TRENDS IN RATES OF BANK EARNINGS AND EXPENSES

Net profits of banks in relation to the volume of earning assets have declined over the past half century. The rate of return upon capital invested in banks has, nevertheless, been well maintained except during the depression years following 1929, owing to an increasing amount of earning assets per unit of invested capital. During the recent depression, however, large deficits have occurred and during the years since 1920 enormous losses have been suffered by both stockholders and depositors in many banks.

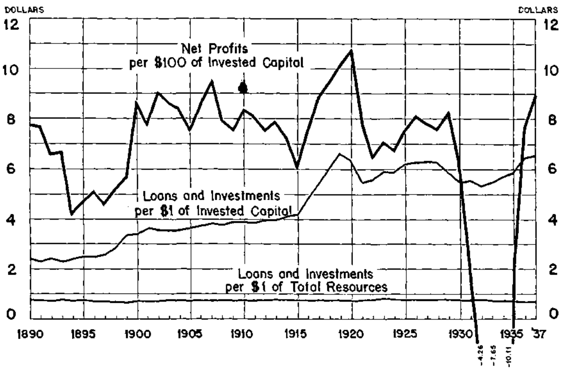
From the point of view of continuous operation of the banks the most important question with respect to profits is whether they are sufficient to cover expenses and losses and leave a reasonable profit on invested capital. The rate of return on invested capital involves many interrelated factors such as the rate of return on earning assets, experience with respect to expenses and losses, and the relation of invested capital to earning assets.

Material for the analysis of trends in bank earnings over a long period is incomplete. The Comptroller of the Currency, however, has published certain basic figures in his annual reports by means of which it is possible to trace in broad outline the trend of earnings of national banks back into the previous century. There is no comparable series of figures for State banks as a whole. Kansas is the only State for which official earnings records for banks cover a period of decades. Earnings returns for such State banks as belong to the Federal Reserve System are available for recent years.

NATIONAL BANKS, 1890-1937

Net Profits.—Chart 1 shows among other things net profits of the national banking system per $100 of invested capital in each fiscal year from 1890 through 1937.[1] During this period of 48 years there were only 11 years in which the rate of net profits fell below 6 percent. These years were during the great

CHART 1



NATIONAL BANKS—ANNUAL NET PROFITS PER $100 OF INVESTED CAPITAL, AND LOANS AND INVESTMENTS PER $1 OF INVESTED CAPITAL AND PER $1 OF TOTAL RESOURCES, 1890-1937 (FISCAL YEAR BASIS)

depressions of the 1890's and the early 1930's. During the former the rate of profit did not fall below 4 percent, while there were deficits of considerable proportions in the 3 years 1932, 1933, and 1934. There were 15 years of this 48-year period when the rate exceeded 8 percent, while the average net profit on invested capital for the period is 6.9 percent.

This is a composite result, which averages profitable banks with those which had small earnings or which incurred deficits. Further comments upon this factor in connection with the discussion of banks by size and geographic groupings appear at a subsequent point.

For purposes of comparability it has been necessary to present the national bank figures on a fiscal year basis,[2] since figures on a calendar year basis are not available in the earlier decades. Other adjustments of methods of present-day accounting to earlier procedure have been necessary in places.[3] While

[1] For ratios shown in chart, see appendix tables I and II. Ratios are derived from dollar figures in tables III and IV.

Net profits represent the final results of the year's operations after all expenses have been deducted and after losses on bad assets have been charged off.

Invested capital includes capital stock (common and preferred), surplus, undivided profits, reserves for contingencies, and retirement funds for preferred stock.

[2] See footnote 1, appendix table II.

[3] The most important adjustment of this character is the inclusion of recoveries on charged-off assets and profits on securities sold with gross earnings throughout the period. Total recoveries on charged-off assets are available 1918-1926, and recoveries on loans, recoveries on securities, and profits on securities sold are separately available 1927-1937 except for the years 1933-1935 when profits on securities sold were included with recoveries on securities. In current statistical presentations of earnings and expense data of member banks recoveries on loans and investments

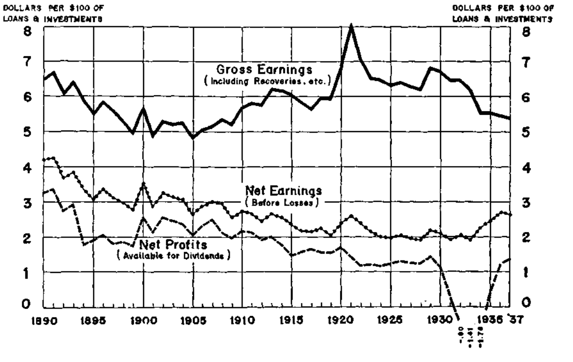
the dollar figures of various items of earnings and expenses of national banks over the period are given in the appendix, ratios of income and expenditures to certain asset or liability items have been used instead in this text since they tend to eliminate the effects of changes in the number and size of banks with the result that significant trends and variations in the year-to-year comparisons become readily apparent. For example, in the depression year 1894 all national banks showed a net profit of $42,000,000 on an invested capital of $1,000,000,000, a rate of return of 4.2 percent. This is to be contrasted with the year 1930 when invested capital reached $4,000,000,000 and net profits were approximately $250,000,000, the rate being 6.2 percent.

Chart 2 shows that there has been a definite downward trend in the rate of net profits on earning assets, that is, on loans and investments. The rate was above 3 percent in 1890 and 1891; below 2 percent for a few years immediately preceding 1900; and subsequently it was above 2 percent until 1912 except for one year. After 1913 it was consistently below 2 percent and during the prosperous years of the middle 1920's it approximated 1.25 percent.

Relation of Loans and Investments to Invested Capital.—The maintenance of a relatively high rate of profits on invested capital during the period when the rate of profits on loans and investments was declining reflected a marked growth in the amount of loans and investments per dollar of invested capital. As is shown in chart 1, this amount grew from $2.40 to $4.00 from 1890 to 1914, from $4.00 to over $6.00 between 1915 and 1918, and fluctuated irregularly about $6.00 thereafter. The alteration in this ratio was associated with the large increase in deposits and loans and investments in relation to invested capital during the first three decades of this century.

Gross and Net Earnings.—Chart 2 shows gross earnings, net earnings (after expenses but before losses), and net profits of national banks per $100 of loans and investments.[1] The chart brings out the fact that the rate of net earnings (before losses) has shown a downward trend similar to that of net profits.

CHART 2



NATIONAL BANKS—ANNUAL GROSS EARNINGS (INCLUDING RECOVERIES, ETC.), NET EARNINGS, (BEFORE LOSSES), AND NET PROFITS (AVAILABLE FOR DIVIDENDS) PER $100 OF LOANS AND INVESTMENTS, 1890-1937 (FISCAL YEAR BASIS)

Net earnings (before losses) decreased from over $4.00 per $100 of loans and investments in 1890 and 1891 to about $3.00 in 1895. In the following 15 years the rate fluctuated around $3.00 although it was slowly

and profits on sales of securities are added to net earnings (before losses) to arrive at net profits, rather than being included with gross earnings.

No adjustments were made in the officially published figures of total resources, loans and investments, and invested capital, although the method of reporting these items has changed from time to time. For example, currently reported figures of loans and investments include rediscounts but exclude borrowed securities and acceptances of other banks and bills of exchange sold with indorsement. In 1920 and some other years, on the other hand, rediscounts were deducted from gross loans while borrowed securities were included in investments. Available information does not permit the figures for the entire period to be placed on a fully comparable basis. Tests indicate, however, that any conclusions based on ratios of earnings, expenses, invested capital, etc., to loans and investments, calculated by using these unadjusted figures, would not be affected if all of the data were placed on a more nearly comparable basis.

[1] For figures see appendix table II.

Gross earnings as shown in chart 2 and appendix table II include recoveries on charged-off assets and profits on securities sold, although these items have been separately available in most of the recent years. (See note 2, second column, p. 102.) Because of the form of the earlier reports, the figures could not be adjusted so as to be comparable with current material.

Net earnings represent gross earnings less expenses, which comprise current operating costs, including salaries and wages, interest on deposits and borrowed money, rent, supplies, taxes, and other expenses. Expenses do not include losses on depreciated assets or depreciation on bank building and furniture and fixtures.

Net profits represent net earnings (including recoveries and profits on securities sold) less gross losses.

Gross losses include total charge-offs or losses on loans and investments, allowances for depreciation on banking house and furniture and fixtures, and all other losses and depreciation.

decreasing, and 1907 was the last year in which it was as high as $3.00. The rate rose in the post-war years but in 1923-1933 it approximated $2.00. Due to recoveries on charged-off assets and profits on securities sold, which in the case of national banks have been included with earnings, there has been a substantial rise in recent years.

