was up at an annual rate of 18 per cent over the second half of 1965. Government surveys of investment anticipations for the second half indicate continued advance but at a slower rate.

Demands for goods and services by Federal, state, and local governments, which accelerated in the second half of 1965, continued to advance in the first half of 1966. Available evidence indicates that these demands may be intensifying in the second half of 1966. A major factor underlying the strength of Government demand is the Viet Nam military effort.

### Prices, Output, and Employment

A situation of expanding aggregate demand is desirable in a growing economy. Full utilization of the economy's productive potential is given high priority in the list of our society's goals. It is when this goal approaches achievement that attention shifts to an-



other goal, that of relative price stability. Not all price increases need be cause for alarm. Price changes (both upward and downward) on individual items are expected and necessary for the efficient operation of a free market economy. Furthermore, imperfections in some markets, particularly certain institutional patterns of behavior resulting in downward rigidity of some product and resource prices, may lead to some upward bias in the average level of prices. For example, consumer prices increased at a 1.3 per cent average annual rate during the period from 1959 to 1964, a period when the economy was producing at somewhat below its potential. Although wholesale prices were virtually unchanged during this period, the general price index (the GNP deflator) rose at a 1.4 per cent average annual rate. It may be, however, that prices did not rise so much as these measures indicate since factors such as quality improvement may not have been taken adequately into account.

Prices rising faster than accounted for by measurement defects or moderate rigidities indicate that the economy is increasing spending at a rate beyond its capacity to increase real product. Such has been the case since late summer of last year. Consumer prices have risen 3.5 per cent in the past year, wholesale prices, 3.8 per cent, and the general price level, as measured by the GNP deflator, an estimated 3.4 per cent. Actual prices may have gone up even faster because of elimination of discounts, quality declines, and similar factors.

It is hoped that the economy's productive potential will increase at a faster rate in coming months. However, an increase in productive potential sufficient to prevent prices from advancing during the next six months is improbable if demand expands at recent

rates of 8 or 9 per cent a year. Increases in productivity rates resulting from the recent surge in plant and equipment spending will be realized only slowly.

An indication of the rate of growth of the economy's productive potential is provided by the rate of increase in production during a period when the economy is operating near full employment of its resources. Total real product increased about 6 per cent in the past year, and industrial production rose almost 10 per cent. These rates of increase depended upon tapping some idle capacity and upon substantial increases in prices to draw forth additional resources.



The expansion of output has depended upon a rapid growth of employment. The number of people employed rose 2.7 per cent in the year ending in August compared with a 1.3 per cent rate of increase from 1957 to 1965. Since unemployment has recently remained near 4 per cent of the labor force, the growth of employment apparently depended upon more



people being drawn into the labor force. Based on the second and third quarters, indications are that the economy is maintaining high employment of its labor resources. To do so, however, is requiring price increases in excess of what most observers consider tolerable. Such a situation illustrates the trade-off between the goals of high employment and relative price stability.

A *simpliste* view of the relation between employment (and unemployment) and the average level of prices is that described by the Phillips curve.<sup>2</sup> Recently published research has questioned the validity of a rigid trade-off between unemployment and prices. Other factors, viz., profit rates, past inflationary pressures, and rates of productivity growth, affect the relation between unemployment and the price level.

George Perry has estimated that during the past 20 years, with an average annual rate of productivity gain of 3 per cent and an average rate of profit of 11 per cent, a 2 per cent increase in consumer prices has been associated with a 4 per cent unemployment rate.<sup>3</sup> In the year ending in the second quarter, unemployment averaged 4.1 per cent, and consumer prices rose 2.7 per cent. According to Perry's analysis, to have reduced unemployment to 3 per cent of the labor force, given prevailing profit rates and productivity growth, would have involved a corresponding rise in prices of over 5 per cent.

### Interest Rates

The rising demand for goods and services during the past year has brought forth not only price inflation but also a great demand for loan funds. This demand for loan funds on the part of the private sector and the Government has pushed interest rates steadily upward. The increase has been exceptionally rapid since June as the intense credit demands apparently have been accompanied by a change in the supply situation. However, because of problems of seasonal adjustment and other problems of measurement, it is not always possible to know with certainty when a significant change has occurred in the rates of saving or of monetary growth.

