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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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Economic Expansion Continues

SINCE THE BEGINNING OF THE YEAR, business activity has continued to expand. Employment and consumer spending have risen at a greater rate than during 1963. The money supply, according to standard seasonally adjusted data, declined from January to March. The expansion in money plus time deposits at commercial banks was at a markedly reduced rate compared with growth in the last half of 1963.

Business Developments

During the first three months of 1964, national business activity continued to rise at a strong pace. Employment rose at a markedly higher rate than during 1963, and unemployment relative to the labor force declined slightly. Consumer spending advanced sharply. Industrial production and new construction rose slightly from advanced levels of late last year.

Total civilian employment rose from December to February at a 5.4 per cent annual rate, markedly above the 1.6 per cent rate during 1963. The longer run rate of expansion in employment (1951-1963) has been 1.0 per cent. The unemployment rate decreased slightly from December to February.

Retail sales increased at a 7.5 per cent rate from December to February in contrast to a 3.3 per cent increase during the previous twelve months. Sales appear to have remained at a high level in March.

Industrial production rose at a 2.8 per cent rate from December to February compared with a 6.6 per cent increase during 1963. Steel production remained strong in early March. New construction in February was little changed from the October and

November level. This development stands in sharp contrast with a 21.6 per cent annual rate of expansion from last May to October.

Monetary Developments

The rate of expansion in bank reserves and money, according to standard seasonally adjusted data,[1] has been markedly less in recent months than in the latter part of 1963. Bank credit has risen more slowly than in late 1963. Interest rates on marketable securities have risen. Such developments are commonly interpreted as indications of monetary restraint.

The nation's money supply (demand deposits plus currency) decreased at a 2.1 per cent annual rate from January to the month ending March 15, compared with expansion at a 6.9 per cent rate from August to January. Money plus time deposits has risen at a lesser rate since January than in the previous five months. Total commercial bank credit (loans and investments) expanded at a 6.6 per cent rate from January to February, compared with an 8.0 per cent rate during the previous five months. The more moderate rate of expansion in bank credit appears to have continued into March. From January to early April, interest rates increased in contrast to a traditional decrease in rates during the early months of a year.

The recent trend of monetary expansion may be evaluated in the light of experience of the last several years. In each year since mid-1960, the seasonally adjusted money supply (standard method) has risen less rapidly during the January to August period than in the remainder of the year (see table). In the last four years, money has risen at an average annual rate of 0.5 per cent from January to August compared with a 4.7 per cent average rate of increase during the remaining five months of the year. In contrast, from 1951 through 1959, the average annual rate of increase in money (seasonally adjusted by the standard method) in the January to August period was about the same as in the rest of the year.

Money Supply
Seasonally Adjusted

	Annual Rates of Change			
	January-August		August-January	
	Standard*	Alternative**	Standard*	Alternative**
1960	—1.1%	+0.5%	+1.0%	—1.5%
1961	+1.7	+3.5	+5.0	+2.5
1962	—0.9	+0.8	+6.0	+3.3
1963	+2.1	+3.9	+6.9	+4.1
Average 1960-63	+0.5	+2.2	+4.7	+2.1
Average 1951-59	+2.4	....	+1.9	....

Money Supply Plus Time Deposits in Commercial Banks

Average 1960-63	+4.2	+6.3	+8.5	+6.9
Average 1951-59	+2.1	....	+1.9	....

*Standard seasonal based on data from 1947 to 1961.
**Alternative seasonal based on data from mid-1960 to mid-1963.

These observations suggest that there has been a significant change in the seasonal pattern of money which has not been fully reflected in the standard seasonal factors calculated from 1947-1961 data. The new intra-yearly pattern apparently began about mid-1960, when there was a pronounced lessening in the movement of short-term interest rates, particularly rates on short-term Treasury bills (Chart 1).

Using an alternative "seasonal" based on data from mid-1960 to mid-1963,[2] financial develop-

[1] Board of Governors' seasonally adjusted money supply based on data from 1947 to 1961.

[2] Calculated by Federal Reserve Bank of St. Louis.

