October 1964

FEDERAL RESERVE BANK OF ST. LOUIS Review

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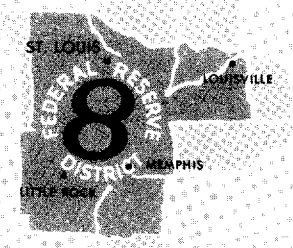

Volume 46 • Number 10
FEDERAL RESERVE BANK
OF ST. LOUIS
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Recent Employment Trends

ESTIMATED TOTAL EMPLOYMENT declined slightly from August to September and has shown no net increase since last April. The relative stability of employment during this recent period might indicate a weakness in the demand for labor. But, while estimated employment has fluctuated around 70.5 million since April, the period involved is short and may not necessarily reveal underlying trends in the labor market. If the data are reviewed in greater perspective and along with other estimates, conclusions may be substantially different.

Total Employment vs. Payroll Employment

In order to judge whether such a lack of increase in the estimate of total employment for five months as we have just experienced necessarily indicates a slackening in the demand for labor, the experience of the past 16 years has been examined. Two widely used broad measures of employment in the nation are available: total employment and total nonfarm payroll employment. Estimates of total employment are based on a monthly survey of about 35,000 households. Payroll employment estimates are based on monthly reports from employers.[1]

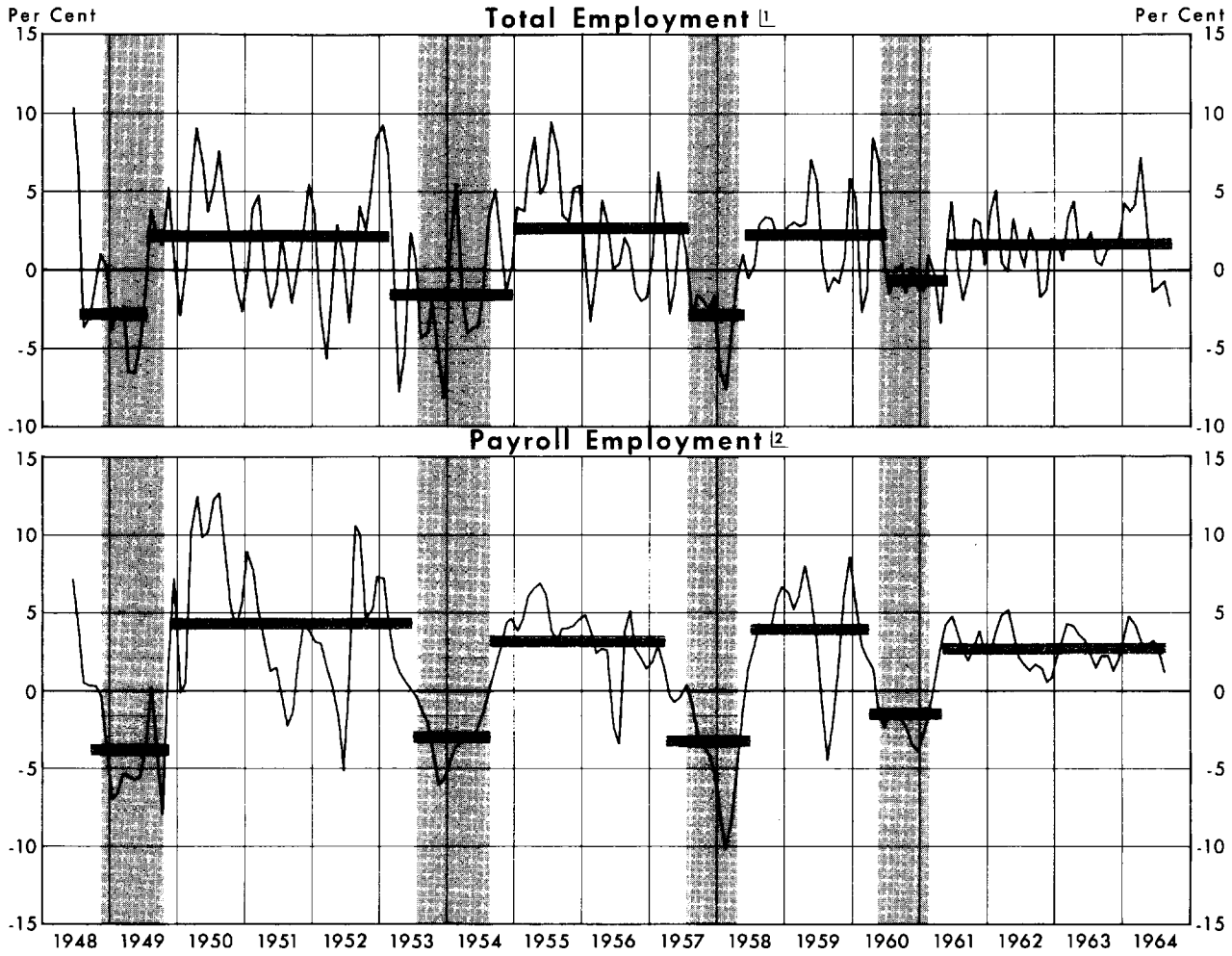
In order to facilitate analysis of these employment data, rates of change of each measure of employment from mid-1948 to the present have been computed.[2] These rates of change are pre-

[1] For a description of both series see *1962 Supplement to Economic Indicators*, U. S. Government Printing Office, 1962, pp. 30 and 40.

[2] These computations were based on seasonally adjusted data and smoothed by a 1-2-1 moving average technique. Tables of monthly rates of change data are available on request. This method of analysis of time series data was first used by this bank in analysis of the money stock and other financial magnitudes in its *Review* for October 1961.

Employment

Annual Rates of Change



[1] Household survey data. Latest data plotted: September, estimated.
[2] Nonfarm establishment data. Latest data plotted: August, estimated.
Source: U. S. Department of Labor.

Three-month moving averages of annual rates of change, weighted 1-2-1, computed from seasonally adjusted data.
Bars indicate average rates for periods of no marked and sustained change in the rates of change (data in Tables I and II).
Vertical shaded areas indicate periods of business recessions.

sented in the chart. For purposes of analysis each of these series has been divided into periods of relatively rapid rates of increase of employment and periods of relatively slow rates of increase or of decrease. Terminal dates of these periods and the average rates of increase for each period are shown in Tables I and II (page 3) and are represented by the horizontal bars on the charts.