The difference between gross and net earnings as shown in chart 2 is the measure of expenses per $100 of loans and investments in each year. The movement of gross earnings has been characterized by no clearly defined trend over the whole period although there have been decided short-term movements. Gross earnings amounted to about $6.50 per $100 of loans and investments in 1890, but this rate declined considerably from 1890 through 1899, reaching slightly less than $5.00 in the latter year, while expenses fluctuated narrowly between $2.50 and $2.20 per $100 of loans and investments. Thus, the spread between gross earnings and expenses narrowed gradually during this period. Somewhat irregular but moderate changes in gross earnings and expenses between 1900 and 1905 were followed by a period of considerable increase in both earnings and expenses per $100 of loans and investments, culminating in record high figures in 1921. Expenses advanced more rapidly in these years than gross earnings, and that influence was reflected in further declines in net earnings per $100 of loans and investments.

Gross earnings decreased to a level of around 6.5 percent on loans and investments in 1923. Expenses also declined sharply in relation to loans and investments but remained at a level substantially higher than in any year prior to 1920. From 1923 through 1933 gross earnings per $100 of loans and investments fluctuated around $6.25 and expenses around $4.25, and in those years net earnings rates changed little.

During the years 1934-1936 the rate of gross earnings declined as a result of lower yields on earning assets, and expenses were reduced by the prohibition of interest on demand deposits and the lowering of the rate paid on time deposits.

Gross Losses.—The rate of gross losses on loans and investments is shown in chart 3.[1] No distinct trend over the 48 years from 1890 through 1937 is apparent. The rate of loss usually increased in periods of business slackness such as 1894, 1908, 1915, 1921, and 1930-1933, and declined when conditions were more prosperous. Years when the rate of failure among business concerns was large were years in which bank losses were also great. Except in years of depression gross losses charged off annually were usually well below $1 per $100 of loans and investments.

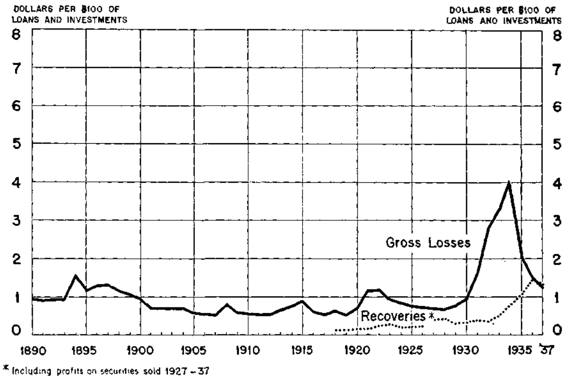
The low ratio of losses between 1923 and 1930 relates only to active banks and does not reflect losses realized on assets of banks after they were closed, nor does it reflect additional losses which would have been charged off in some cases except for the fact that depositors waived some of their claims incident to reorganization of banks. The number of bank failures during these years was large and the loss realized on their assets in liquidation was substantial. Furthermore, bankers operating active banks may have been reluctant to charge off losses during those years when the rate of net earnings (before losses) on loans and investments was comparatively low. As a consequence, some banks no doubt entered the depression carrying assets at figures higher than were justified by the facts. After 1930 losses charged off rose to an unprecedented height and were the chief factor in the large deficits recorded by the national banking system in 1932, 1933, and 1934.

The gross losses recorded in the earnings and expense statements of 1935, 1936, and 1937 were also large but were to a great extent offset by substantial recoveries on loans and investments and profits on securities sold, as chart 3 shows. In 1936 profits on

[1]For figures see appendix table II.

securities sold accounted for approximately 35 percent of net profits of all national banks and in 1937 this proportion was nearly 45

CHART 3



NATIONAL BANKS—ANNUAL GROSS LOSSES AND ANNUAL RECOVERIES (INCLUDING PROFITS ON SECURITIES SOLD, 1927-1937) PER $100 OF LOANS AND INVESTMENTS, 1890-1937 (FISCAL YEAR BASIS)

percent. Similar figures are not available for 1933, 1934, and 1935, but on the basis of scattered evidence it is known that profits on securities sold were important in 1934 and 1935.

MEMBER BANKS, 1927-1936

Beginning in 1927 the official earnings and dividends reports of members of the Federal Reserve System were compiled in more detail with respect to the components of earnings, expenses, and losses than had been the case previously.[1] The data which have been collected and compiled in the Board's annual reports are on an approximately uniform basis from year to year, and are sufficiently comprehensive to justify further analysis even though the period covered is relatively short.

In the member bank figures there is somewhat more weight given to larger banks than in the case of the national bank data, because of the greater proportion of large banks included among State members. The net effect of this influence, however, is slight. Figures given with respect to member banks in this section are not wholly comparable with those given for national banks in preceding paragraphs. The member bank data are on a calendar year basis, as published in the Board's annual reports, while the national bank statistics are for fiscal years, since they were available in no other way in early decades.[2]

Net Profits on Invested Capital.—The rate of net profits (available for dividends) on invested capital showed about the same movement for member banks as for national banks over the period covered. Table 1 shows that from a level above $8.50 per $100 of invested capital in each of the years 1927-1929 the rate dropped rapidly, and in 1932, 1933, and 1934 sizable deficits were incurred. After 1934 improvement was marked, and in 1936 the rate of net return available for dividends was even higher than the 1927-1929 average. The improvement during the last two years can be attributed to three factors: a substantial reduction in the volume of losses currently charged off against depreciated assets, an important increase in recoveries and profits on securities sold, and to a lesser extent the increasing proportion of loans and investments to invested capital.

Net Profits on Loans and Investments.—The ratio of net profits to loans and investments evidenced much the same general tendencies as did that on invested capital. After reaching a peak of nearly $1.60 per $100 of loans and investments in 1929, it fell off substantially. Deficits were shown in 1932-1934, but in 1935 there were net profits (available for dividends) of about $.70 per $100 of loans and investments, and in 1936 this rate was more than doubled.

Loans and investments per $1 of resources,

[1] Members of the Federal Reserve System include all national banks in the continental United States and such State banks as join the System. In 1927 the net profits of all member banks aggregated $447,009,000, of which $257,283,000 was earned by national banks; in 1936 the similar figures were $465,317,000 and $313,570,000.

[2] The figures of loans and investments, total resources, and invested capital represent averages of call dates (December to December, inclusive, except 1933) in the case of member banks, while the corresponding figures in the case of national banks are for the call date nearest June 30. In the official publications of the Board of Governors earnings ratios have been related to balance sheet items averaged for the several calls of the year. For the long-term survey of national banks an averaging method did not appear to justify the cost involved.

TABLE 1.—OPERATING RATIOS OF MEMBER BANKS BY CALENDAR YEARS, 1927-1936

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Per $100 of loans and investments:										
Gross earnings (excluding recoveries, etc.)	$6.15	$6.32	$6.71	$6.10	$5.51	$5.45	$4.95	$4.62	$4.17	$4.05
Expenses	4.63	4.65	4.71	4.53	4.00	4.01	3.44	3.15	2.88	2.78
Net earnings (before losses)	1.52	1.67	2.00	1.57	1.51	1.44	1.51	1.47	1.29	1.27
Gross losses	.63	.63	.82	1.03	1.85	2.73	3.43	3.24	1.86	1.41
Recoveries and profits on securities sold	.47	.41	.38	.33	.38	.40	.50	.94	1.30	1.62
Net losses	.16	.22	.44	.70	1.47	2.33	2.93	2.30	.56	[1] +.21
Net profits[2] (available for dividends)	1.36	1.45	1.56	.87	.04	−.89	−1.42	−.83	.73	1.48
Other ratio items:										
Net profits[2] (available for dividends) per $100 of invested capital	$8.66	$8.96	$8.75	$4.56	$.19	$−4.50	$−7.26	$−4.45	$4.14	$8.93
Loans and investments per $1 of invested capital	6.34	6.18	5.62	5.26	5.23	5.04	5.10	5.33	5.65	6.02
Loans and investments per $1 of total resources	.77	.76	.75	.75	.76	.77	.75	.72	.69	.68

[1] Net recovery.
[2] Minus figures represent net deficits.

NOTE.—For more detailed figures see appendix table VII; for dollar amounts see appendix table VIII.

as shown in table 1, decreased in recent years because banks were holding unusually large amounts of idle funds. Consequently, net profits as a percentage of total resources in recent years have compared less favorably with the period 1927-1929 than net profits as a percentage of loans and investments.

Loans and investments per dollar of invested capital at $6 in 1936 were somewhat less than in 1927. However, there was a material reduction in the ratio during 1927-1932 to a low of about $5.00, followed by an upturn which continued during 1933-1936. It will be observed that in the case of national banks[1] the decline (based on mid-year figures) during the former period was not as great, but the growth in the proportion of loans and investments after 1933 was of somewhat greater magnitude.

Gross Earnings on Loans and Investments.—For the period under consideration in this section, 1927-1936, it is possible to segregate recoveries and profits on securities sold from gross and net earnings figures. Owing to the fact that profits on securities sold were not segregated from "other earnings" prior to 1927 and that recoveries were not so segregated prior to 1918, these items were included with earnings in the national bank statistics for the entire period. Hence the trends shown in the two series of earnings data are not completely comparable. The discrepancy has been particularly significant in recent years, when recoveries and profits on securities sold have risen to such an extent that in 1936 they more than offset the substantial losses on bad assets which were charged off.