Why Data Are Seasonally Adjusted

IN ANALYZING ECONOMIC DATA, the analyst is interested primarily in cyclical movements and trends. Therefore, it is desirable to remove from the data regular variations resulting from such factors as weather or man-made conventions, such as holidays. These intra-yearly movements are called seasonal variations.[1]

An example of seasonal variations in financial markets is a sharply rising demand for credit in the last few months of a year, as crops move to the market and as retailers build up Christmas inventories. Then, as demands slacken in the early months of a year, credit declines.

Most seasonal patterns in economic activity change slowly over time. For instance, changed construction methods have resulted in smaller seasonal reductions in building activity during the winter months. Air conditioning of retail stores has helped to overcome the reluctance of persons to shop during the summer months.

However, at times a sharp change in the seasonal pattern of activity may occur, as appears to have been the case for some financial indicators about mid-1960. When this happens, the use of factors derived from previous data to adjust for seasonal patterns may under- or overcorrect for seasonal influences. Thus, figures must be used with care to avoid a misinterpretation of cyclical or trend movements.

[1] There are many methods, some quite sophisticated, for adjusting data for seasonal variations. Simply stated, each month's (or some other sub-period of a year) data are adjusted to exclude the average deviation of that particular month, calculated for several years, from the trend in the data.

ments since January appear not to have been as restrictive as indicated by the standard seasonally adjusted data. Money decreased at a 1.0 per cent rate from January to the month ending March 15.[3] Bank credit rose at a 12.7 per cent rate from January to February, moderately more than the 8.4 per cent rate from August to January.

Changed Seasonal Patterns in Financial Indicators

A pronounced change in the seasonal movements in some frequently used financial indicators is disclosed when their seasonal patterns for the three years from mid-1960 to mid-1963 are compared with those of the previous three years. The following discussion should be taken only as an indication of changes in intra-yearly movements in financial data rather than as a definitive measurement of these changes. If the seasonal movement in a time series has changed in character, it may be desirable to use a seasonal adjustment based on most recent experience even though the time period involved is relatively brief.

The 90-day Treasury bill rate (not seasonally adjusted) has moved in a less pronounced manner since mid-1960 than in the previous ten years (Chart 1). It was at about this time that a conflict developed between the desirability of lower interest rates to encourage domestic economic expansion and higher rates to correct a chronic international balance-of-payments deficit. As a result of this change, a marked reduction in the seasonal movements in the bill rate developed (Chart 2).

Chart 1

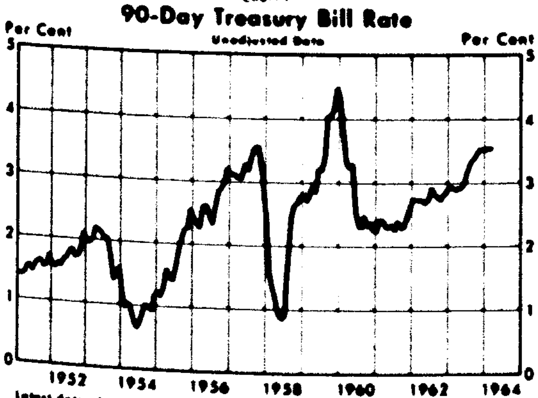
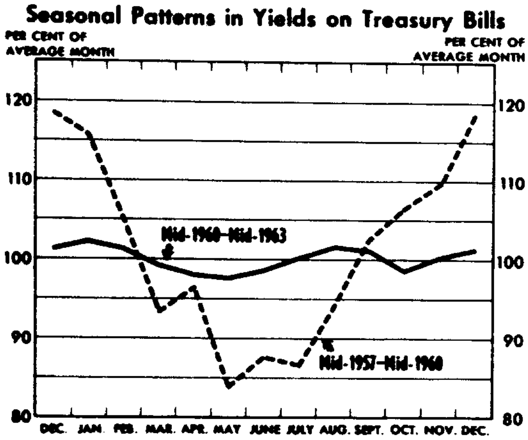
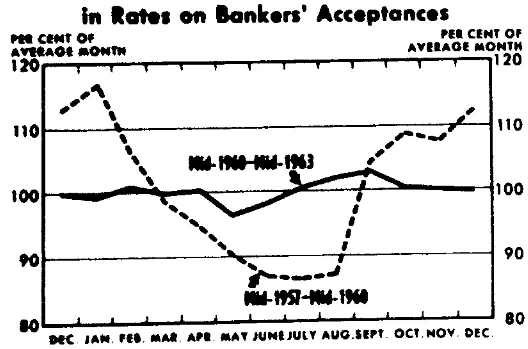