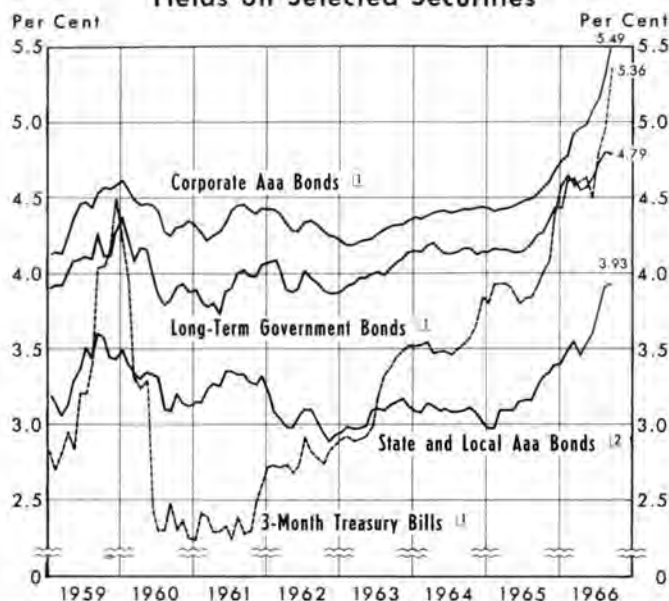
The accelerated rise in interest rates beginning about early summer occurred throughout the maturity spectrum. The yield on three-month Treasury bills

<sup>2</sup>Named after A. W. Phillips, "The Relation Between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957", *Economica* (November 1958).

<sup>3</sup>George L. Perry, *Unemployment, Money Wage Rates and Inflation* (Cambridge: MIT Press, 1966).



## Yields on Selected Securities



1 Monthly averages of daily figures.

2 Monthly averages of Thursday figures.

Latest data plotted: September

Sources: Board of Governors of the Federal Reserve System and Moody's Investors Service

increased from 4.5 per cent in June to 5.4 per cent in late September. Four- to six-month commercial paper rose from 5.5 per cent to 6.0 per cent during the same period, and three- to five-year Governments increased from 5.0 per cent to 5.5 per cent. The corporate Aaa bond rate advanced from 5.1 per cent to 5.5 per cent.

Contributing to the advance of interest rates may have been a substantial turnaround in the rates of

### SELECTED INTEREST RATES

(Compounded Annual Rates of Change)

	June 1965 to June 1966	June 1966 to September 1966
3-month Treasury bills .....	18.4%	101.3%
4- to 6-month Commercial paper .....	25.8	30.6
3- to 5-year Governments .....	22.5	58.3
Long-term Governments .....	11.8	14.6
Corporate Aaa bonds .....	13.7	37.5
Municipal Aaa bonds .....	14.3	42.0
Conventional mortgages <sup>1</sup> .....	6.2	22.7 <sup>2</sup>

<sup>1</sup> Includes fees and charges.

<sup>2</sup> June to August (August estimated).

### SELECTED MONETARY INDICATORS

(Compounded Annual Rates of Change)

Seasonally Adjusted

	June 1965 to June 1966	June 1966 to September 1966 <sup>1</sup>
Money supply .....	5.8%	-1.4%
Demand deposit component .....	5.5	-3.5
Currency component .....	6.9	5.5
Time deposits .....	12.8	8.6
Money plus time deposits .....	9.0	3.2

<sup>1</sup> September estimated.

change of certain key monetary variables. The money supply declined at a 1.4 per cent annual rate from June to September compared with a 6 per cent expansion for the year ending June 1966. Member bank deposits with the Federal Reserve have declined at a 2.1 per cent rate since June after increasing 3.9 per cent in the year ending in June.

When the price of a factor of production goes up relative to that of another, the use of that factor tends to be reduced most in products where its use bulks largest. Accordingly, when the price of the use of capital funds increases, capital use tends to be held back most in those industries where the use of capital is a large portion of the cost of production. Among industries having the largest stock of capital assets relative to their net output are public utilities, transportation, communications, petroleum refining, and housing. Those with small capital relative to their output are primarily in manufacturing, trade, and some services.

The effects of high interest rates need not appear immediately in the investment plans of capital-intensive industries. However, high interest rates sustained over substantial periods eventually have an impact. Precise determination of effects of high capital costs is made difficult by the influence of other factors bearing on investment decisions, e. g., expected sales and profits.

Against the background of rising interest rates, it is useful to recall the basic functions of interest in a free market economy. Interest rates facilitate the flow of saving into investment. By inducing persons and firms to make available their savings for business expansion and other purposes, future production and consumption and thus economic growth are encouraged.