The two employment series show similar cyclical movements, registering reductions of employment during periods of general economic recession and sustained rates of increase during periods of economic expansion. During these 16 years there have been four periods of rapid increase of employment and four periods of decrease or very slow increase. The amplitude of cyclical fluctuation is greater for payroll employment than for total employment. The secular upward trend is greater for payroll than for total employment. The average annual rate of increase of total employment has been 1.07 per cent and of payroll employment, 1.68 per cent. Within cycles the month-to-month changes in estimates of total employment (based on household surveys) are erratic, while movements in the rate of change in payroll employment estimates are relatively gradual. The wide fluctuations in the total employment series probably indicate some short-run technical inadequacies. The payroll

Table I

TOTAL EMPLOYMENT[1]

Compounded Annual Rates of Change

Periods of No Marked and Sustained Change in the Rate of Change (Represented by bars on charts)	Annual Rate of Change[2]
July 1948 - July 1949	—2.8
July 1949 - Feb. 1953	2.2
Feb. 1953 - Dec. 1954	—1.5
Dec. 1954 - July 1957	2.7
July 1957 - May 1958	—2.8
May 1958 - June 1960	2.4
June 1960 - May 1961	—0.6
May 1961 - Sept. 1964	1.7 e
July 1948 - Sept. 1964	**1.1 e**

1 Household survey data.
2 Computed from 3-month moving averages, weighted 1-2-1, of seasonally adjusted data.
Source: U. S. Department of Labor.

Table II

PAYROLL EMPLOYMENT[1]

Compounded Annual Rates of Change

Periods of No Marked and Sustained Change in the Rate of Change (Represented by bars on charts)	Annual Rate of Change[2]
Sept. 1948 - Nov. 1949	—3.7
Nov. 1949 - June 1953	4.4
June 1953 - Aug. 1954	—2.9
Aug. 1954 - Mar. 1957	3.3
Mar. 1957 - June 1958	—3.2
June 1958 - Mar. 1960	4.0
Mar. 1960 - Apr. 1961	—1.4
Apr. 1961 - Aug. 1964	2.8 e
Sept. 1948 - Aug. 1964	**1.7 e**

1 Nonfarm establishment data.
2 See footnote 2, Table I.
Source: U. S. Department of Labor.

data seem to be a better indicator of short-run employment developments than the total employment estimates.

During the course of the current business expansion both total employment and payroll employment have increased rapidly. Since April 1961, three and one-half years ago, total employment has increased at an annual rate of 1.7 per cent and payroll employment, at a 2.9 per cent rate. Since the first of the year, both total employment and payroll employment have grown at an accelerated rate, showing annual rates of increase of 2.2 per cent and 3.1 per cent, respectively. As is typical, payroll estimates have increased more steadily and plausibly than total employment estimates. For example, the estimate of total employment jumped at a 13 per cent annual rate from March to April and then showed a slight net decline from April to September. Payroll employment rose at a rate of 3.6 per cent from March to April and at a 2.3 per cent rate from April to August. One may presume that the plateau of estimated total employment since April has not evidenced economic weakness. For current analysis the payroll data would seem to be a better indicator of recent employment trends. This measure has indicated continued strength in the labor market since last spring.

At the same time that employment has been increasing strongly, estimates of unemployment have also improved. For example, the unemployment rate for married men, probably a relatively reliable estimate,[3] has recently averaged about 2.7 per cent, the lowest rate in many years.

[3] It is believed that the reliability of response and reporting of employment and especially of unemployment for married men is greater than for other classes of the population.

Employment and Population Trends

In order to make judgments about the strength of employment, it is useful to relate changes in employment to changes in underlying employment potential.

A possible indicator of employment potential is that portion of the population which is of approximate working age. It is suggested here as a supplement to the commonly used "labor force" concept as a basis of comparison for the growth of employment. Increases of total employment[4] at a substantially greater rate than the growth of population of approximate labor force age may be viewed as an indication of strength in the demand for labor and in the employment situation.

During the past 16 years (1948-64), while total employment has increased at an average rate of 1.07 per cent, the total population of approximate working age (20-64) has increased at about a 0.90 per cent rate. Since April 1961, while total employment has increased at a 1.7 per cent annual rate, population aged 20 to 64 is estimated to have increased at a rate of about 1.1 per cent per annum, and population aged 18 to 64 increased at a 1.3 per cent rate. So far this year, while employment has increased at an annual rate of about 2.2 per cent, the 20 to 64 age group is estimated to have been increasing at a rate of about 1.2 per cent and the 18 to 64 age group, at a 1.4 per cent rate. It is estimated that the 16 to 64 group is now increasing at a rate of about 1.6 per cent per annum. In three or four years each of these groups will be increasing at a rate of about 1.6

[4] While this article indicates the probable unreliability of estimates of total employment data based on household surveys so far as changes during a very few months are concerned, it is believed that these data do give adequate indications of trends over longer periods of time and of the order of magnitude of employment at any one time.

per cent per annum. It seems likely that approximately that rate will then continue for a considerable number of years. The rate of growth of employment since 1961, and especially the rate in 1964, has been as great or greater than any rate of increase of population of labor force age that is anticipated for a number of years.

Whether viewed from the 1948 business peak 16 years ago, from the 1960 peak 4 years ago, or simply over the past year, the increase of employment and jobs has been rapid. Jobs and employment have grown faster than the increase in population of approximate labor force age. The rapid increase in employment has been made possible not only by an increase in the number of people of approximate labor force age but also by attraction of an increasing proportion of women into the labor market. (The proportion of women aged 20 to 64 who were employed increased from 38 per cent in 1953 to 43.5 per cent in 1964, while the proportion aged 18 to 64 increased from 36.5 per cent to 41 per cent.) Contrary to the widely held view that jobs are disappearing or growing more slowly than population, the fact is that the economy has been providing net new jobs at a very high rate.