Chart 2



Since mid-1960, intra-yearly movements in the bill rate have been slight. Traditionally, bill yields rose about 35 or 40 per cent during the last half of the year in response to rising demand for credit. Then, as credit demand slackened, rates fell sharply during the first half of the year. Since mid-1960, seasonal changes in the demand for credit have probably continued in approximately the same magnitude, but they have apparently been more nearly matched by changes in the supply of credit funds than formerly, as evidenced by smaller seasonal variations in the bill rate. A marked reduction has also occurred in the seasonal pattern of rates on bankers' acceptances (Chart 3).

Chart 3

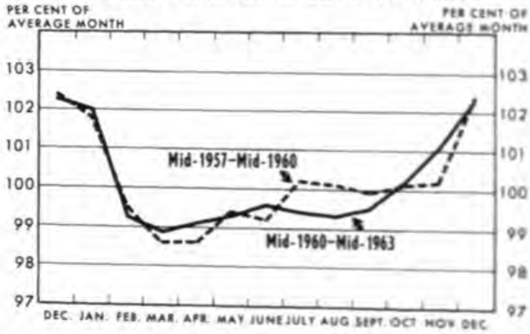


Changes in the intra-yearly pattern of available credit funds have come in large part from the banking system. Since mid-1960, total member bank reserves have had a greater seasonal upswing in the later months of each year than in these same months in the 1957 to 1960 period (Chart 4).

In the latter part of each of the last four years, when reserves have increased more than formerly in the period, banks have been able to meet the rising demand for credit more fully than in prior

[3] For greater detail concerning recent rates of change see this Bank's release "Bank Reserves and Money" dated March 31, 1964.

Seasonal Patterns in Bank Reserves



years. Since mid-1960 there have been more pronounced seasonal movements in commercial bank loans (Chart 5) and in total bank credit (Chart 6). At the same time, seasonal fluctuations in bank holdings of government and other securities have moderated (Chart 7).

Chart 5

Seasonal Patterns in Bank Loans

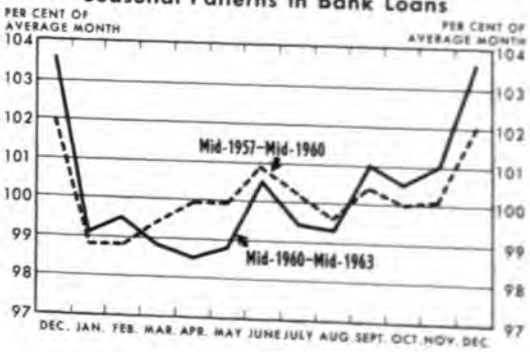


Chart 6

Seasonal Patterns in Bank Credit

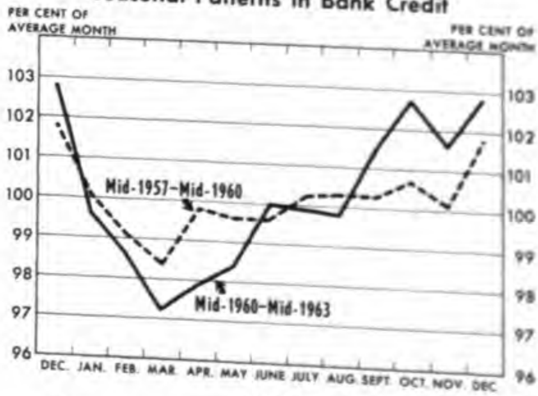
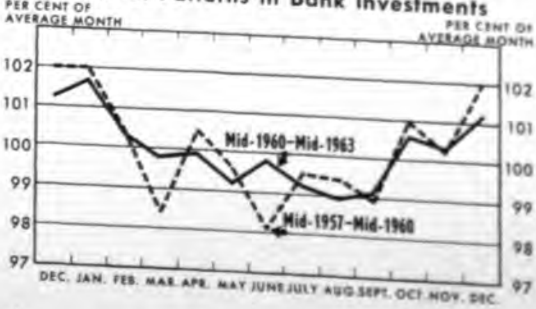