As shown in table 1, the gross earnings of member banks per $100 of loans and investments increased from 1927 to 1929 but after the latter year they started on a steady and pronounced downward movement which continued through 1936. During the period 1929-1936 the reduction in the rate of gross earnings amounted to nearly 40 percent. This decrease reflected a corresponding shrinkage in the rate of gross return on loans and investments, only minor changes being shown in most other types of earnings. An analysis of changes during the period in the relative rates of return on loans as against investments appears in subsequent paragraphs.

Expenses in Relation to Loans and Investments.—The sharp decline in earnings on loans and investments during the 7 years subsequent to 1929 was to a considerable ex-

[1] See chart 1.

tent offset by a parallel reduction in interest paid on deposits. In fact the amount of interest paid on deposits per $100 of loans and investments declined in every year of the 1927-1936 decade, and in the final year was only about $.60 as against almost $2.20 in the first year of the period.[1]

Annual salary and wage payments expressed as a percentage of loans and investments also showed a downward tendency from 1929 to 1936 but the amount of decline was relatively small. Tax payments as a percentage of loans and investments were also reduced somewhat, although they turned upward in 1936.

Total expenses fluctuated between $4.50 and $4.70 per $100 of loans and investments during 1927-1930, were at the $4.00 level in the two subsequent years, and decreased steadily thereafter, amounting to about $2.75 in 1936.

Net Earnings (Before Losses).—The net effect of the fluctuations in gross earnings (excluding recoveries, etc.) and expenses of member banks during the 10-year period was an increase in net earnings (before losses) from $1.50 per $100 of loans and investments in 1927 to $2.00 in 1929, followed by an extended downward trend. By 1936 the rate had declined to about $1.25. This movement is to be contrasted with the wider fluctuation registered by net profits.

Losses and Recoveries.—While gross losses rose to record high levels in the early 1930's, offset to only a small degree by recoveries and profits on securities sold, the annual rate reflected a sharp reduction in 1935 and 1936 coincident with a sharp expansion in the amount of recoveries (including profits on securities sold) per $100 of loans and investments.

[1] Detailed figures for expenses appear in appendix table VII. Payment of interest on demand deposits by member banks was prohibited by the Banking Act of 1933, and the Board of Governors of the Federal Reserve System was authorized to limit the rates payable on time deposits. The decline in interest paid on deposits was somewhat offset by the provision in the Banking Act of 1933 for Federal deposit insurance. Assessments against member banks for deposit insurance in 1936 amounted to 1/12 of 1% of deposits.

The growth in recoveries and profits on securities sold in recent years, accompanied by diminishing charge-offs of losses on bad assets, has been so large that it has much more than offset the declining tendency in net earnings from operations (i.e., before losses) and has been the prime factor in the recent improvement in the net profits ratios of member banks. Even in 1935 and 1936 gross losses charged off were larger than in any of the years 1927-1930, and if it had not been for the considerable volume of recoveries and profits on securities sold the banks would still have been operating at a deficit as they did in the 3 preceding years.

KANSAS STATE BANKS, 1902-1935

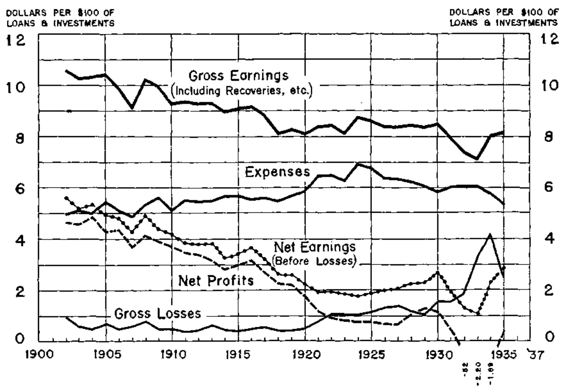
The analysis of earnings rates for a period of decades must of necessity be based upon national banks because similar data are not available for State banks generally. The only State for which earnings and expense figures are available over a long period is Kansas, and the record of banks in this State cannot be considered as typical of State banks as a whole, since Kansas is predominantly agricultural and changed from a frontier to a settled community during the period under review.

Chart 4[2] presents data for Kansas State banks similar to those for national banks used in charts 2 and 3. One of the principal points to be noted in this chart is the distinct downward trend in gross earnings of Kansas State banks per $100 of loans and investments in contrast with the fluctuating rate for national banks. The unusually high rate of Kansas State banks in the earlier years, more than $9 per $100 of loans and investments for the first decade of this century, may be explained by the fact that Kansas at the beginning of the century was in an early stage of economic development, when risks were comparatively great but opportunities for profitable use of funds were such as to encourage borrowing even at high rates of

[2] For figures see appendix table X.

interest. The expenses of Kansas State banks, which in the earlier years were considerably more than twice as high per $100 of loans and investments as those of national banks, showed little change between 1905 and 1918, while the expenses of national banks rose considerably. The higher level of expenses per $100 of loans and investments probably reflects the fact that most of the Kansas State banks were small institutions which tend to have higher gross earnings and expenses per $100 of loans and investments than do larger banks.

CHART 4



KANSAS STATE BANKS—ANNUAL GROSS EARNINGS (INCLUDING RECOVERIES, ETC.), EXPENSES, NET EARNINGS (BEFORE LOSSES), GROSS LOSSES, AND NET PROFITS PER $100 OF LOANS AND INVESTMENTS, 1902-1935 (CALENDAR YEAR BASIS)

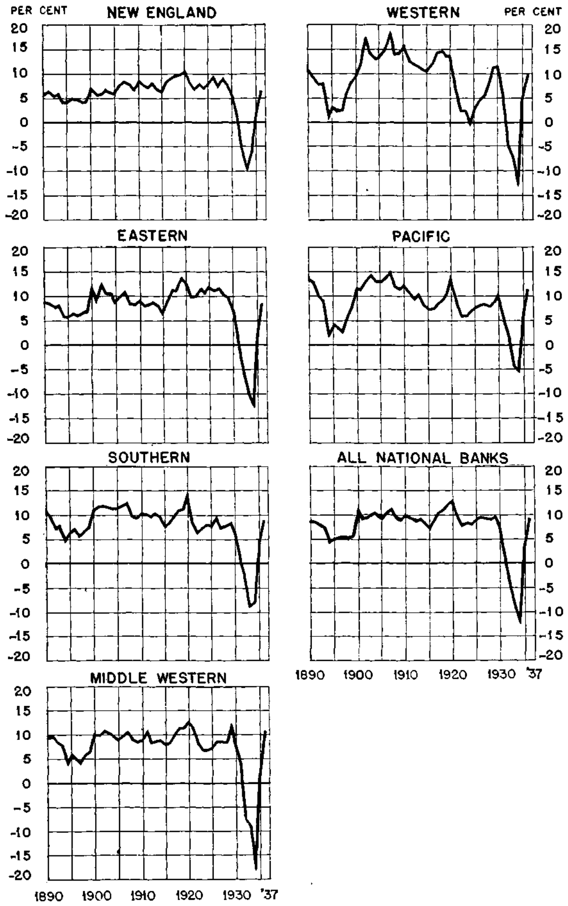
These variations in levels of gross earnings and expenses over a period of years resulted in a greater decline, proportionately, in net earnings (before losses) of Kansas State banks over the years than was shown by national banks. Net profits per $100 of loans and investments also declined more for Kansas State banks than for national banks between 1902 and 1922.

RESULTS BY SPECIAL CLASSES OF BANKS

The foregoing sections have dealt with the profits experience of the banking system in general and are, therefore, a reflection of averages; the good records of profitable institutions have been averaged with the poor records of others. One means of further analyzing the records is to examine the results of smaller groups of banks in order to determine whether certain classes of banks are more profitable than others.

A long-term comparison of net profits on capital and surplus of national banks by geographic regions is available from data contained in the annual reports of the Comptroller of the Currency. Data for 6 regions are presented in chart 5,[1] which shows that banks in the areas of more recent economic development, notably the Western and Pacific

CHART 5



NET PROFITS PER $100 OF CAPITAL AND SURPLUS OF NATIONAL BANKS BY GEOGRAPHIC AREAS, 1890-1936 (FISCAL YEAR BASIS)

[1] For figures see appendix table V.

States, often had much higher annual rates of profits than banks in the older sections where economic activities had become more diversified and stabilized. Equally important, the banks in the new regions had at times much lower profits rates than those in more settled areas. In New England, for example, during the 41 years from 1890 through 1930 national banks had profits of 4 percent or more on capital and surplus in every year, and the rate exceeded 8 percent in only 10 years. In the case of the Western States, on the other hand, net profits exceeded 12 percent on capital and surplus in 14 years while in 8 years they were less than 3 percent.

It is apparent that the degree of economic development and conditions of prosperity or depression are major factors in determining the profitability of banks as a whole in any given area. Unfortunately, there is not sufficient statistical material available to illustrate many other factors which are generally characteristic of unprofitable banks over the whole period since 1890. Some of these characteristics are suggested by records other than official earnings reports. For example, it is reasonable to assume that those types of banks whose failure experience has been worse than the average have also been characterized by unfavorable profits records. The record of bank suspensions during 1921-1936 shows that the rates of failure among the groups of banks with small amounts of resources compared unfavorably with the average experience.[1] For a bank to survive over a long period of time its earnings must be sufficient to cover its expenses, its losses on bad assets, and, in addition, some return on invested capital.