The fact that the number of persons who are working plus those who report they are looking for work, the so-called labor force, has increased somewhat more rapidly than employment over the past decade or so (though less rapidly since the beginning of the current economic expansion nearly four years ago) does not detract from the impressive rate of increase of jobs and employment in the country. Further, the very rapid rate of increase of nonfarm payroll employment reflects not only the strength of total demand for labor but also the adaptability of the economy in absorbing the agricultural workers released by technological change in that field.[5]

Other Business Developments

According to most measures of business activity, the economy has been continuing its well-balanced advance. Output, incomes, and spending have all grown substantially since the first of the year. Most major indicators showed further improvement in August and September. At the same time prices have remained relatively stable.

Output of the nation's factories, mines, and utilities rose to 133.5 per cent of the 1957-59 average in August. The August increase of 0.8 of a point was the eleventh consecutive monthly advance. The advance was widespread as output in most major industries moved higher. Since December, total output has increased at an annual rate of 8 per cent, nearly double its average rate of growth since 1951. Preliminary data suggest that output gained further in September.

Personal income also continued to grow in August, reaching a seasonally adjusted annual rate of $494 billion. Spurred by expanding output, increased employment, and a gradual improvement in both hours worked per week and average weekly earnings in many industries, personal income has grown at an annual rate of 5 per cent since December. The $2.5 billion increase from July to August was above the average since December.

Retail sales in September fell about 1 per cent below August to a level of $22.0 billion. Since December, sales have increased at an annual rate of 6 per cent. The September decline came in nondurable goods, for which sales were down 3 per cent from August. A slight increase in food-store sales was more than offset by declines in such other soft goods as apparel and general merchandise.

Outlays for new construction in September were at a seasonally adjusted annual rate of $66 billion, remaining on the plateau which was reached a year ago. Both private and public construction continued at about the levels of recent months. Housing starts, which averaged an annual rate of 1,616,000 units from December to March, have since declined, reaching 1,380,000 units in August. Movements in housing starts often presage changes in outlays on residential construction.

Most price indexes held steady in August and early September. The consumer price index in August, at 108.2 per cent of the 1957-59 average, was down slightly from July but up 1 per cent from a year ago. The wholesale price index edged downward by 0.1 per cent in August, reaching 100.3 per cent of the 1957-59 average. Prices of both farm products and processed foods declined during the month, while industrial prices were unchanged. In September weekly wholesale prices averaged higher as prices of farm products and processed foods edged upward.

Financial Developments

Financial developments since last spring have continued to be expansive. Since May, the money supply has risen at an advanced rate, and commercial bank credit has continued to expand at the same rapid

(Continued on Page 12)

[5] Agricultural employment has been declining since 1961 at a compounded annual rate of 4 per cent and since 1951 at a 3 per cent rate. Tables of monthly rates of change data are available from this bank upon request.

Bank Loans, 1961-1964

Introduction

COMMERCIAL BANK LOANS have increased substantially during the economic expansion which began in early 1961. Some analysts view the commercial banking system's accommodation of customer loan demand as a strategic economic variable. Accordingly, from time to time it is of interest to analyze the banking system's potential for future loan expansion. Other observers who place emphasis on the effects of changes in the money supply on economic activity may also be interested in loan developments. The credit-expansion process, of which bank loan expansion is an integral part, is the principal mechanism by which changes in the stock of money are effected.[1]

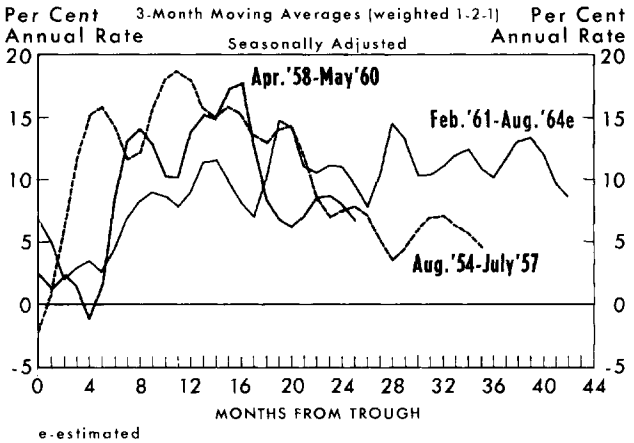
This article reviews briefly the behavior of loans during periods of strong economic activity since 1954, with special attention to developments during the current expansion. Following this, there is a discussion of the banking system's loan behavior in relation to other banking developments. In particular, the ability of the commercial banking system to accommodate customer loan demands is discussed in relation to the bank deposit-expansion process, the broader portfolio management activities of commercial banks, and central bank actions. Based on this analysis, there is a discussion of prospective loan developments.

Loan Developments Since 1961

Commercial bank loans have risen at an annual rate of nearly 12 per cent since February 1961, the trough of the 1960-61 recession (Chart 1). During this period there has not yet been a marked and sustained moderation in the rate of increase in bank loans.

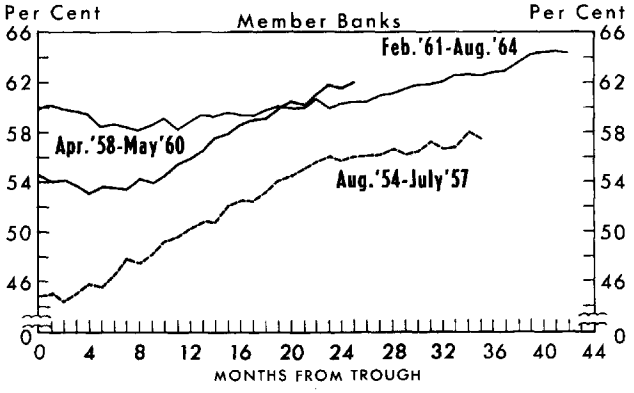
In order to retain valued depositors, commercial banks have an incentive to accommodate the loan demands of customers. Moreover, as profit-making institutions, banks have an incentive to hold those assets which have the greatest return. During periods of strong loan demand, banks tend to shift their earning assets toward loans (which generally carry higher yields than investments). During the first two years of this economic expansion, banks added to both their loan and their investment portfolios. It was not until the twenty-second month of the expansion that the banking system's holdings of loans as a per cent of total earning assets (loans plus investments) rose above the levels reached at the trough of the 1960-61 recession (Chart 2). Since that time, loans as a per cent of total earning assets have risen substantially, accounting for 64 per cent of the total in August 1964 compared with 61 per cent in December 1962.