A result of the above process is the rationing of available saving or money capital to those uses that offer the greatest prospect of economic use (return). The result of this rationing device in the allocation of capital funds is comparable to the allocation of any economic good by the price system.

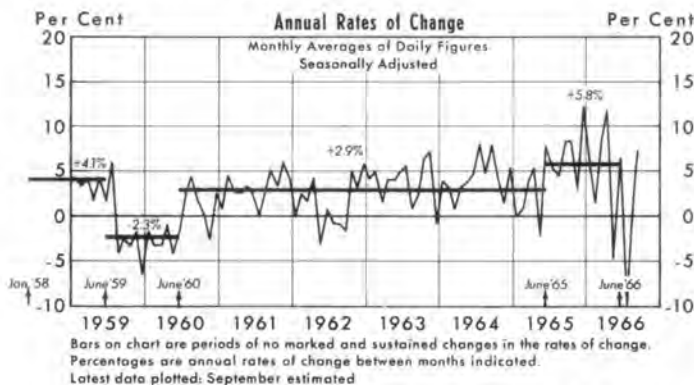
Another function of the interest rate is to restrict the volume of investment to the amount of planned saving during periods of high employment. To the extent that investment is not responsive to interest rate changes, other means, such as rationing by lenders, must be directed toward control of inflationary pressures. Given the current state of total demand and the supply of loan funds, high interest rates are inevitable and are instrumental in channeling funds into areas of most profitable return.

## Fiscal and Monetary Developments

The mix of fiscal and monetary developments during the second half of 1965 and the first half of 1966 consisted of stimulative fiscal conditions and rapid monetary expansion. Although there was less fiscal stimulus in the first half of this year than originally anticipated in the January budget message, the budget position was nevertheless apparently inappropriately stimulative given the state of total demand and the limited availability of resources. The mix in the third quarter has apparently consisted of monetary restraint and yet more expansionary fiscal actions.

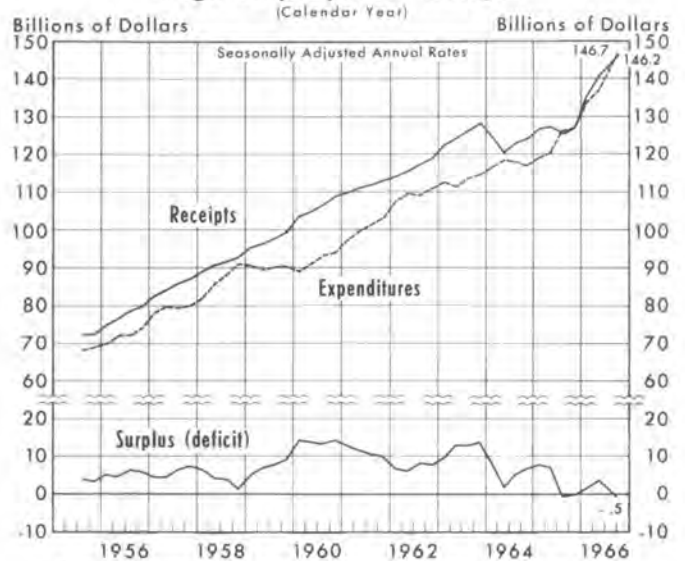
Monetary developments have been assuming a more restrictive stance since June. As a result, when this development is combined with the intense demand for credit, interest rate increases have been accelerated.

### Money Supply



Fiscal actions, on the other hand, are becoming more expansionary in the second half of 1966 despite proposed measures to suspend the 7 per cent investment tax credit and to tighten amortization procedures for tax purposes. These measures, although in the right direction toward containing the investment spending boom, probably will have little effect in the remainder of 1966 and will fall short of offsetting the

## High-Employment Budget



stimulus of increased defense expenditures. The high-employment budget has probably moved toward a somewhat more stimulative stance in the second half of 1966 compared with the first half. Such an excessively stimulative budget may be somewhat moderated by the plans for tax changes and moderation of nondefense expenditures.

## Summary

The economy has been subjected to a rapid increase in total demand during the past year. Responding to the strong demands, interest rates have surged forward, particularly since June. Production has been at near-capacity, and prices have risen. Total demand is continuing its rapid rate of expansion through 1966. Prices continue to rise in response to both current and past pressures.

The problem of maintaining high employment without disruptive price increases continues to pose problems for policymakers. Reduction of reserves and money since June have provided some restraint on total demand, but defense expenditures continue to burgeon. The new mix of stabilization actions may provide a more appropriate total demand than the one followed last spring. At the same time the current mix—monetary restraint and a highly stimulative budget—is likely to cause higher interest rates and less investment and growth than a mix with a somewhat more restrictive fiscal policy. Even when an optimum demand is achieved, prices may continue working up for some time as prices respond to the presently excessive total demand.