One limited study of all national banks for the period 1926-1930 showed that the typical rate of net profits on invested capital of banks with loans and investments of less than $500,000 was less than 4 percent. For those with loans and investments of less than $250,000 it was scarcely half as good. With respect to what may be called medium-size banks the typical rate during these years was about 7.5 percent, while that for larger banks was moderately higher. Typically, the unfavorable experience of small banks was associated with relatively high operating expenses. Although these were offset by relatively high gross returns, net profits were unsatisfactory because of the necessity for writing off large proportions of depreciated assets. Since a large proportion of small banks were located in agricultural regions, the unfavorable experience of these banks during 1926-1930 reflected in part agricultural difficulties.

[1] Federal Reserve Bulletin for September and December 1937.

ECONOMIC CONDITIONS AND RATES OF EARNINGS AND EXPENSES

Business conditions influence the earnings positions of banks by affecting the level of interest rates and therefore the rate of gross earnings on earning assets; by affecting the costs or expenses of banking; and by affecting the losses and subsequent recoveries from such losses. While all of these elements in the earnings of national banks have been influenced by changes in business conditions during the period under review, there is no single factor which has shown wider year-to-year changes than losses. The following paragraphs present by periods some of the important influences of business conditions on the earnings of national banks.

1890-1900.—Several of the years between 1890 and 1900 were characterized by depressed conditions in the economic system generally, and banks suffered declines in gross earnings per dollar of loans and investments as well as increases in losses on assets. As a consequence, net profits on loans and investments and on invested capital of national banks were comparatively low from 1894 through 1899.

1900-1920.—The period from a little before 1900 until 1920 was marked by an almost continuous rise in commodity prices and farm land values. The upward tendency of prices and values was an important factor in the growth of national income which enabled borrowers generally to repay loans and helped maintain the value of bank investments. Its effect is reflected to some extent in the comparatively low level of bank losses during these years, and consequently in the small portion of net earnings used in writing off worthless assets. Reflecting in part the small losses, net profits on invested capital of national banks (see chart 1) ranged around 8 percent during much of this period, and in the war years were considerably above that rate.

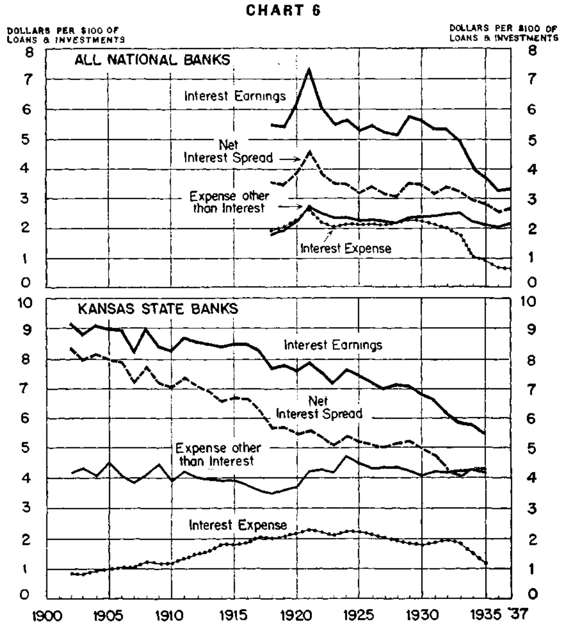
The relatively high level of bank profits after 1900 encouraged the opening of additional banks, charters for which were freely granted by supervisory authorities. Many of the new banks were located in small towns, often already served by banks, and consequently obtained relatively small amounts of deposits and assets. An effect of the marked increase in the number of small banks is seen in the fact that, despite considerable growth in the resources of the banking system, the average volume of loans and investments per bank was lower in 1915 than in 1900.

Increases that became evident in bank operating expenses per $100 of loans and investments after 1907 may be ascribed in general terms to increased competition, partly growing out of the larger number of banks. It is impossible to analyze in detail the form of the increased costs since, with the exception of Kansas State banks, no segregated data of earnings and expenses are available for the period prior to 1918. Growth in the amount of interest paid by banks was an important factor, however, as is indicated by an analysis of deposits. At all commercial banks in the United States time accounts represented about 12 percent of total deposits, excluding interbank balances, in 1900. By 1915 time accounts included about 30 percent, and by 1930 about 40 percent of total deposits. At national banks alone, time deposits represented about 43 percent of total deposits in 1930. This growth in the relative volume of time deposits points definitely to increased interest costs, whether or not the rate paid by banks was bid up. As a matter of fact, commercial banks did tend to raise their rates paid on both time and demand accounts in an effort to attract deposits.

One feature of the increase in time deposits was the tendency to look upon time accounts as less subject to withdrawal than demand accounts, and as justifying increases in loans and investments which rested on capital values rather than the turnover material of business. The almost continuous appreciation in prices and values up to the war and the marked rise from 1915 to 1920 in incomes and net worth helped to sustain the value of capital assets. The ratio of losses to loans and investments was low.

Not only did the total volume of loans and investments, both short-term and long-term, increase sharply, but rates of return on loans and investments were gradually tending up-

CHART 6



ANNUAL INTEREST EARNINGS, INTEREST EXPENSE, OTHER EXPENSE, AND NET SPREAD BETWEEN INTEREST EARNINGS AND INTEREST EXPENSE, PER $100 OF LOANS AND INVESTMENTS OF ALL NATIONAL BANKS, 1918-1937 (FISCAL YEAR BASIS), AND OF KANSAS STATE BANKS, 1902-1935 (CALENDAR YEAR BASIS) ward from 1900 until 1921. At the same time, however, the increase in interest paid by banks helped narrow the spread between gross earnings and expenses, resulting in the steady decline in net earnings (before losses) per $100 of loans and investments.

Although no detailed classification of national bank income and expenses is available prior to 1918, the ratios of interest and other expenses to loans and investments for Kansas State banks since 1902 indicate what was happening in that State, and perhaps furnish a clue to the operating results of banks in general. As is shown by chart 6,[1] the amount of interest paid by Kansas State banks per $100 of loans and investments rose almost continuously from 1902 until 1922. Expenses other than interest (mainly salaries, space, and supplies) declined slightly between 1909 and 1917. In 1921, however, the ratio of non-interest expenses to loans and investments at all national banks and at Kansas State banks advanced sharply. The absolute amount of such expenses increased only moderately in that year but the ratio increased considerably since large amounts of loans and investments were liquidated.

The Post-War Decade.—After 1920 bankers were confronted with economic conditions different from those that had prevailed between 1900 and 1920. Commodity prices declined precipitously after the middle of 1920 and in 1921; the volume of goods produced was sharply curtailed; and incomes of business concerns and individuals were consequently reduced. Losses of national banks per dollar of loans and investments rose sharply, as shown in the difference between the curves of net earnings (before losses) and net profits in chart 2, owing to increased charge-offs and the reduced volume of earning assets.

Farm real estate prices also started to decline in 1920. Unlike commodity prices, however, they continued downward without interruption over a period of 13 years, whereas the more drastic 1920-1921 drop in commodity prices was followed by 8 years of comparative stability. In addition to the difference between changes from 1921 through 1929 in farm land prices and average prices of all commodities, the contrast between agricultural and non-agricultural conditions is sharpened by noting that prices of corporate equities advanced markedly in these years. Prices of urban real estate, especially in some large communities affected particularly by industrial conditions, also advanced considerably.

Gross earnings and expenses of national banks per $100 of loans and investments did not change greatly between 1923 and 1929. Revenue from the operation of trust departments tended to increase, but it remained a very small portion of total income. Among the expense items interest paid on deposits continued to grow, both because banks were increasing their rates and because the proportion of time deposits in the banking system was growing rapidly. The increase in interest paid on deposits was partly offset by reductions in interest paid on borrowed money and by reductions in taxes.[2]

Since neither earnings nor expenses of national banks per $100 of loans and investments changed materially between 1923 and 1929, the rate of net earnings (before losses) was comparatively steady. The rising volume of production at a stable commodity price level and the advancing prices of securities enabled most borrowers to repay bank loans with reasonable promptness. Reflecting a lower rate of charge-offs for losses, net profits per $100 of loans and investments increased slightly. Loans and investments expanded proportionately more than capital funds after 1921, and the rate of net profits on invested capital tended to rise.

Although the banking system as a whole made high profits during the decade of the

[1] For figures see appendix tables VI and XII.

[2] Statistics of earnings for national banks are classified in less detail prior to 1927 than thereafter. Details of earnings and expense items of member banks in each year 1927-1936 appear in appendix tables VII and VIII.

1920's, some important portions did not prosper. An indication of this was given in earlier paragraphs dealing with the experience of banks by location and by size.

Depression and Post-Depression Years.—Following the collapse in security prices in 1929 there was a severe decline in commodity prices, both agricultural and non-agricultural, which extended over a period of more than 3 years. This decline was accompanied by an even greater proportionate contraction in national income. The net profits of national banks were also sharply reduced, and for some time during and after the reaching of the lower depression levels there were net deficits for the banking system in general. The outstanding factor responsible for the movement of net profits from the high level of the 1920's to a point below zero was the charging off of large amounts of depreciated assets.