Chart 1
Rates of Change in Bank Loans
All Commercial Banks



e-estimated

Chart 2
Ratio of Loans to Earning Assets



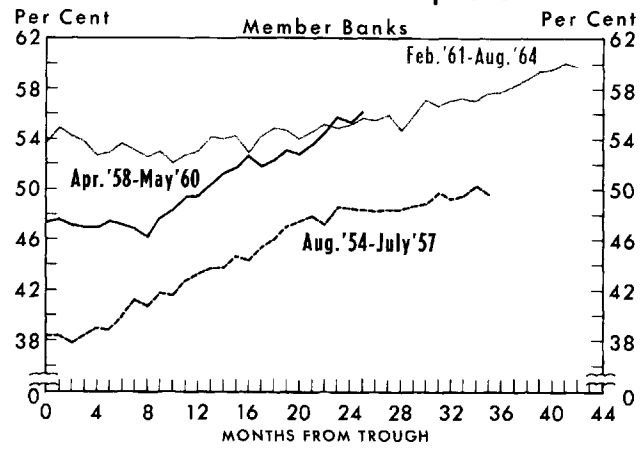
Loans in relation to bank deposits have also reached new highs in recent months. In August the loans-to-deposits ratio reached 60 per cent. In May 1960, the previous peak in business activity, the ratio was 56 per cent; in July 1957 and July 1953, the two preced-

[1] See "Bank Loans and Investments, 1951-1963" in the October 1963 issue of this *Review*.

ing peak months, the loans-to-deposits ratio reached 50 and 40 per cent, respectively (Chart 3).

Chart 3

Ratio of Loans to Deposits

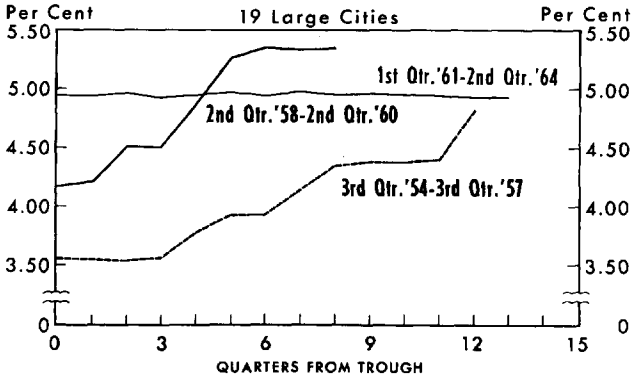


In other periods of economic expansion since 1954, there were rapid increases in bank loans in the early stages of expansion. However, as these expansions progressed (about two years after the beginning of recovery), there were moderations in the rate of increase (Chart 1). The financial literature during those periods suggested that banks came under reserve pressure — that is, in common parlance, they became "loaned up" or "tight" — and took steps to inhibit further loan extensions. In both of these expansions interest rates on short-term business loans rose (Chart 4). In contrast, during the current expansion the aver-

Chart 4

Interest Rates on Short-Term Business Loans

Per Cent Per Annum



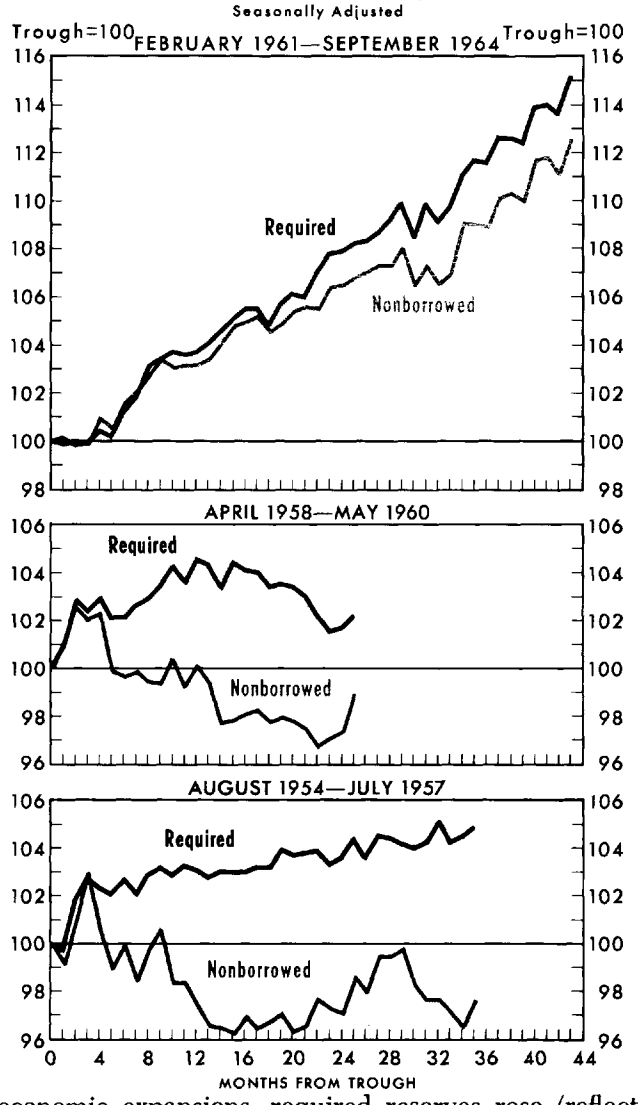
age rate of interest charged by banks on short-term business loans has remained virtually unchanged. However, rate increases are but one example of changes in the various terms which surround the loan contract and, thus, may not give a complete indication of the availability of bank loans.

In what sense did banks come under reserve pressure during the 1958-60 and 1954-57 expansions, and in what sense is there currently an absence of such pressures? As Chart 5 shows, during the two earlier

Chart 5

Required Reserves and Nonborrowed Reserves

Monthly Averages of Daily Figures
Seasonally Adjusted



economic expansions, required reserves rose (reflecting increases in bank deposits), but nonborrowed reserves[2] declined. In the expansion since 1961, required reserves have increased at an average annual rate of 3.8 per cent, and nonborrowed reserves have risen at a 3.5 per cent rate. If over a period of time there is a greater rate of increase in required reserves than in nonborrowed reserves, then an increasing number of individual banks will experience difficulties in meeting their reserve requirements and will need to make adjustments.