Chart 7

Seasonal Patterns in Bank Investments



Seasonal Patterns in Money Supply

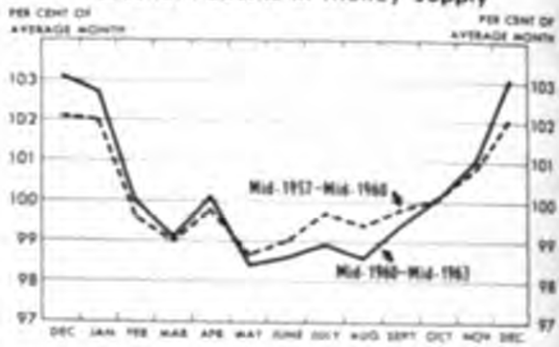


Chart 9

Seasonal Patterns in Demand Deposits

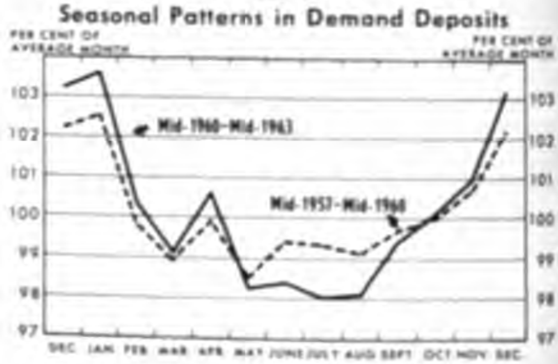
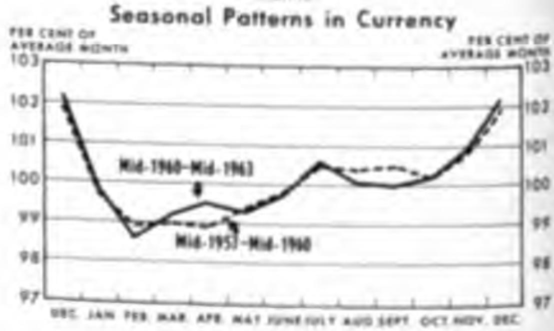


Chart 10

Seasonal Patterns in Currency



The changed seasonal movement in bank credit has been accompanied by a similar change in demand deposits, the major component of the money supply. Movements in demand deposits are closely related to movements in total bank credit. Since mid-1960, the decrease in the money supply has been greater in the first seven months of a year than in these months of the previous years, and money has risen faster in the remaining months (Chart 8). This change in the intra-yearly movement in money reflects primarily a new seasonal movement in demand deposits (Chart 9). The seasonal movement in currency since mid-1960 has been essentially the same as in the preceding three years (Chart 10).

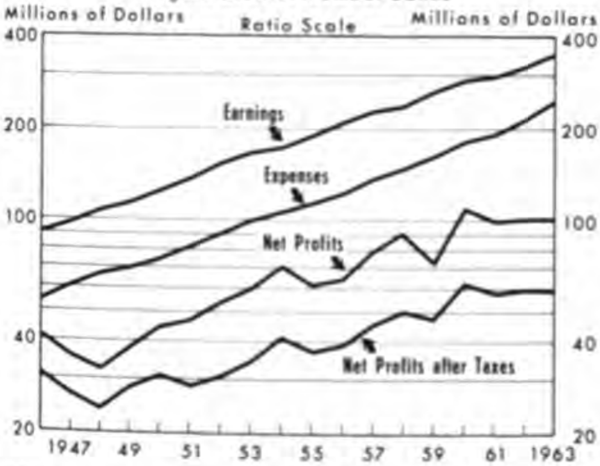
1963 Earnings and Expenses
of Central Mississippi Valley Member Banks

BOTH EARNINGS AND EXPENSES of Federal Reserve member banks in the Central Mississippi Valley area[1] continued to rise markedly from 1962 to 1963, and net profits remained about unchanged (Chart 1). Earnings expanded from $320 million in 1962 to $350 million in 1963. Expenses rose by a smaller amount, although by a greater rate, from $213 million to $241 million. Net profits (after taxes) were $59 million, virtually the same as in the three previous years. Since 1960, net profits have declined relative to capital accounts and total resources.