# Banks and Rising Interest Rates

Talk by DARRYL R. FRANCIS, President,  
Federal Reserve Bank of St. Louis, before the  
Kentucky Bankers Association, Louisville, Kentucky,  
September 13, 1966

THE COMMERCIAL BANKS of the United States are currently subject to exceptional dynamic change. The central force in this rapid development is a tremendous demand for loan funds.

I propose in this discussion (1) to outline some of the basic facts relative to recent trends in banking, (2) to consider the causes of our present situation, and (3) to examine effects and some necessary policies.

## Basic Facts

By way of background, commercial banking has had three phases in the past 20 years. First, up to 1960 the banks were *not* our most dynamic financial institutions. The decline in the relative role of commercial banks had been going on since the beginning of the century. In 1900 commercial banks had 55 per cent of the assets of all financial institutions; by the 1950's this had fallen to about one-third. The fact that commercial bank deposits were 78 per cent of all deposit-type funds in 1950 and by 1960 had fallen to 65 per cent is evidence that the trend continued for another decade.

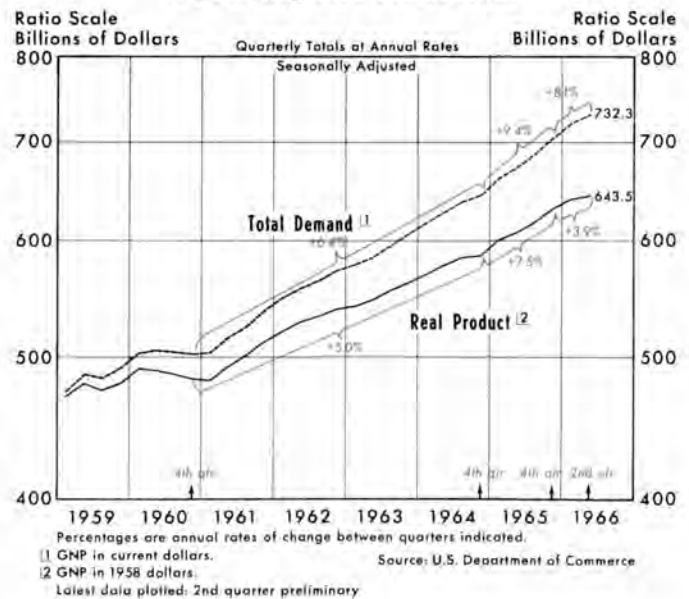
Beginning about 1961 and extending until last year commercial banks played a more vital role in the nation's financial picture. From 1960 to 1965 total time and savings deposits increased 15 per cent per year, or twice as fast as in the previous decade. Demand deposits also increased much faster in 1960-65 than in the previous five years. As a result of these faster growth rates, commercial banks regained a part of the ground lost in prior years.

During the past year the course of commercial banking was again, in some respects, reversed in response to changing economic circumstances. The changed circumstances are: (1) Excess total demand for production has developed, primarily in response to a highly stimulative Federal budget. (2) A great demand for loan funds by business has followed from the excess demand for goods and services. (3) These

great loan fund demands in the private sector, plus the direct effects of the Federal budget on borrowing and saving, have pushed the demand for funds ahead faster than the growth in fund supplies. (4) This demand and supply situation has pushed market interest rates steadily upward.

Since a year ago yields on long-term bonds have risen 50 basis points, and on 90-day Treasury bills, 150 basis points. Rates paid on large negotiable certificates of deposit have risen a full percentage point, and rates on commercial paper, one and one-half percentage points. (5) Under these circumstances of rapidly rising interest rates, the rates paid by financial intermediaries such as commercial banks and savings and loan associations have lagged behind other rates. Intermediaries have thus found it increasingly difficult to maintain their role in the flow of saving into investment. Savers have tended more to invest their saving directly, and funds have tended more to flow through the open market at the expense of financial intermediaries.