According to one way of viewing the matter, a means by which the banking system can adjust to an emerging imbalance between the rate of increase in

[2] Nonborrowed reserves consist of total reserves minus borrowing from the Federal Reserve.

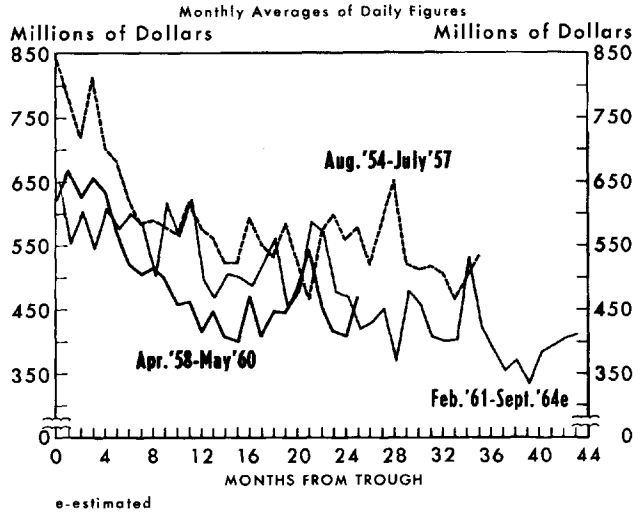
required reserves and the rate of increase in nonborrowed reserves is to accommodate itself to lower levels of excess reserves. It may be more meaningful, however, to regard reductions of excess reserves as reflecting changes in the banking system's demand for such reserves rather than as a means of adjusting to "pressures." During periods of economic expansion since 1954, as interest rates rose there were reductions in excess reserves (Chart 6). Conversely, during

Chart 6

Excess Reserves

Member Banks

Monthly Averages of Daily Figures



periods of economic contraction excess reserves increased. In the period of economic expansion since 1961, the dollar volume of excess reserves has declined about as much as might have been expected on the basis of cyclical experience over the previous decade. This decline has occurred despite the marked growth in bank reserves.

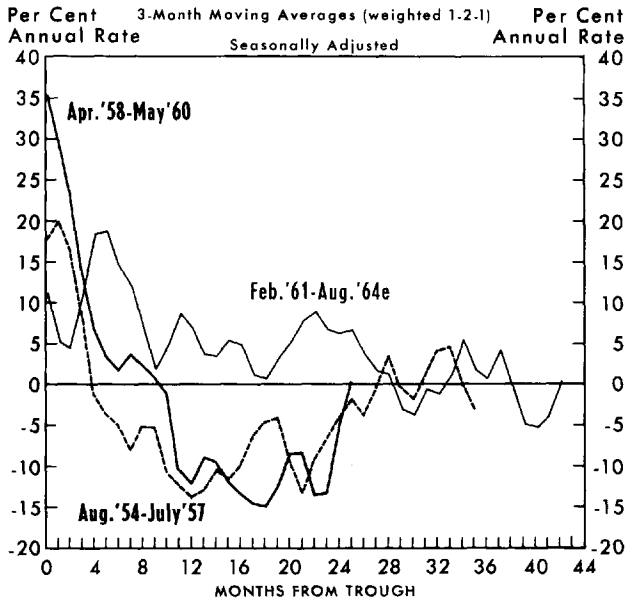
Another means by which the banking system can avoid reserve deficiencies is to sell assets. At an early stage of both the 1958-60 and 1954-57 expansions there were reductions in security holdings. Because bank loans rose during these periods (Chart 1) and bank reserve expansion was limited (Chart 5), banks found it necessary to make adjustments by selling assets (Chart 7). Although bank loans have risen substantially during the current expansion, the rise in loans has been accompanied by an increase in nonborrowed reserves; consequently, there has not yet been a marked reduction in bank holdings of securities.

Finally, banks can make reserve adjustments by borrowing from the Federal Reserve System. To the extent that individual banks find it advantageous to do so, they can maintain or expand their assets by borrowing. That is, if they are unwilling or unable to meet discrepancies between loan demands and de-

Chart 7

Rates of Change in Bank Investments

All Commercial Banks



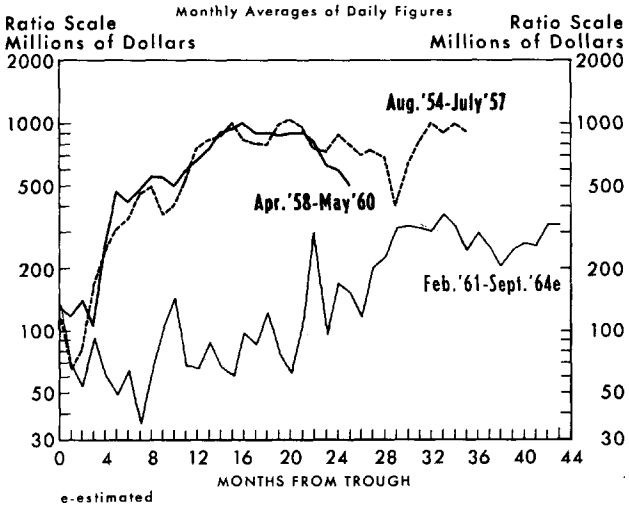
posit trends by selling assets, they must borrow. At an early stage of the 1958-60 and 1954-57 expansions, member banks borrowed substantially and remained heavily in debt throughout much of these expansion periods (Chart 8). While member bank borrowing has

Chart 8

Borrowings

Member Banks

Monthly Averages of Daily Figures



risen during the current expansion, it has remained at much lower levels than in earlier expansions.

Important Variables in the Loan-Expansion Process

In order to consider the possibilities for loans to grow further in the current expansion it seems desirable to outline some of the general principles of the bank expansion process. An analysis of the extent to which the banking system is "tight" or "loaned up"

is, substantively, an investigation of specific, though interrelated, crucial variables relating to the behavior of the monetary authority, the banking system, and the public.