Chart 1

Earnings and Expenses

Eighth District Member Banks



Member banks of the Federal Reserve System throughout the country fared slightly better in 1963 than those in the Central Mississippi Valley. Earnings of all member banks rose 10 per cent, from $10.2 billion in 1962 to $11.2 billion in 1963, while expenses increased 12 per cent, from $7.0 billion to $7.9 billion. Net income after taxes expanded 8 per cent, from $1.7 billion to $1.8 billion.

Review of 1963

Total earnings of Federal Reserve member banks in the Central Mississippi Valley area were 9 per cent greater in 1963 than in 1962. The increased earnings reflected primarily an expansion in assets made possible by a growth in deposits and capital. The average volume of loans outstanding during 1963 was $4.0 billion, 10 per cent above a year earlier. Holdings of municipal and corporate securities averaged $0.8 billion, 24 per cent higher than in the previous year. On the other hand, portfolios of Government securities contracted slightly. In addition to growth in the volume of earning assets, there were moderate increases in the average rate of return on these assets and in receipts from service charges and other sources.

Expenses of area member banks expanded 13 per cent from 1962 to 1963. Each of the expense items rose. As in other recent years, the most notable increase occurred in interest payments on time and savings deposits. The increase resulted from a 16 per cent expansion in the average volume of time and savings deposits and a rise in the average interest rate on these balances from 2.63 per cent in 1962 to 2.98 per cent in 1963.[2] One factor in the higher average rate may have been the revision in maximum interest rates on time deposits.[3]

Net operating earnings of these banks totaled $109 million, 2 per cent larger than in each of the preceding two years and equal to the record level attained in 1960. Net losses, charge-offs, and transfers to reserves absorbed $8.5 million, and income taxes amounted to $42 million, leaving net profits after taxes of $59 million. Since 1960, net profits have varied between $58 million and $62 million. After distributing $26 million as cash dividends to their shareholders, district member banks added $33 million to their capital accounts.

Postwar Trends

Since the end of World War II, earnings and expenses of Federal Reserve member banks in the Cen-

[1] The "Central Mississippi Valley" is used as a descriptive name for the Eighth Federal Reserve District. The district includes all of Arkansas and parts of Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee, as shown by the map on the cover.

[2] These statistics and some other member bank operating ratios for 1963 and 1962 which are quoted in this article are not exactly comparable with ratios previously published for 1962 and prior years. The ratios using balance sheet figures were, until 1963, based on averages of amounts in Reports of Condition for the mid-year and fall of the current year and the preceding December. In September 1963, the Report of Condition of national banks was revised to make the report more informative and to reduce the reporting burden. Therefore, the averages for 1963 are based on the December 1962, March 1963, and June 1963 calls. Operating ratios for 1962 were recomputed on this basis. A copy of the 1963 and revised 1962 ratios for Eighth District member banks can be obtained on request to the Research Department of this Bank.

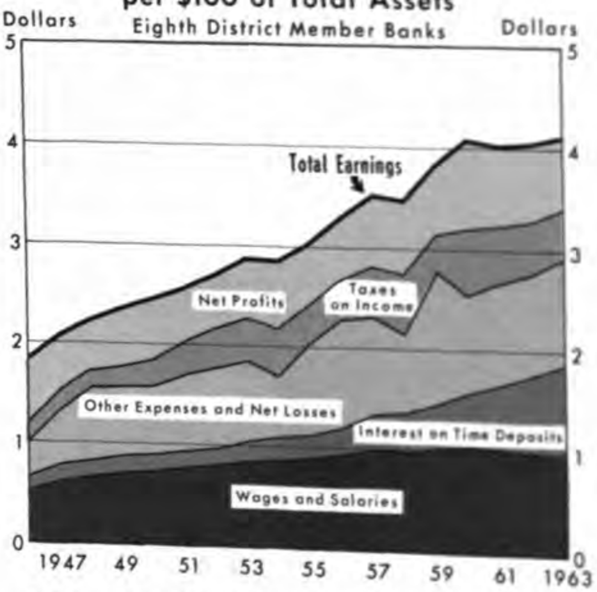
[3] Effective July 17, 1963, the Board of Governors increased to 4 per cent the rate of interest that member banks are permitted to pay on time deposits and certificates with maturities from 90 days to 1 year. Prior to this change maximum rates on time deposits and certificates with these maturities ranged from 2½ to 3½ per cent.