## Spending and Production





## *Underlying Causes*

I turn now to some of the underlying causes of these changed conditions. In response to the market demand for investment and loan funds, interest rates in general have been pushed up rapidly during the past year. The rates paid by commercial banks have not led in this movement and, indeed, may have lagged the general trend. As open market rates increased in response to supply and demand forces, loanable funds tended to bypass commercial banks. It became necessary for commercial banks to increase the rates they paid to avoid further deterioration of their relative role in the financial process. Bankers strive to be able to meet the financial needs of their customers. It is in response to these general market forces that interest rates have risen on large negotiable CD's, as well as on other certificates of deposit, and on savings accounts. If banks had not raised these rates, funds would have flowed to a much greater extent through other avenues and much less through the commercial banks.

At this point let me give you my views as to why interest rates have gone up so greatly in the past year. Interest rates generally trend upward in periods of economic expansion. This usual behavior of rising rates occurred from 1961 to 1965. During the past year, however, rates spurted upward much more rapidly. Why have we had this great rate increase during the past year? As I see it, the increase came from a jump in demand for loan funds, not from a restriction on supply. At least it did not come from any Federal Reserve restriction before this past summer. In the year ended in May, Federal Reserve credit grew 8 per cent, bank reserves 5 per cent, bank credit 9 per cent, and the money supply 6 per cent. These do not appear to be restrictive rates of growth.

It was said that the Federal Reserve was a major factor causing higher interest rates when the discount rate and the Regulation Q ceiling were raised in early December 1965. However, interest rates had already been moving up strongly for several months prior to these actions. In the last half of 1965 Treasury bill yields had moved above the discount rate. Also, practically every other interest rate had trended strongly upward. The discount rate and the Regulation Q ceiling were adjusted upward only *after* market rates had moved.

We find then that interest rates moved up because of the great demand for loan funds. This, in turn, was due to the very easy Federal budget beginning a year ago. An easy budget led to excessive total demand for loan funds.

Treasury actions have also exerted upward pressure on some interest rates. Interest yields on long-term U. S. Treasury bonds have recently been about 4.80 per cent, 55 basis points above the 4.25 per cent maximum the Treasury is allowed to pay on new issues. The market rate on these securities rose above the 4.25 per cent limit about September 1965. Since then, the Treasury has been forced to do all its financing with securities bearing five years' maturity or less. As a result, the average maturity on Treasury securities has declined from 64 months a year ago to 59 months. This trend may be interpreted as a progressively stimulative or inflationary factor. With the Treasury estopped from issuing securities with more than five years' maturity, the yield on 3- to 5-year U. S. issues has moved upward from 4.25 per cent a year ago to 5 per cent in June, and to the neighborhood of 5.75 per cent in recent weeks.

Another remarkable aspect of Federal Government debt management has been with respect to agency issues. Here the yields have risen more than yields on comparable direct obligations of the Government. The sale to the public by various agencies of participations in their portfolios has placed upward pressure on their interest rates.

The main key to lower interest rates without further upward pressure on prices would be a less expansive budget. This could be achieved through either an increase in tax rates to pay for Federal expenditures or a reduction of expenditures. Attention is beginning to be given to this possibility.

## *Market Interest Rates Affect Bank Deposits*

In response to rising market rates in late 1965 and relatively inflexible rates paid by banks, commercial banks began to find it difficult to hold deposits. The maximum interest rate on certificates of deposit was raised at the end of 1965. Subsequently, in early 1966, the rates on 4- to 6-month prime commercial paper and on prime bankers' acceptances were about 5 per cent. Rates on both were well below the new 5½ per cent Regulation Q limit. Under these circumstances, banks were permitted to meet competitive market rates. However, these market rates moved steadily upward and in June reached about the upper limit that commercial banks are permitted to pay on time deposits. In July rates on such paper moved above the maximum level permitted by Regulation Q. Recently commercial paper rates have been 38 basis points and bankers' acceptances 25 basis points above the maximum that can be paid on bank certificates of deposit. Consequently, banks are facing very great

difficulties in attracting and holding funds. The volume of time deposits has recently been under great downward pressure due to the higher rates being paid on open market funds.

Bankers experienced their first difficulties in attracting and holding funds almost exactly a year ago. Through August 1965, CD's were increasing at a rate of about 33 per cent a year. In September, however, the rapid rate of increase of CD's fell markedly. Since then their rate of increase has declined until in the last three months they rose at a rate of only 3 per cent a year. With regard to total time and savings deposits, banks were able to continue to increase these accounts through October 1965 at about the 15 per cent rate of the past five years. This was due to rapid increases in savings-type CD's and in savings accounts. But since last October the rate of increase in total time and savings deposits has declined from the 15 per cent rate to a 9 per cent rate in the last three months. This experience has, in general, been common to all the financial intermediaries. Commercial banks, however, have fared better than some others.