The banking system acquires or loses reserves as a result of Government actions, principally those of the Federal Reserve, as a result of such money market developments as gold inflows and outflows and changes in the nonbank public's holdings of currency and coin, and by borrowing from the Federal Reserve. For example, purchases of Government securities by the Federal Reserve result in increases in the commercial banking system's holdings of reserves. The extent to which an increase in the reserve base is accompanied by an increase in total bank credit and bank deposits depends upon two factors: (1) whether the dollar amount of excess reserves which the banking system desires to hold remains constant and (2) the mix of the deposit expansion.

The volume of excess reserves held by the banking system is not large nor does it undergo wide variation in terms of absolute dollar magnitudes. However, what variation there is appears to be related to opportunity costs.[3] Specifically, the greater the cost of holding nonearning assets (in terms of foregone earnings), the smaller is the volume of excess reserves which the banking system finds efficient to hold.

The banking system brings its actual holdings of excess reserves into alignment with its desired holdings by increasing or decreasing earning assets. As total bank credit expands — that is, as commercial banks make loans or purchase securities from the nonbank public — the public's deposit holdings rise. Because banks must maintain reserves against their deposit liabilities, an increase in deposits is reflected in a rise in required reserves and a corresponding decline in excess reserves.

When bank credit and deposits expand, required reserves will rise at varying rates, depending upon the character of the deposit expansion. Although total deposits are closely associated with changes in bank credit, the breakdown of deposits into demand and time deposits depends upon factors other than variation in bank reserves and bank credit. During any given period there will be some variation in deposits which is chiefly associated with what is happening to bank assets. Thus, variations in private demand deposits are closely related to variations in bank reserves. At the same time there is likely to be deposit variation which bears only an indirect relationship with movements in reserves. Variations in time deposits are of this latter variety. A deposit expansion that occurs largely in time deposits will result in a less rapid rise in required reserves (and a smaller decline in excess reserves) than a deposit expansion which is concentrated in demand deposits.[4]

If nonborrowed reserves do not rise as rapidly as required reserves in the credit- and deposit-expansion process, it becomes necessary for banks to make adjustments in order to avoid running reserve deficiencies. At their own initiative member banks can acquire reserves by borrowing from the Federal Reserve System. Alternatively, it is possible for them to make reserve adjustments by selling investments. By selling securities to the nonbank public the banking system in effect induces the public to hold securities instead of bank deposits. The resulting decline in deposits is accompanied by a decline in required reserves, thereby reducing reserve pressures.

Banks will tend to make adjustments in that manner which is least costly. What considerations are relevant in deciding whether to sell securities or to borrow? Looking to the individual bank at a point in time, if market interest rates rise (security prices fall), there is an increase in the cost of obtaining funds by selling securities. A rise in interest rates means that there is an increase in the foregone returns from securities which are sold. Unless there is an accompanying increase in the Federal Reserve discount rate, borrowing becomes relatively more attractive.

Looking to the banking system as a whole, the analysis becomes increasingly complicated. It may be an acceptable type of analysis to regard interest rate movements as given to the individual bank and then to discuss the likely adjustments which the bank will make in the face of its given alternatives. In considering the banking system as a whole, however, these individual bank adjustments have significant "feedback" effects on the very same interest rates which are assumed to be given to the individual bank. If a significant number of banks begin selling securities, upward pressures are placed on interest rates (downward

[3] See "Excess Reserves" in the April 1963 issue of this bank's *Review*.

[4] There are several other "slippages" which introduce variation between the rate of increase in deposits and the rate of increase in required reserves. Because reserve city member banks have higher reserve requirements, required reserves rise more rapidly if the deposit expansion is centered in these banks. Also, to the extent that the public relates its currency holdings to its total deposit holdings, it is quite likely that a rise in total deposits will be accompanied by a rise in currency in the hands of the public. This results in a dollar-for-dollar loss to the banking system of both deposits and reserves but a lesser decrease in required reserves (and, hence, an increase in reserve pressures).

pressures on security prices), and the cost of obtaining funds by selling securities tends to rise.

As the focus of attention shifts from a *point in time* to a discussion of developments *through time,* additional factors need to be taken into account. There are limitations on the amount of borrowing which an individual bank and, hence, the banking system can undertake.[5] Thus, even though there may be no change in the nominal cost of borrowing (as represented by the discount rate) as indebtedness increases, there may be a rise in the real cost of borrowing. Also, there are increasing costs associated with continued reductions in securities holdings. The banking system cannot reduce indefinitely its holdings of securities, especially short-term, highly liquid, Government securities. For one thing, there are standards concerning the minimum levels of these secondary reserves which may be regarded as prudent. Second, such securities may be used as collateral for bank borrowing from the Federal Reserve System or may be "pledged" as security for certain deposit accounts. Thus, in a very real sense, banks need to hold some minimum dollar volume of Government securities.

Prospective Loan Developments

Whether bank loans can continue to expand as rapidly in the future as they have in the past three and one-half years depends upon what happens to the "crucial" variables discussed above. Thus, in the light of the foregoing analysis, judgments concerning loan expansion potentialities on the supply side rest on an examination of:

1. The probabilities concerning the provision of nonborrowed reserves to the banking system.
2. The probabilities concerning excess reserves behavior.
3. The probabilities concerning changes in the mix of deposits.
4. The probabilities concerning changes in member bank borrowing.
5. The probabilities concerning bank portfolio management.

The probabilities concerning each of these crucial variables will be discussed in turn.

Nonborrowed Reserves

To a significant extent the banking system accrues reserves as a result of Federal Reserve System purchases of securities, i.e., open market operations. Thus, the probabilities concerning prospective changes in nonborrowed reserves rest on basic policy decisions of the monetary authorities. For example, there would be a likelihood of an acceleration in the rate of increase in nonborrowed reserves if a recession developed and a more rapid monetary expansion was needed. On the other hand, if it were felt that the nation faced balance-of-payments problems or needed to prevent price inflation, a less rapid expansion would be more likely.