tral Mississippi Valley area have grown steadily and rapidly (Chart 1). Over this period, earnings have risen at a compound annual rate of 8.3 per cent, and expenses have risen at a 9.1 per cent rate. Net profits (both before and after taxes) of these banks rose irregularly from the late forties to 1960. Since 1960, profits have changed only slightly despite continued growth in bank capital and resources.

The growth of total earnings during the postwar period has resulted chiefly from three factors: 1) an increase in deposit and capital funds, 2) a shift to higher earning assets, and 3) a rise in the average level of interest rates.

From 1946 to 1960, total resources grew from $5.0 billion to $7.4 billion, providing these banks with considerably more funds to lend or invest. Earnings, however, increased much more rapidly than assets, and, hence, the earnings-to-assets ratio more than doubled, rising from 1.83 per cent in 1946 to 4.08 per cent in 1960 (Chart 2).

Chart 2
Expenses and Net Profits per $100 of Total Assets
Eighth District Member Banks



During the 1946-1960 period area banks expanded their earnings by shifting a portion of their funds from nonearning and lower earning assets to assets on which the rates of return were relatively high. Nonearning cash balances were reduced from 24 per cent to 23 per cent of total assets. Holdings of relatively low-yielding Government securities dropped from one-half to one-quarter of total assets. Over the same period, higher yielding loans more than doubled in relative importance, rising from 20 per cent to 43 per cent of assets. Municipal and corporate securities rose from 6 per cent to 8 per cent.

From 1946 to 1960, interest rates generally worked up, and the rate of return on most types of bank earning assets rose, contributing materially to the increase in area bank earnings. Yields on 3- to 5-year Government securities rose from 1.16 per cent in 1946 to 4.87 per cent during January 1960. The prime rate on business loans rose from 1.50 per cent in 1946 to 5.00 per cent in early 1960.

Other sources of area bank earnings grew during the postwar period but contributed proportionately less to total earnings in 1960 than in 1946. Service charges on deposit accounts, trust department earnings, service charges and fees on bank loans, and other revenues accounted for 16 per cent of total earnings in 1946 and 12 per cent in 1960.

Since 1960, the growth in total earnings has moderated somewhat (Chart 1). From 1946 to 1960, earnings rose at a compound annual rate of 8.7 per cent, and from 1960 to 1963 they increased at a rate of 6.6 per cent. Bank assets have grown at an even faster rate than earlier, rising from $7.4 billion in 1960 to $8.7 billion in 1963. However, the earnings-to-assets ratio has remained virtually constant at just over 4 per cent since 1960 (Chart 2). Unlike the previous period, there has been virtually no net gain since 1960 from changing interest rates, intensity of asset investment, and other factors.

Total operating expenses of Federal Reserve member banks in the Central Mississippi Valley rose at about the same rate as earnings in the 1946-1960 period (8.9 per cent compound rate versus 8.7 per cent) but have risen at a substantially more rapid rate than earnings since 1960 (10.2 per cent against 6.6 per cent). Wages and salaries, traditionally the biggest expense in operating a bank, increased steadily from $26 million in 1946 to $83 million in 1963. The rise reflected both the growth in size and operations of these banks and increases in general wage rates in the communities in which they operate. Wages and salaries rose more rapidly than bank resources in the 1946-1960 period (Chart 2). Since 1960, however, with the introduction of electronic machines and other efficiencies, the rise in labor costs has been slightly less than the expansion in bank deposits and assets.