### Recent Decline of Demand Deposits

While banks have been able to attract time and savings deposits somewhat less rapidly since last fall than previously, demand deposits continued to grow at a relatively high rate until quite recently. Private demand deposits grew 5.5 per cent during the year ending in May 1966. This was the fastest growth in demand deposits for any year since the Korean War. Thus, monetary expansion or restraint, up to three months ago, was not a factor in the tightness of credit markets and the rising interest rate. Such pressures appear to have come from the demand side and not from monetary actions.

This picture may have changed somewhat in the past few months. Private demand deposits have declined in the past three months. The money supply, of which these deposits are the main component, has accordingly declined. This is the first such decline in several years. In this connection I want to emphasize two points: First, the reduction of money supply was not responsible for the rise in interest rates and the tight situation of the banks during the past year as a whole. Up until May or June of this year bank reserves and the money supply were rising rapidly. Second, in view of the general inflationary situation and the stimulative Federal budget, monetary restriction may be necessary if we are to avoid progressive inflation.

So long as the basic supply and demand situation with respect to loan and investment funds produces

high general interest rates, it is necessary for the commercial banks to go along with these trends. Banks must both pay high rates and charge high rates if they are to perform their function in the economy. In many ways the high and increasing general level of interest rates is disruptive and undesirable. But if the general level of rates needs to be kept down, total demand for loanable funds must be reduced. Public policy can accomplish this only by influencing the supply and demand situation with respect to the total product of the economy. The only way we know to accomplish this is by a more restrictive Federal budget, which may be shaping up, and possibly also by a somewhat less rapid monetary expansion. It is to be noted that the rapid upward movement of interest rates in the past year started just when we reached a very high level of resource utilization. Simultaneously, the stance of the Federal budget became the most stimulative in many years. More rapid monetary expansion would tend to drive up total demand. Demand for investment funds would rise further, and after these increments to the credit supply are absorbed, interest rates will continue up.

So long as the basic influence of supply and demand conditions on interest rates is stimulative, attempts to restrict rates paid by various types of borrowers will only interfere with the most efficient operation of the economic system. Limitations on the interest rates paid or charged by financial institutions, including the commercial banks, mean that funds will flow through other avenues, notably the open market. When funds flow through the open market, a special advantage is given to those who can most effectively





use that market. Both users of funds and suppliers of funds in that market are benefited. Generally speaking, more use of the open market means that the big borrowers get special access to funds and big savers get special benefits of the higher interest rates paid. On the other hand, when interest rates paid by the banks are limited, small borrowers who cannot get use of the open market tend to be deprived of their customary share of funds. Furthermore, small savers who cannot get use of the open market tend to receive relatively low interest rates. In other words, such restrictions tend to be most damaging to one group for which help is intended, namely, the small borrowers.

### Effects and Necessary Policies

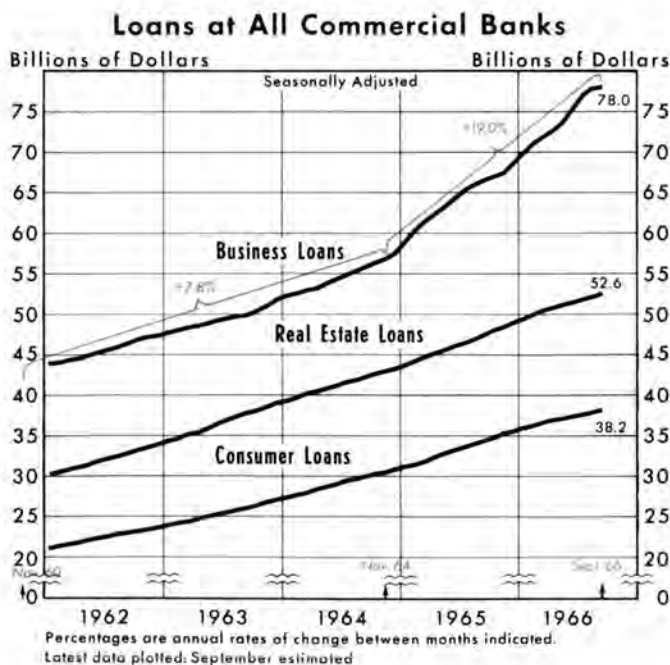
As demands for loan funds have continued unabated or even increased, and as the flow of funds to the banks has declined in recent months, banks have had a hard problem allocating available funds. Because of the great investment plans of business, and the increasing needs for funds to finance payrolls, inventories and sales credit, bank loans to business have expanded with exceptional rapidity. In some respects this may have been a reasonable rise of credit from the standpoint of the banks and of the economy in general. At a time, however, when total demand is excessive and planned investment exceeds planned saving, it is necessary that some plans get cut out. At such a time it may be reasonable that the plans cut will be those for long-term investment, that is, those for capital goods which will yield their services only over a long period of time.