In addition to depending on basic policy decisions, the probabilities as to likely movements in nonborrowed reserves depend on the specific analytical framework within which monetary policy is formulated and carried out. If, for example, the monetary authority were to concentrate on providing the economy with that stock of money which was appropriate to the economic environment, it may be that there would be little interest in the course of nonborrowed reserves alone. Instead, the monetary authority may need to concentrate on bringing about a certain level of or change in total reserves. If this were the case, increases in borrowing would be "offset" by decreases in nonborrowed reserves. However, if a different guide were followed, the implications for movements in nonborrowed reserves would be different; if, for example, the monetary authority were to maintain a given level of "free" reserves (excess reserves minus borrowing), an increase in borrowing would be "offset" by an *increase* in nonborrowed reserves. Thus, according to either of these guides, short-run movements in borrowing would determine movements in nonborrowed reserves, though the *direction of change* would depend upon the guide being followed.

Excess Reserves

As Chart 6 shows, the dollar volume of excess reserves is low compared both with what it was earlier in the current expansion and with what it was in comparable stages of earlier expansions. This impression is especially pronounced if excess reserves are related to such other balance sheet magnitudes as total deposits.

The probabilities for further declines in excess reserves may hinge on prospective interest rate developments. Thus far in the current expansion, short-term interest rates have not risen to the extent which characterized earlier periods of economic expansion.

[5] In addition, for the individual bank there are limitations on the frequency and duration of borrowing. Thus, as more banks borrow more often, it becomes increasingly difficult for total borrowing to expand.

Deposit Mix

As stated above, deposits variation may be thought of as consisting of two components. One component, which includes private demand deposits, is closely associated with variations in total bank reserves. Moreover, in view of the fact that private demand deposits are the chief segment of the money supply, variations in this component may be closely tied to public policy decisions regarding desired movements in the stock of money. Variations in time deposits are primarily related to other factors. During the current expansion, time deposits have risen rapidly. In contrast, during the 1958-60 and 1954-57 periods of economic expansion there were declines in the rate of time deposit growth.[6] In these expansion periods yields on short-term marketable securities rose above maximum rates which banks were permitted to pay on time deposits. The continued rapid rate of increase in time deposits in the current expansion may reflect the fact that short-term market interest rates have not risen above maximum permissible rates on time deposits.

According to this view, the probabilities concerning the character of prospective deposits growth depend on public policy decisions and on forthcoming interest-rate developments. Changes in privately held demand deposits will depend largely on the necessities which arise in achieving an appropriate rate of growth in the money supply. Turning to time deposits developments, this analysis suggests that if short-term market yields rise above the maximum rates that banks can pay on time deposits there will be an incentive for large corporations, savings and loan associations, state and local governments — and others with large sums of money to invest for short periods — to shift from time deposits (principally negotiable certificates of deposit) into other short-term market instruments.

Borrowing and Asset Adjustments

The probabilities concerning prospective movements in bank holdings of securities and bank borrowing cannot meaningfully be discussed separately. The probabilities depend upon likely movements in nonborrowed reserves and the relationship between the cost of obtaining funds by borrowing and the cost of obtaining funds by selling securities. As suggested above, if nonborrowed reserves expand sufficiently, banks can accommodate rising loan demands without resorting either to asset adjustments or to borrowing If resort is made to these alternatives, there will be a tendency to choose that one which is least costly.

As stated, there are limitations on the amount of borrowing which can be undertaken and on the extent to which banks can reduce their holdings of securities. Member bank borrowing averaged about $310 million in the three months ending in September. Borrowing reached and remained near the $1 billion level during the advanced stages of both the 1958-60 and 1954-57 expansions (Chart 8). Although banks have not made marked reductions in security holdings during the current expansion (Chart 7), such holdings are at an unprecedentedly low level in relation to total deposits.

Summary and Conclusions

Bank loans have risen markedly since 1961, similarly to the rise in other periods of economic expansion since 1954. Unlike experience in the two preceding periods, however, the rate of loan expansion has not yet moderated. In these earlier expansions interest rates rose rapidly, and the rate of bank loan expansion declined. In contrast, since early 1961, the average rate of interest charged by banks on business loans has remained stable, and the rate of expansion of bank loans has been maintained.

Whether loans can continue to expand at an undiminished pace depends upon numerous factors. For one thing, prospective loan increases are related to the strength of loan demand. Given this, the pace at which banks can make loans depends upon their ability and willingness to reduce holdings of securities and excess reserves, the amount of time deposits they can attract, the amount of nonborrowed reserves made available by the Federal Reserve, and their ability and willingness to borrow from Reserve Banks. If nonborrowed reserves increase in pace with an expansion in loans and total deposits, it is less likely that the banking system will need to borrow or sell securities. However, if nonborrowed reserves do not increase sufficiently to meet the rise in required reserves accompanying an expansion in deposits, it becomes likely that the banking system will eventually sell securities.

Since early 1961, the stock of money has grown at a 3.1 per cent annual rate. During this same period time deposits have risen at a 14.5 per cent rate. The steady rise in nonborrowed reserves accompanying the exceptional expansion in time deposits since 1961 has enabled the banking system to accommodate rising loan demand without an increase in loan rates and without marked increases in borrowing or reductions in security holdings.

WILLIAM R. BRYAN

[6] For a discussion see "Movements in Time and Savings Deposits, 1951-1962" and "Recent Trends in Time Deposits" in the March 1963 and July 1964 issues, respectively, of this *Review*.

Agricultural Conditions in the Central Mississippi Valley

AGRICULTURAL CONDITIONS in the Central Mississippi Valley are less favorable this year than last. Cash income has lagged year-earlier amounts in recent months after being slightly higher than a year before in the early part of the year. Prices have averaged slightly less than in 1963, and crop production is estimated to be well below the 1963 level.

The relatively high level of cash receipts in the early months of the year (Table I) was the result of late marketings of last year's crops (tobacco in Kentucky and Tennessee and cotton in Mississippi). During June and July of this year, receipts were slightly less than a year ago. Receipts from sales of livestock and livestock products were slightly less in the January to July period than in the like period a year earlier in all the states except Mississippi and Arkansas.

Table I

CASH RECEIPTS FROM FARM MARKETINGS

Central Mississippi Valley

January - July

	1963	1964	Per cent change
	(Thousands of dollars)		
Arkansas	260,393	259,588	0
Kentucky	272,229	339,683	+25
Mississippi	242,426	266,242	+10
Missouri	542,620	529,992	— 2
Tennessee	208,627	232,373	+11
Total 5 States	526,295	1,627,878	+ 7
Illinois	1,242,993	1,195,081	— 4
Indiana	660,367	644,735	— 2
United States	18,090,747	18,046,758	0

Source: USDA.