Interest payments on time and savings deposits jumped from $7 million in 1946 to $77 million in 1963. Time and savings deposits grew much more rapidly than other deposits over this period, and the average interest rate paid on them increased from 0.90 per cent to 2.98 per cent. Interest payments on these deposits rose from 14 cents per $100 of bank assets in 1946 to 90 cents in 1963 (Chart 2). In marked contrast to the rise in wages and salaries, which was greatest in the early postwar period, the sharpest rise in interest payments has occurred in recent years.

Other expense items, including local taxes, depreciation, rent, interest on borrowed money, fees to directors, supplies, and advertising, increased from $22 million in 1946 to $81 million in 1963. These expenses rose from 45 cents per $100 of bank assets in 1946 to 95 cents in 1963.

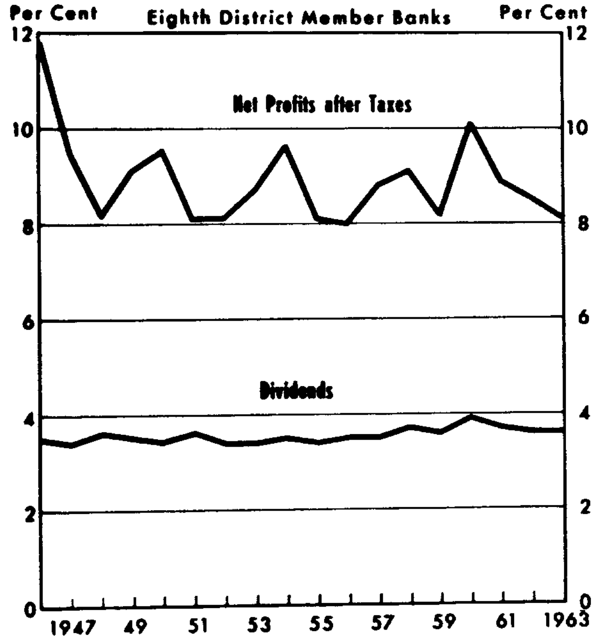
Net profits after taxes rose from $31 million in 1946 to $62 million in 1960. The gain resulted primarily from an increase in net operating earnings, which occurred even though the rates of expansion in earnings and expenses were nearly identical. Net profits rose more rapidly than bank assets in the 1946 to 1960 period, and, hence, banks were able to raise cash dividends from 0.18 per cent to 0.34 per cent of assets and to increase earnings retained to supplement capital accounts from 0.44 per cent to 0.53 per cent.

From 1960 to 1963, net profits after taxes remained nearly unchanged. Net operating earnings also showed relatively little change despite the fact that expenses rose at a faster rate than earnings. Compared to bank assets, net profits decreased from 1960 to 1963. Cash dividends declined from 0.34 per cent of assets to 0.31 per cent, and retained earnings fell from 0.53 per cent to 0.38 per cent.

Net profits after taxes amounted to 10.1 per cent of capital accounts of Federal Reserve member banks in the Central Mississippi Valley in 1960, the highest level since 1946. By 1963, net profits after taxes had declined to 8.1 per cent, approximately the postwar low (Chart 3). Dividends decreased from a peak of 3.9 per cent of capital accounts in 1960 to 3.6 per cent in 1963.

Chart 3

Net Profits after Taxes and Dividends as a Per Cent of Total Capital



EARNINGS AND EXPENSES OF EIGHTH DISTRICT MEMBER BANKS

(In millions of dollars)

	1963	1962	1961	Percentage Change 1962-1963	Percentage Change 1961-1962
Interest and discounts on loans	$221.8	$ 200.6	$187.0	+10.6%	+ 7.3%
Interest on securities					
a. U. S. Government	67.9	64.7	60.4	+ 4.9	+ 7.1
b. Other	23.9	19.5	16.7	+22.6	+16.8
Service charges on deposits	14.4	13.9	13.1	+ 3.6	+ 6.1
Other earnings	21.9	21.2	20.2	+ 3.3	+ 5.0
Total earnings	$349.9	$319.9	$297.4	+ 9.4	+ 7.6
Salaries and wages	82.8	78.5	75.5	+ 5.5	+ 4.0
Interest on time deposits	77.0	61.2	46.4	+25.8	+31.9
Other expenses	81.1	73.5	68.7	+10.3	+ 7.0
Total expenses	$240.9	$213.2	$190.6	+13.0	+11.9
Net earnings	$109.1	$106.7	$106.8	+ 2.2	— 0.1
Net recoveries and profits (+), losses (—)					
a. On securities	+4.7	+ 5.3	+3.4		
b. On loans	—7.5	—10.1	—8.5		
c. Others	—5.7	— 1.3	—1.8		
Total net recoveries and profits	$—8.5	$— 6.1	$—6.9		
Net profits	$100.6	$100.5	$ 99.9	+ 0.1	+ 0.6
Taxes on net profits	41.6	41.2	42.1	+ 1.0	— 2.1
Net profits after taxes	$ 59.0	$ 59.4	$ 57.8	— 0.7	+ 2.8
Cash dividends on common stock	26.3	25.0	23.9	+ 5.2	+ 4.6
Net retained earnings	$ 32.7	$ 34.4	$ 33.9	— 5.0	+ 1.5