It is reasonable that investment for the time being be concentrated in capital goods which will produce most in the near future. Longer term investment may be postponed until total demand has been brought into line with productive capacity and planned investment in line with planned saving. This is what has happened. Bank credit has been flowing in greater measure to meet the short and intermediate needs of business. It has been flowing in less measure to meet the very long-term uses of housing and public construction. The demand for housing credit, and in a sense the needs, may have been somewhat less intense than for short- and intermediate-term production credit. During the past year, while the interest rate on corporate bonds has increased about 30 per cent, that on conventional first mortgages has increased 13 per cent.

Commercial banks have done a tremendous job of adapting their operations to the stresses and strains of the past year. You have had to adjust to the excessive demand for loan funds. In the face of rapidly rising market interest rates you have attempted to retain deposits and attract new funds. You have had some success; your total time and savings deposits have continued to increase, though at a declining rate.

In conclusion, if we are to avoid the disruptive effects of increasingly high interest rates, we must have proper limitations on total demand for goods and services. These could be provided primarily by an adequately restrictive Federal budget and by accompanying limitation on monetary expansion. The President has asked Congress to suspend for 16 months the 7 per cent tax credit for new business investment in equipment and the accelerated depreciation of buildings and structures. In addition, the Secretary of Treasury has announced a freeze on new borrowings by Federal agencies until the end of the year. These actions should, to some extent, serve to moderate over-all demand in the economy and strains on credit and financial resources.

The steps which are necessary to restrict total demand in general and price inflation are the same as those necessary to limit the demand for investment funds. These steps will also keep in bounds the upward surge of interest rates. A tighter Federal budget and monetary restriction can do the two necessary jobs. They can keep down total dollar spending and stop inflation. They can keep down credit demand and keep interest rates in bounds. If these steps can be taken, the current problems of banks, savings and loan associations, and other financial institutions can be solved.



# Recent Employment Trends in the Central Mississippi Valley

**N**ONFARM PAYROLL EMPLOYMENT<sup>1</sup> in the Central Mississippi Valley<sup>2</sup> has advanced at a 4.5 per cent annual rate since late 1965, almost keeping pace with the national rate of growth. Employment in the region, as in the nation, has risen faster in 1966 than in any previous year of the current business expansion, which began in 1961. Major gains have been recorded in manufacturing, particularly in durable goods industries. Nonmanufacturing employment has grown at about the same rate as in other years of the current expansion.

Patterns of employment growth in the region's states have varied. In Arkansas, Missouri, and Tennessee, growth has accelerated in 1966. In Kentucky the rate was about unchanged. In Mississippi, however, the rate of growth of payroll employment has slowed in recent months after expanding rapidly from 1961 to 1965.

## *Arkansas*

Employment in the state has moved upward at a 6.2 per cent rate, with manufacturing employment expanding somewhat more rapidly than nonmanufacturing. Durable goods industries, especially machinery, have added large numbers of workers.

Nonfarm employment during 1966 in the state of Arkansas as a whole has advanced more rapidly than in the metropolitan areas of the state, indicating that strong growth has occurred in the outlying regions.

<sup>1</sup> Includes wage and salary employees but excludes agricultural, domestic, unpaid family, and self-employed workers. The terms "nonfarm payroll employment," "payroll employment," "nonfarm employment," and "employment" are used interchangeably in this article. Trends in total employment, which includes farm workers, may differ substantially from trends in nonfarm payroll employment in primarily agricultural states.

<sup>2</sup> The Central Mississippi Valley, as used in this article, consists of the states of Arkansas, Kentucky, Mississippi, Missouri, and Tennessee. The following metropolitan areas are in the CMV: Little Rock, Fort Smith, Pine Bluff, Louisville, Evansville, St. Louis, Springfield, Missouri, and Memphis.

In the Little Rock Metropolitan Area payroll employment has risen at a 3.9 per cent rate in 1966, somewhat below the 4.8 per cent trend rate from 1961 to 1965. Manufacturing employment, which rose rapidly in the longer run period, has leveled off this year, while nonmanufacturing categories, particularly construction, have shown increases.