With the progress of recovery following the banking crisis in 1933 values of bank assets appreciated. Charge-offs of losses continued heavy in 1933 and 1934, however, since many of the banks that did not fail had been unable to write off all their losses in previous years. As values continued to rise in 1934, 1935, and 1936, gross losses were reduced, and banks began to obtain substantial recoveries on assets previously charged off. Such losses as were written off in the fiscal years 1936 and 1937 were substantially offset by recoveries on previous charge-offs and profits on securities sold. Without these unusually large recoveries and profits on securities sold the banking system would have been earning a rate of net profit substantially under the levels of the pre-depression period.

Increased Proportion of Investments.—Decreases in gross earnings per $100 of loans and investments of national banks between 1929 and 1936 resulted partly from a decline in the relative importance of loans which, on the whole, yield more than investments. The shift from loans to investments has been underway for many years and has been part of a widespread movement on the part of corporate and other large-scale borrowers to reduce short-term commercial loans and replace them by longer-term securities. From 1931 through 1936 the increased importance of securities among bank assets was greatly accelerated. Commercial loan demand grew slowly, while borrowings of the Federal Government increased markedly. Banks acquired a considerable part of the new Government issues, thus increasing their earning assets and at the same time making funds available to the Government, the expenditure of which increased the amount of funds in the hands of business and made less necessary additional borrowing by business concerns. By the middle of 1936 investments represented 60 percent of the total loans and investments of all commercial banks in the United States, as compared with 27 percent in 1929 and 25 percent in 1921. There has been some decline in this proportion since the middle of 1936.

Aside from reducing rates of gross earnings, an increasing proportion of securities among bank assets has its bearing on bank profits in other ways. To the extent that banks hold long-term investments they are subject to considerable change in the value of those assets because of changes in the long-term interest rate. An advance in that rate may be reflected in losses on securities sold unless the securities have been written down previously. On the other hand, decreases in interest rates during recent years have given banks opportunities to realize profits from the sale of securities, and that source produced an important part of net profits of the banking system in 1935 and 1936, and to a lesser extent in the first half of 1937. Beginning in 1927 the reports of member bank earnings and expenses have shown separately the amounts of interest income on loans and discounts, and on investments. During the 10 years for which such information is available the gross interest returns on loans have averaged more than 1 percent[1] above the gross interest returns on investments, the difference being greatest in the latter half of the period. This differential is shown by years in table 2. The decline in the gross interest return both on loans and on investments since 1929 may also be observed. The gross interest return on loans declined about 1.5 percent while that on investments was more than 2 percent lower in 1936 than in the years 1927-1929.

TABLE 2.—GROSS INTEREST RETURN, NET CHARGE-OFFS, AND NET RETURN ON LOANS PER $100 OF LOANS, AND ON INVESTMENTS PER $100 OF INVESTMENTS OF MEMBER BANKS, 1927-1936

Calendar year	Loans			Investments		
	Gross interest return[1]	Net charge-offs[2]	Net return	Gross interest return[1]	Net charge-offs[2]	Net return
1927	$5.50	$.40	$5.10	$4.70	[3] $+.80	$5.50
1928	5.70	.40	5.30	4.70	[3] +.50	5.20
1929	6.10	.40	5.70	4.70	----------	4.70
1930	5.40	.70	4.70	4.50	.20	4.30
1931	4.90	1.20	3.70	4.10	1.50	2.60
1932	5.10	2.30	2.80	3.90	2.10	1.80
1933	4.70	3.10	1.60	3.50	2.20	1.30
1934	4.30	3.30	1.00	3.30	.90	2.40
1935	4.20	1.50	2.70	2.80	[3] +.40	3.20
1936	4.10	.90	3.20	2.60	[3] +1.40	4.00

[1] Includes interest and discount in the case of loans, and interest and dividends in the case of investments.
[2] The amount of net charge-offs is obtained by deducting recoveries and profits on securities sold from gross losses.
[3] A plus charge-off indicates an excess of recoveries and profits on securities sold over gross losses.

Source: Appendix table XIV.

The differences between the gross return on loans and that on investments do not carry over to net returns because of considerably different rates of charge-off. During the 10-year period, the net return on investments exceeded that on loans in 1927, 1934, 1935, and 1936. For the period as a whole, however, the average net rate of return on loans was somewhat higher than on investments,—about $3.90 on loans and $3.40 on investments. In three of these years recoveries and profits on securities sold exceeded gross charge-offs on securities so that the net return on securities exceeded the gross return. The net charge-offs on loans exceeded those on investments in every year except 1931. The highest rate of net charge-offs per $100 of loans during the period was $3.30 in 1934 compared with $.40 in each of the years 1927, 1928, and 1929. The highest rate on investments was $2.20 in 1933.

The rates of net charge-off do not fully reflect the year-to-year changes. It would appear that the losses on investments are recognized and written off earlier than those on loans, and because of this lag the losses on loans did not increase as early in the depression years but persisted longer after the banking holiday than the losses on investments. The difference in the time required for recognizing and writing off such losses probably results from the availability of market quotations on investments which respond promptly to changes in the business outlook.

The proportion of investments in the portfolios of banks varies in different parts of the country as do rates charged on loans to customers. In general, the banks in the Northeastern part of the country have received about as high a rate of net return from investments as from loans and consequently have not been particularly sensitive to changes in the proportions between the two major types of earning assets. Banks in the Western and Southern areas have received in the past and continue to receive higher net returns on loans than on investments. Bank earnings in these areas, therefore, are sensitive to changes in the portfolio proportions of loans and of investments.[2]

Easy Money Conditions.—Table 2 reflects the decline in interest rates associated with easy money conditions which have obtained in recent years. In 1929 member banks realized a gross return of 6 percent on their loans and more than 4½ percent on their investments. For 1936 the comparable rates were 4 percent and 2½ percent, respectively.

The decline in interest rates was to a large

[1] Percentages referred to in this section are percentage points, not actual changes measured in percentages. That is, a decline from 5 to 4 is referred to as a decline of 1, not 20, percent.

[2] Gross interest return, net charge-offs, and net return for all member banks, by Federal Reserve districts and by years, 1927-1936, appear in appendix tables XV, XVI, and XVII.

degree an outgrowth of increasing amounts of idle bank reserves seeking employment, but that broad influence was supplemented by competitive factors in the form of low rates offered bank customers by various governmentally sponsored agencies. Banks found it necessary to lower their rates somewhat in order to retain loans, or, in the case of those paid off, to employ the funds by investing in lower-yield securities. At the end of 1937 banks continued to have a large volume of idle funds.

The rate of gross income on total assets of banks has, of course, been affected by the large volume of idle funds which banks have held. Loans and investments constituted about 75 percent of total assets of member banks during the pre-depression years but only 68 percent in 1936, as table 1 shows. From the standpoint of the rate of net profits this is of importance only in so far as the offsetting liabilities of the banks in the form of deposits cost something in interest and other out-of-pocket expenses.

Reduction of Interest on Deposits.—The decline in expenses of member banks per $100 of loans and investments which occurred between 1929 and 1933 resulted mainly from decreased interest payments on deposits. The substantial reduction in expenses in 1933 and 1934 was largely a result of the prohibition of interest on demand deposits and decreased interest payments on time deposits. Before the easy reserve position of banks had become widespread in 1933, many banks had begun to reduce rates paid to depositors because they were having difficulty in employing their funds profitably, and because they were being pressed to reduce operating costs. The reduction of rates had often been postponed because of competitive situations under which some banks hesitated to initiate lower rates at the risk of losing deposits, even though they may not have been desirous of obtaining additional deposits at high cost.

Although the movement had begun by 1933, widespread and substantial declines in rates of interest paid on all deposits, and thus in total operating costs, followed the passage of the Banking Act of 1933. The act prohibited payment of interest on demand deposits and contained provisions under which the Board of Governors of the Federal Reserve System in November 1933 set a maximum rate of 3 percent that member banks could pay on time and savings deposits. This maximum was lowered to 2½ percent effective February 1, 1935, with even lower rates on some types of time deposits. The Banking Act of 1935 contained provisions under which the Federal Deposit Insurance Corporation issued similar regulations setting maximum rates which might be paid by insured nonmember banks at the same levels as those applying to member banks.

With the impetus of these measures and continued pressure of idle reserves, many banks carried their reductions further, lowering rates on ordinary savings deposits to 2 percent and 1½ percent or even less. Mainly because of these voluntary and mandatory decreases in interest rates, total operating costs of banks were reduced sufficiently in 1934, 1935, and 1936 to offset almost entirely the effects of lowered rates of return on loans and investments, and rates of net earnings (before losses) declined only slightly.

New Sources of Income.—The presence of ample reserves and the slow rise in commercial demand for loans have caused banks to seek new employment for funds. Although no statistics on the subject are included in bank condition reports, it is known that in the past few years instalment and personal loans have grown substantially. Since gross rates of earnings on these advances are higher than on other types of loans, continued growth of the business may tend to raise the average rate of return on loans.