A major factor in the decline of cash farm receipts has been the generally lower average prices for livestock. Cattle prices averaged about 12 per cent below year-earlier levels throughout the eight-month period January through August. Hogs averaged about 3 per cent and broilers 5 per cent less. Livestock prices have increased in recent weeks and, in the case of hogs, have exceeded levels of a year earlier. It is unlikely, however, that average livestock and livestock product prices for 1964 will equal the 1963 average.

Prices of most important crops in the area are also somewhat below year-earlier levels. Cotton has been about 7 per cent lower in recent weeks and, with the reduced Government support price, will probably average lower throughout the marketing season. Corn and soybean prices have been slightly below year-earlier levels, and rice has been about unchanged. Tobacco support prices are about 1 per cent above 1963 levels.

Production of two major crops in the area is estimated at less than 1963 output (Table II). Corn production for the five states is estimated at 17 per cent less. Tobacco is expected to be down 19 per cent. The cotton, wheat, rice, and soybean crops are estimated to be greater than in 1963. In the Corn Belt States of Illinois and Indiana, however, the oats, wheat, and soybean crops are also down. Most of the gain in wheat output was in Arkansas and Mississippi, where production rose 10 million and 3 million bushels, respectively, primarily due to major acreage increases.

Table II

PRODUCTION OF MAJOR CROPS

Central Mississippi Valley

Percentage Change, 1963 - 1964[1]

	Corn	Oats	Wheat	Rice	Soybeans	Cotton	Tobacco
Arkansas	—35	+ 69	+182	+3	+24	+4	....
Kentucky	—19	0	+ 19	....	+ 8	....	—22
Mississippi	+ 7	+138	+241	—3	+ 8	+1	....
Missouri	—23	— 19	+ 22	+6	—10	—4	— 5
Tennessee	0	+ 23	+ 39	....	+22	—1	—10
Total 5 States	—17	+ 9	+ 44	+3	+ 7	+1	—19
Illinois	— 7	— 27	— 4	....	—14	....	....
Indiana	—13	— 46	— 7	....	—11	....	—22
United States	—13	— 9	+ 13	+3	0	0	— 8

[1] USDA October 1 estimates.

The decline in crop production estimated for the area reflects a shortage of moisture throughout most of the planting and growing seasons. Hardest hit by the drought were central and southern Illinois, southern Indiana, and central Missouri. Yield estimates for most crops are well below 1963 levels in the major producing sections of the Central Mississippi Valley (Table III). Corn yields, for example, are down 21 per cent in Missouri. Soybean yields are down 14 per cent in Missouri and 10 per cent in Kentucky. Cotton yield estimates are below 1963 yields in Missouri. Estimated cotton yields, however, are greater in the other major producing states of the area. Tobacco yields in Kentucky are down 13 per cent.

Table III

YIELD PER ACRE OF MAJOR CROPS
Central Mississippi Valley

Percentage Change, 1963 - 1964[1]

	Corn	Oats	Wheat	Rice	Soybeans	Cotton	Tobacco
Arkansas	—26	+28	+ 6	+2	+20	+4	....
Kentucky	—18	+ 3	+ 7	....	—10	....	—13
Mississippi	+19	+59	— 6	—3	+ 5	+1	....
Missouri	—21	—10	0	—2	—14	—4	+ 4
Tennessee	— 2	+18	+ 7	....	+14	+1	— 1
Illinois	— 8	—12	— 7	....	—22	....	....
Indiana	—13	—27	—11	....	—11	....	—14
United States	— 9	— 4	0	+3	— 8	+1	0

[1] USDA October 1 estimates.

Recent Employment Trends—*(Continued from Page 4)*

rate as it has since the February 1961 trough in economic activity. Interest rates have changed only slightly in the most recent months despite a seasonal rise in the demand for credit and the continued increase in business activity.

The nation's money supply (currency plus demand deposits) rose at a 7 per cent annual rate from May to September compared with a 3.5 per cent rate since last November. From the beginning of the current economic expansion in early 1961, money has risen at a 3.1 per cent annual rate. Most of the recent sharp expansion in money occurred in the demand deposit component; currency in the hands of the public has continued to rise at approximately its earlier rate.

Although the rate of expansion of the money supply has been at an increased rate since May, the rate of commercial bank credit expansion has continued about the same as during the entire current period of economic expansion. From May to September total bank credit rose at a 9 per cent annual rate, the same rate that has prevailed since early 1961.

From May to September total loans at commercial banks and most major categories of loans continued to increase at about the same rate as over the entire February 1961 to September 1964 period. During the past forty-three months total loans have risen at an average annual rate of 12 per cent, business loans at a 9 per cent rate, real estate loans at a 13 per cent rate, and consumer loans at a 10 per cent rate.

Interest rates have changed only slightly in recent months. The supply of bank credit and the flow of new savings available for investment have about kept pace with rising seasonal credit needs and demands for funds that have accompanied the expansion in economic activity. The three-month Treasury bill rate was 3.58 per cent in mid-October, higher than in mid-summer but about the same as last March. Since November of last year, three-month bill rates have remained within the narrow 3.40 to 3.60 per cent range. Yields on long-term Government bonds rose slightly from June to early October but remained below their April level. Yields on highest grade corporate issues have been about unchanged since last spring. According to traditional seasonal patterns, interest rates on marketable securities would be higher now than during the late spring.

New Member Banks

The First National Bank of Iuka, Iuka, Mississippi, opened for business on September 5 with capital of $120,000 and surplus of $120,000. Its officers are: Reuben E. Grisham, Jr., Chairman of the Board; Kelly S. Segars, M.D., President; Eugene C. Bonds, Executive Vice President and Cashier; and Edna V. Richardson, Assistant Cashier.

* * *

The First National Bank of Brinkley, Brinkley, Arkansas, opened for business on September 8. The bank has capital of $160,000 and surplus of $160,000. Its officers are: Otto W. Clifton, President; Mark M. Davis, Executive Vice President; and Joe McCain, Cashier.