Note: Detail may not add to totals due to rounding.

Income Per Farm in Central Mississippi Valley States

TOTAL INCOME PER FARM was higher in all seven Central Mississippi Valley states in 1963 than in 1962. Net income was larger, however, in only four of these states as production expenses also increased (Table I).

Both gross and net incomes per farm were up sharply in Arkansas and Mississippi, reflecting substantially higher cash receipts for soybeans and cotton, and somewhat higher receipts for eggs and broilers. Gross income exceeded year earlier levels by 15 per cent for Arkansas and 17 per cent for Mississippi, while net income in these states was up 23 and 25 per cent, respectively. Production expenses in each averaged only moderately higher than in 1962.

Although each of the remaining five states in the area had higher gross incomes per farm compared to a year earlier, average net income remained relatively stable, rising slightly in Indiana and Tennessee and declining slightly in Missouri and Kentucky. A somewhat larger decline occurred in Illinois (Table II).

While there were increased returns from soybeans, wheat, and tobacco (in the case of Kentucky), these gains were largely offset by reduced returns from cattle and hogs, lower Government payments to farmers, and higher production costs. Illinois, which was down 6 per cent in net income per farm, had increased production costs and sizable declines in receipts from sales of cattle, hogs, corn, and dairy products which were not offset by increased sales of other products.

Most of the states in the Central Mississippi Valley had inventory increases from 1962 to 1963, which were not taken into consideration in the above income computations. When these gains are considered, net income per farm in 1963 exceeded year earlier levels in five states, namely, Arkansas, Indiana, Kentucky, Mississippi, and Tennessee. Net returns to farms in the nation declined slightly after adjustment for inventory changes.

The increase in net income per farm in the Central Mississippi Valley states does not necessarily mean that the total net farm income for the states increased. From 1962 to 1963 the number of farms in the nation decreased about three per cent. Assuming an equal rate of decline in this area, farm income in those states with only moderate gains in income per farm probably remained about the same in 1963 as a year earlier.

Personal per capita income of the farm population in the area probably continued upward. Nationally, such income rose about 3 per cent from 1962 to 1963. Stability in total returns both from farm and nonfarm sources together with a decline of about 6 per cent in farm population were the major factors accounting for the increase.

Table I

Average Income per Farm

State	Realized Gross Income[1]		Realized Net Income[1]	
	1962	1963	1962	1963
Arkansas	$ 9,525	$10,920	$3,583	$4,400
Illinois	16,095	16,305	4,810	4,527
Indiana	11,098	11,494	3,680	3,746
Kentucky	5,101	5,274	2,196	2,163
Mississippi	6,350	7,406	2,485	3,097
Missouri	8,145	8,387	2,956	2,906
Tennessee	4,177	4,398	1,628	1,633
United States	$11,061	$11,494	$3,414	$3,430

[1] Excludes changes in inventories.

Source: USDA, *Farm Income Situation*

Table II

Change in Average Income per Farm, 1962 to 1963

	Per Cent	
	Realized Gross Income	Realized Net Income
Arkansas	15	23
Illinois	1	— 6
Indiana	4	2
Kentucky	3	— 2
Mississippi	17	25
Missouri	3	— 2
Tennessee	5	*
United States	4	1

*Less than 0.5 per cent increase