Payroll employment in Fort Smith has declined at a 3.5 per cent rate this year. Manufacturing employment rose to a high level in May and has since declined because a large plant in the metals category has temporarily laid off workers. Construction has suffered the heaviest loss among nonmanufacturing industries. It was adversely affected by the closing of Fort Chaffee in 1965.

In the Pine Bluff Metropolitan Area payroll employment has shown little net gain during 1966 in either manufacturing or nonmanufacturing industries. In the period from 1961 to 1965, however, payroll employment in Pine Bluff expanded at a 5.2 per cent average annual rate, with substantial gains in nonmanufacturing.

## *Kentucky*

Payroll employment in Kentucky has increased at a 4.1 per cent rate in 1966, slightly less than the 4.3 per cent growth rate from 1961 to 1965. Manufacturing employment has risen rapidly in recent months with substantial gains in apparel, lumber and wood products, and electrical and nonelectrical machinery. Nonmanufacturing employment has increased at a 3.5 per cent rate.

In the Louisville Metropolitan Area payroll employment has risen at a 3.6 per cent rate compared with a 3.1 per cent average rate from 1961 to 1965. Manufacturing gains have been substantial in 1966, despite the prevalence of strikes in the Louisville area this year. Nonmanufacturing employment has expanded at a 2.6 per cent rate.

Payroll employment in the Evansville, Indiana—Kentucky area has advanced at a 4.8 per cent rate in 1966, following a period of little net change the previous year. The average rate of growth from 1961 to 1965 was 4.0 per cent. Manufacturing has increased at a 10 per cent rate, and nonmanufacturing, at a 1.7 per cent rate since late 1965. The machinery and miscellaneous manufacturing categories have shown the largest gains.

### **Mississippi**

Payroll employment growth in Mississippi has slowed in 1966 after expanding at a brisk pace from 1961 to 1965. Manufacturing employment is up at a 1.2 per cent rate, while nonmanufacturing employment has risen at a 3.4 per cent rate in 1966.

During the period from 1961 to 1965 total payroll employment in Mississippi rose at a 4.5 per cent rate. Manufacturing employment expanded at a 7.5 per cent rate, the highest for any of the Central Mississippi Valley States. Nonmanufacturing employment increased at a rate of 3.3 per cent, the same as in the region.

### **Missouri**

Payroll employment in Missouri has expanded less rapidly than in the nation during 1966, but growth has been well above the longer term rate for the state. Nonfarm employment has advanced at a 3.3 per cent rate since late 1965 with most of the gain in the manufacturing sector. Largest increases have occurred in the transportation equipment and ordnance and miscellaneous manufacturing categories. Nonmanufacturing employment has expanded at a 1.9 per cent rate.

Recent advances in St. Louis payroll employment have been outstanding. Employment has expanded at a 5.1 per cent rate since late 1965, with growth rates about equal in the manufacturing and nonmanufacturing sectors. In the longer run period from

1961 to 1965, by comparison, payroll employment in St. Louis expanded at a 2.5 per cent rate. The transportation equipment industry accounted for much of the recent manufacturing employment gain, while trade, services, and government were primarily responsible for the nonmanufacturing employment increases.

In Springfield, Missouri, payroll employment expansion has accelerated sharply in recent months. Such employment has advanced at a 6 per cent rate since late 1965, with employment in manufacturing, particularly nonelectrical machinery, gaining at a rapid 16 per cent rate. From 1961 to 1965, by contrast, payroll employment in Springfield rose at a 2.3 per cent average annual rate.

### **Tennessee**

Nonfarm payroll employment growth in Tennessee has been more rapid than in the nation during 1966, with payroll employment expanding at a 7 per cent rate. Manufacturing employment has risen at an 11 per cent rate with durable industries, particularly electrical machinery, transportation equipment, fabricated metals, and furniture gaining substantially. The apparel and chemical industries accounted for much of the increase in nondurables employment. Nonmanufacturing employment has expanded at a 5 per cent rate, reflecting primarily gains in trade, services, and government.

In the Memphis Metropolitan Area a 6 per cent rate of gain in payroll employment during 1966 was primarily attributed to sharp gains in the manufacturing sector. Manufacturing employment has risen at a 16 per cent rate, due to an expansion in employment by several durable goods firms and the staffing of new plants moving into the area. Employment in nonmanufacturing has risen moderately this year. Total payroll employment in Memphis rose at a 2.9 per cent rate from 1961 to 1965.





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