Some addition to gross earnings of banks in recent years has resulted from extension of service charges in various forms. These are primarily on deposit accounts, but some banks have installed such charges on small loans. While arguments for imposition of service charges on deposit accounts have been widespread among bankers' associations recently, such charges have not been of great importance as a source of gross earnings to banks generally. Figures for service charges on deposit accounts were not reported separately until 1933 and in that year they constituted somewhat less than 2 percent of gross returns of national banks. During the fiscal year ending June 30, 1937, they constituted about 3.6 percent of such returns.

APPENDIX

TABLE I.—LOANS AND INVESTMENTS OF NATIONAL BANKS PER $1 OF TOTAL RESOURCES AND PER $1 OF INVESTED CAPITAL, AND NET PROFITS PER $100 OF INVESTED CAPITAL, 1890-1937 [1]

Year	Loans and investments per $1 of:		Net profits[3] per $100 of invested capital
	Total resources	Invested capital[2]	
1890	$.73	$2.39	$7.71
1891	.73	2.29	7.67
1892	.71	2.43	6.59
1893	.74	2.30	6.68
1894	.70	2.38	4.19
1895	.71	2.50	4.75
1896	.69	2.48	5.06
1897	.69	2.56	4.60
1898	.68	2.85	5.24
1899	.67	3.34	5.74
1900	.69	3.37	8.61
1901	.68	3.64	7.70
1902	.70	3.54	9.00
1903	.72	3.51	8.55
1904	.71	3.52	8.37
1905	.71	3.67	7.53
1906	.71	3.70	8.55
1907	.72	3.80	9.49
1908	.71	3.73	7.87
1909	.71	3.85	7.52
1910	.71	3.82	8.33
1911	.71	3.83	8.12
1912	.72	3.95	7.51
1913	.73	3.94	7.87
1914	.73	4.08	7.28
1915	.74	4.15	6.03
1916	.73	4.81	7.49
1917	.73	5.40	8.84
1918	.74	6.05	9.44
1919	.74	6.62	10.17
1920	.71	6.33	10.76
1921	.74	5.42	7.73
1922	.76	5.55	6.45
1923	.79	5.88	7.08
1924	.76	5.87	6.71
1925	.76	6.20	7.54
1926	.76	6.24	8.07
1927	.77	6.28	7.79
1928	.78	6.25	7.57
1929	.78	5.84	8.21
1930	.75	5.48	6.19
1931	.75	5.55	1.40
1932	.78	5.33	[4] −4.26
1933	.74	5.42	[4] −7.65
1934	.71	5.68	[4] −10.11
1935	.69	5.86	2.31
1936	.68	6.40	7.64
1937	.69	6.52	8.93

[1] Loans and investments, invested capital, and total resources as of call nearest June 30 in each year. Net profits figures for fiscal years ending August 31, 1890–1906; 10 months September 1, 1906–June 30, 1907; and thereafter for fiscal years ending June 30. See note below table II.

[2] Invested capital includes common and preferred stock, surplus, undivided profits, reserves for contingencies, and funds for the retirement of preferred stock.

[3] Available for dividends.

[4] Deficit.

NOTE.—The data in this table and others relating to national banks include the figures of nonmember national banks located in U. S. possessions except for the year 1937, which covers only the member national banks.

Source: Ratios computed from dollar figures shown in tables III and IV.

TABLE II.—ANNUAL GROSS EARNINGS, EXPENSES, NET EARNINGS, GROSS LOSSES, AND NET PROFITS OF NATIONAL BANKS PER $100 OF LOANS AND INVESTMENTS, 1890-1937 [1]

Year	Gross earnings (including recoveries, etc.)	Expenses	Net earnings (before losses)	Gross losses	Net profits (available for dividends)
1890	$6.49	$2.30	$4.19	$.95	$3.23
1891	6.70	2.44	4.26	.91	3.35
1892	6.04	2.38	3.66	.94	2.71
1893	6.41	2.58	3.83	.93	2.91
1894	5.87	2.51	3.36	1.60	1.76
1895	5.50	2.43	3.07	1.16	1.90
1896	5.85	2.50	3.35	1.30	2.04
1897	5.59	2.48	3.11	1.31	1.80
1898	5.27	2.29	2.98	1.15	1.84
1899	4.95	2.17	2.78	1.07	1.72
1900	5.66	2.13	3.53	.98	2.55
1901	4.87	2.01	2.86	.74	2.12
1902	5.28	2.03	3.25	.70	2.54
1903	5.20	2.07	3.13	.70	2.44
1904	5.25	2.17	3.08	.70	2.38
1905	4.81	2.17	2.64	.59	2.05
1906	5.06	2.18	2.88	.57	2.31
1907	5.16	2.16	3.00	.51	2.50
1908	5.35	2.42	2.93	.81	2.11
1909	5.19	2.64	2.55	.60	1.96
1910	5.70	2.97	2.73	.55	2.18
1911	5.80	3.14	2.66	.54	2.12
1912	5.74	3.30	2.44	.54	1.90
1913	6.20	3.53	2.67	.67	2.00
1914	6.17	3.61	2.56	.78	1.79
1915	6.05	3.69	2.36	.90	1.45
1916	5.84	3.66	2.18	.61	1.56
1917	5.62	3.46	2.16	.53	1.64
1918	5.98	3.75	2.23	.67	1.56
1919	5.96	3.91	2.05	.52	1.54
1920	6.82	4.43	2.39	.69	1.70
1921	8.09	5.47	2.61	1.19	1.43
1922	7.02	4.63	2.38	1.22	1.16
1923	6.51	4.36	2.15	.95	1.20
1924	6.47	4.47	2.00	.86	1.14
1925	6.32	4.34	1.99	.77	1.22
1926	6.41	4.37	2.04	.75	1.29
1927	6.28	4.33	1.94	.70	1.24
1928	6.19	4.29	1.90	.69	1.21
1929	6.80	4.60	2.20	.80	1.41
1930	6.70	4.59	2.11	.98	1.13
1931	6.44	4.54	1.90	1.65	.25
1932	6.47	4.42	2.06	2.86	[2] −.80
1933	6.20	4.30	1.90	3.31	[2] −1.41
1934	5.53	3.27	2.26	4.04	[2] −1.78
1935	5.53	3.06	2.47	2.08	.39
1936	5.43	2.73	2.70	1.50	1.20
1937[3]	5.38	2.76	2.62	1.25	1.37

[1] For fiscal years ending August 31, 1890–1906; 10 months September 1, 1906–June 30, 1907; and thereafter for fiscal years ending June 30.

[2] Deficit.

[3] Member national banks.

NOTE.—In computing the above ratios for the years 1918–1937 the figures of gross earnings and net earnings before losses were changed from the form in which they were officially reported in order to establish a comparability with the period prior to 1918. This change consisted of the addition to reported figures of earnings of (1) amounts of recoveries on charged-off assets for the years 1918–1937 and (2) the amounts of profits on securities sold during 1927–1937. In current compilations these recoveries and profits are added to net earnings (before losses) to arrive at net profits. Because of the form of the earlier reports the figures could not be adjusted so as to be comparable with current material.

No adjustments were made in the officially published figures of total resources, loans and investments, and invested capital, although the method of reporting these items has changed from time to time. For example, currently reported figures of loans and investments include rediscounts but exclude borrowed securities and acceptances of other banks and bills of exchange sold with indorsement. In 1920 and some other years, on the other hand, rediscounts were deducted from gross loans while borrowed securities were included in investments. Available information does not permit the figures for the entire period to be placed on a fully comparable basis. Tests indicate, however, that any conclusions based on ratios of earnings, expenses, invested capital, etc., to loans and investments, calculated by using these unadjusted figures,

TABLE III—TOTAL RESOURCES, LOANS AND INVESTMENTS, AND INVESTED CAPITAL OF NATIONAL BANKS, 1890-1937[1]

[In thousands of dollars]

Year	Total resources	Loans and investments	Invested capital[2]
1890	3, 061, 771	2, 229, 891	934, 543
1891	3, 113, 415	2, 258, 753	987, 551
1892	3, 493, 795	2, 461, 124	1, 011, 145
1893	3, 213, 262	2, 365, 096	1, 028, 870
1894	3, 422, 096	2, 379, 646	1, 001, 388
1895	3, 470, 553	2, 463, 811	987, 228
1896	3, 535, 797	2, 435, 462	982, 996
1897	3, 563, 408	2, 461, 823	962, 420
1898	3, 977, 675	2, 718, 675	954, 988
1899	4, 708, 834	3, 159, 498	947, 187
1900	4, 944, 166	3, 418, 788	1, 013, 084
1901	5, 675, 910	3, 866, 624	1, 062, 459
1902	6, 008, 755	4, 191, 446	1, 184, 368
1903	6, 286, 935	4, 507, 077	1, 285, 690
1904	6, 655, 989	4, 753, 173	1, 349, 017
1905	7, 327, 806	5, 169, 000	1, 406, 858
1906	7, 784, 228	5, 520, 289	1, 491, 293
1907	8, 476, 501	6, 099, 632	1, 604, 104
1908	8, 714, 064	6, 213, 095	1, 667, 802
1909	9, 471, 733	6, 709, 539	1, 744, 075
1910	9, 896, 625	7, 067, 863	1, 850, 970
1911	10, 383, 049	7, 396, 624	1, 933, 134
1912	10, 861, 764	7, 835, 034	1, 984, 398
1913	11, 036, 920	8, 051, 723	2, 045, 667
1914	11, 482, 191	8, 360, 443	2, 049, 715
1915	11, 795, 685	8, 733, 514	2, 105, 364
1916	13, 926, 868	10, 121, 056	2, 103, 288
1917	16, 290, 406	11, 865, 511	2, 198, 553
1918	18, 354, 942	13, 606, 455	2, 249, 793
1919	21, 234, 918	15, 639, 433	2, 363, 478
1920	23, 411, 253	16, 609, 064	2, 622, 075
1921	20, 517, 862	15, 160, 150	2, 796, 291
1922	20, 706, 010	15, 820, 737	2, 848, 456
1923	21, 511, 766	16, 897, 804	2, 875, 712
1924	22, 565, 919	17, 131, 131	2, 916, 245
1925	24, 350, 863	18, 413, 863	2, 970, 074
1926	25, 315, 624	19, 269, 646	3, 089, 358
1927	26, 581, 943	20, 358, 702	3, 239, 539
1928	28, 508, 239	22, 302, 581	3, 570, 988
1929	27, 440, 228	21, 467, 858	3, 674, 763
1930	29, 116, 539	21, 785, 375	3, 976, 148
1931	27, 642, 698	20, 860, 112	3, 755, 730
1932	22, 367, 711	17, 483, 029	3, 279, 848
1933	20, 860, 491	15, 491, 403	2, 856, 554
1934	23, 901, 592	17, 046, 296	3, 001, 033
1935	26, 061, 065	18, 085, 103	3, 086, 418
1936	29, 702, 839	20, 245, 967	3, 165, 728
1937[3]	30, 280, 025	20, 893, 471	3, 205, 577

[1] As of call nearest June 30 in each year. See note below table II.
[2] Invested capital includes common and preferred stock, surplus, undivided profits, reserves for contingencies, and funds for the retirement of preferred stock.
[3] Member national banks.

Source: Annual Reports of the Comptroller of the Currency. Figures for 1937 are from the FEDERAL RESERVE BULLETIN for September 1937.

would not be affected if all of the data were placed on a more nearly comparable basis.

The ratios for the items of recoveries and profits on securities sold per $100 of loans and investments are as follows:

Year	Recoveries	Year	Recoveries	Profits on securities sold
1918	$.12	1927	$.16	$.26
1919	.13	1928	.16	.27
1920	.14	1929	.17	.16
1921	.16	1930	.15	.19
1922	.26	1931	.17	.24
1923	.30	1932	.24	.14
1924	.20	1933	*.51	*
1925	.22	1934	*.79	*
1926	.23	1935	*1.10	*
		1936	1.09	.39
		1937	.74	.60

* Profits on securities sold included in recoveries for the years 1933–1935.

Source: Ratios computed from dollar figures shown in tables III and IV.

TABLE IV—ANNUAL GROSS EARNINGS, EXPENSES, NET EARNINGS, GROSS LOSSES, AND NET PROFITS OF NATIONAL BANKS, 1890-1937[1]

[In thousands of dollars]

Year	Gross earnings (including recoveries, etc.)	Expenses	Net earnings (before losses)	Gross losses	Net profits (available for dividends)
1890	144, 614	51, 266	93, 348	21, 292	72, 056
1891	151, 335	55, 036	96, 299	20, 535	75, 764
1892	148, 559	58, 682	89, 877	23, 219	66, 658
1893	151, 695	60, 909	90, 786	22, 035	68, 751
1894	139, 725	59, 683	80, 042	38, 087	41, 955
1895	135, 459	59, 990	75, 468	28, 602	46, 866
1896	142, 443	61, 006	81, 437	31, 695	49, 742
1897	137, 728	61, 153	76, 574	32, 301	44, 273
1898	143, 394	62, 182	81, 212	31, 179	50, 033
1899	156, 520	68, 498	88, 022	33, 675	54, 347
1900	193, 649	72, 714	120, 936	33, 659	87, 277
1901	188, 266	77, 667	110, 598	28, 745	81, 853
1902	221, 278	85, 235	136, 044	29, 462	106, 582
1903	234, 583	93, 121	141, 462	31, 580	109, 882
1904	249, 412	103, 050	146, 362	33, 425	112, 937
1905	248, 584	112, 206	136, 379	30, 470	105, 909
1906	279, 312	120, 448	158, 863	31, 337	127, 526
1907	314, 702	131, 544	183, 158	30, 922	152, 236
1908	332, 454	150, 551	181, 903	50, 568	131, 335
1909	348, 674	177, 035	171, 640	40, 454	131, 186
1910	402, 665	209, 785	192, 882	38, 714	154, 168
1911	428, 973	232, 062	196, 912	39, 926	156, 986
1912	450, 043	258, 731	191, 313	42, 256	149, 057
1913	499, 252	284, 516	214, 736	53, 756	160, 980
1914	515, 624	301, 425	214, 200	64, 930	149, 270
1915	527, 985	322, 451	205, 535	78, 482	127, 053
1916	590, 642	370, 903	219, 740	62, 196	157, 544
1917	667, 406	410, 753	256, 653	62, 332	194, 321
1918	813, 997	510, 185	303, 812	91, 480	212, 332
1919	931, 826	610, 780	321, 046	80, 680	240, 366
1920	1, 133, 028	736, 390	396, 638	114, 555	282, 083
1921	1, 225, 897	829, 906	395, 991	179, 885	216, 106
1922	1, 109, 050	732, 990	376, 060	192, 390	183, 670
1923	1, 100, 508	736, 582	363, 926	160, 438	203, 488
1924	1, 109, 054	766, 044	343, 010	147, 304	195, 706
1925	1, 163, 783	798, 714	365, 069	141, 134	223, 935
1926	1, 236, 223	841, 666	394, 557	145, 390	249, 167
1927	1, 276, 382	882, 374	394, 008	141, 689	252, 319
1928	1, 380, 875	957, 661	423, 214	153, 056	270, 158
1929	1, 460, 128	986, 882	473, 246	171, 442	301, 804
1930	1, 458, 962	999, 066	459, 896	213, 635	246, 261
1931	1, 344, 077	948, 024	396, 053	343, 512	52, 541
1932	1, 132, 366	771, 598	360, 768	500, 548	[2] −139, 780
1933	960, 921	666, 010	294, 911	513, 295	[2] −218, 384
1934	941, 877	557, 043	384, 834	688, 380	[2] −303, 546
1935	1, 001, 366	553, 203	448, 163	376, 791	71, 372
1936	1, 098, 331	552, 428	545, 903	303, 932	241, 971
1937[3]	1, 124, 588	576, 497	548, 091	261, 971	286, 120

[1] For fiscal years ending August 31, 1890–1906; 10 months September 1, 1906–June 30, 1907; and thereafter for fiscal years ending June 30.
[2] Deficit. [3] Member national banks.

NOTE.—The above figures for the years 1918–1937 have been changed from the form in which they are officially reported in order to establish a comparability with the period prior to 1918. Recoveries on charged-off assets for the years 1918–1937 and profits on securities sold 1927–1937 have been included with gross earuings rather than added to net earnings before the deduction of gross losses to arrive at net profits (available for dividends). The figures for these items (in thousands of dollars) are as follows:

Year	Recoveries	Year	Recoveries	Profits on securities sold
1918	16, 107	1927	33, 339	52, 660
1919	21, 066	1928	36, 469	59, 328
1920	23, 912	1929	35, 643	35, 085
1921	23, 978	1930	31, 621	41, 783
1922	41, 782	1931	35, 310	50, 342
1923	51, 100	1932	42, 325	24, 869
1924	34, 495	1933	*78, 559	*
1925	39, 686	1934	*135, 351	*
1926	44, 005	1935	*198, 232	*
		1936	220, 379	78, 956
		1937	154, 676	124, 765

* Profits on securities sold included in recoveries for the years 1933–1935.

Source: Annual Reports of the Comptroller of the Currency. Figures for 1937 are from the FEDERAL RESERVE BULLETIN for November 1937.

TABLE V—NET PROFITS PER $100 OF CAPITAL AND SURPLUS OF NATIONAL BANKS, BY GEOGRAPHIC AREAS, 1890-1936[1]

Year	All national banks	New England	Eastern	Southern	Middle Western	Western	Pacific
1890	$8.51	$5.59	$8.75	$10.35	$9.53	$10.48	$12.86
1891	8.48	6.46	8.43	9.27	9.63	9.02	12.00
1892	7.27	5.12	7.59	7.12	8.58	7.64	9.72
1893	7.40	5.71	8.00	7.46	7.87	7.80	8.94
1894	4.61	4.01	5.91	4.83	4.19	1.00	1.72
1895	5.18	4.04	5.62	6.29	5.83	2.74	4.22
1896	5.54	4.95	6.35	6.90	5.17	2.38	3.69
1897	4.99	4.79	5.83	5.74	4.33	2.55	2.47
1898	5.82	4.30	6.52	6.85	5.84	5.98	5.89
1899	6.35	4.42	6.79	7.58	6.52	8.32	7.88
1900	10.14	6.86	11.82	10.88	10.10	9.32	11.68
1901	9.06	5.73	9.05	11.63	9.97	11.91	11.54
1902	10.92	5.73	12.46	11.64	10.69	16.89	13.19
1903	10.21	6.72	10.50	11.57	10.25	14.24	14.22
1904	9.81	5.96	10.34	11.22	9.62	12.93	12.95
1905	8.95	5.70	8.61	11.30	8.81	13.33	12.84
1906	10.27	7.59	10.06	11.69	9.73	14.52	13.69
1907	11.16	8.43	10.59	12.40	10.54	18.23	14.93
1908	9.11	7.84	8.35	9.77	9.11	13.97	11.84
1909	8.72	6.43	8.18	9.50	8.31	14.22	11.33
1910	9.67	8.68	9.05	10.10	8.89	15.55	12.19
1911	9.36	7.79	7.94	10.09	10.82	12.52	10.54
1912	8.59	7.02	8.18	9.62	8.19	11.95	9.38
1913	9.06	7.94	8.64	10.10	8.55	11.57	10.22
1914	8.39	6.50	7.80	9.55	8.79	10.72	8.22
1915	7.08	5.91	5.99	7.59	7.98	10.24	7.23
1916	8.76	8.13	9.15	8.31	8.29	11.89	7.49
1917	10.52	9.04	11.13	9.97	10.10	14.26	8.56
1918	11.09	9.62	11.12	10.96	11.30	14.49	9.25
1919	12.11	9.93	13.65	11.14	11.21	13.57	10.63
1920	12.78	10.33	12.61	14.24	12.59	13.51	13.62
1921	9.40	8.38	9.60	8.12	11.29	7.14	8.86
1922	7.79	6.64	9.84	6.20	7.93	2.39	5.98
1923	8.48	7.86	11.58	7.34	6.75	2.23	6.05
1924[2]	8.11	6.95	10.59	8.04	6.82	−.19	6.86
1925	9.00	7.61	11.76	7.90	7.23	2.69	7.68
1926	9.54	9.38	10.91	9.47	8.50	4.41	8.39
1927	9.24	7.38	11.25	7.32	8.50	5.41	8.40
1928	8.96	8.92	9.90	7.73	8.47	8.07	7.99
1929	9.72	7.57	9.76	8.32	11.68	11.15	8.85
1930	7.38	5.38	6.93	6.36	7.87	11.29	10.24
1931[2]	1.65	.90	−.13	.94	3.95	5.36	6.16
1932[2]	−4.94	−6.01	−5.74	−2.45	−7.69	−5.28	1.29
1933[2 3]	−9.08	−9.95	−10.37	−8.76	−9.24	−7.26	−4.39
1934[2]	−11.71	−6.41	−12.61	−8.05	−17.56	−12.63	−5.44
1935	2.70	1.97	1.92	4.40	1.57	4.60	5.62
1936	9.06	6.35	8.37	8.65	10.64	9.99	11.08

[1] For fiscal years ending August 31, 1890–1906; 10 months September 1, 1906–June 30, 1907; and thereafter for fiscal years ending June 30.
[2] Minus figures represent net deficits.
[3] The capital as of June 30, 1933, used in computing ratios for that year, did not include the small amount of preferred stock outstanding because most of it had been recently issued.

Source: Annual Reports of the Comptroller of the Currency. In some years, particularly those prior to 1912, when the ratios were not shown or were not on a fiscal year basis, they were derived from other data reported by the Comptroller.

TABLE VI—INTEREST RECEIVED, INTEREST PAID, EXPENSE OTHER THAN INTEREST, AND THE DIFFERENCE BETWEEN INTEREST RECEIVED AND INTEREST PAID PER $100 OF LOANS AND INVESTMENTS OF NATIONAL BANKS, 1918-1937[1]

Year	Interest received	Interest paid	Expense other than interest	Difference between interest received and interest paid
1918	$5.47	$1.93	$1.82	$3.54
1919	5.41	2.01	1.88	3.40
1920	6.09	2.23	2.20	3.86
1921	7.30	2.71	2.76	4.59
1922	6.04	2.16	2.59	3.88
1923	5.56	2.04	2.31	3.52
1924	5.64	2.13	2.33	3.51
1925	5.30	2.11	2.23	3.19
1926	5.43	2.11	2.26	3.32
1927	5.24	2.09	2.23	3.15
1928	5.17	2.11	2.18	3.06
1929	5.76	2.28	2.32	3.48
1930	5.63	2.23	2.35	3.40
1931	5.31	2.15	2.39	3.16
1932	5.30	1.97	2.44	3.33
1933	4.96	1.75	2.55	3.21
1934	4.00	1.07	2.20	2.93
1935	3.72	.92	2.14	2.80
1936	3.25	.69	2.04	2.56
1937[2]	3.29	.63	2.13	2.66

[1] Fiscal years ending June 30.
[2] Member national banks.

Source: Computed from dollar figures shown in the *Annual Reports of the Comptroller of the Currency.*

TABLE VII—AMOUNTS OF EARNINGS, EXPENSES, LOSSES, RECOVERIES, AND NET PROFITS OF MEMBER BANKS PER $100 OF LOANS AND INVESTMENTS, BY CALENDAR YEARS, 1927-1936

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Earnings:										
Interest and discount on loans	$3.83	$3.96	$4.37	$3.81	$3.21	$2.98	$2.42	$2.00	$1.72	$1.64
Interest and dividends on investments	1.40	1.44	1.32	1.33	1.44	1.60	1.71	1.76	1.62	1.55
Interest on balances with other banks	.11	.09	.09	.10	.08	.06	.03	.01	.01	-------
Total interest earned	5.34	5.49	5.79	5.25	4.73	4.64	4.16	3.77	3.35	3.19
Collection charges, commissions, fees, etc.	.13	.13	.17	.14	.11	.10	.10	.11	.10	.10
Foreign department	.10	.06	.07	.07	.08	.08	.08	.07	.04	.04
Trust department	.16	.19	.22	.23	.23	.23	.24	.26	.27	.28
Service charges on deposit accounts	(1)	(1)	(1)	(1)	(1)	(1)	.08	.10	.12	.13
Other current earnings	.42	.45	.46	.41	.36	.40	.29	.31	.29	.31
Gross earnings (excluding recoveries, etc.)	6.15	6.32	6.71	6.10	5.51	5.45	4.95	4.62	4.17	4.05
Expenses:										
Interest on time deposits	1.24	1.27	1.25	1.27	1.16	1.06	.93	.84	.68	.56
Interest on demand deposits	.69	.68	.69	.64	.42	.34	.17	.05	.03	.02
Interest on bank deposits	.25	.22	.19	.21	.16	.12	.05	.01	.01	.01
Total interest on deposits	2.18	2.17	2.13	2.12	1.74	1.52	1.15	.90	.72	.59
Interest and discount on borrowed money	.07	.14	.18	.06	.06	.14	.06	.01	-------	-------
Salaries and wages	1.28	1.27	1.30	1.28	1.23	1.25	1.23	1.22	1.16	1.12
Fees paid to directors and members of executive, discount, and advisory committees	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	.02
Taxes	.34	.32	.31	.32	.26	.24	.23	.23	.22	.26
Other expenses	.76	.75	.79	.76	.71	.86	.77	.79	.78	.79
Total expenses	4.63	4.65	4.71	4.53	4.00	4.01	3.44	3.15	2.88	2.78
Net earnings (before losses)	1.52	1.67	2.00	1.57	1.51	1.44	1.51	1.47	1.29	1.27
Losses and depreciation:										
On loans	.38	.34	.39	.55	.88	1.41	1.70	1.68	.87	.66
On investments	.11	.13	.27	.31	.79	1.07	1.38	1.19	.69	.42
On banking house, furniture, and fixtures	.08	.09	.09	.10	.09	.08	.14	.15	.12	.12
All other	.06	.06	.07	.07	.09	.17	.21	.23	.18	.21
Total losses and depreciation	.63	.63	.82	1.03	1.85	2.73	3.43	3.24	1.86	1.41
Recoveries, profits on securities, etc.:										
Recoveries on loans	.08	.08	.07	.07	.08	.09	.12	.16	.25	.30
Recoveries on investments	.03	.03	.05	.03	.04	.21	.32	.69	.96	.51
Profits on securities sold	.32	.26	.21	.20	.21					.74
All other	.04	.04	.05	.03	.05	.10	.06	.09	.09	.07
Total recoveries, etc.	.47	.41	.38	.33	.38	.40	.50	.94	1.30	1.62
Net profits [3]	1.36	1.45	1.56	.87	.04	−.89	−1.42	−.83	.73	1.48

[1] Included in "other current earnings."
[2] Included partly in "salaries and wages" and partly in "other expenses."
[3] Minus figures represent net deficits.
Source: FEDERAL RESERVE BULLETIN and *Annual Reports of the Board of Governors of the Federal Reserve System.* For dollar amounts see appendix table VIII.

TABLE VIII—ANNUAL EARNINGS, EXPENSES, LOSSES, RECOVERIES, AND NET PROFITS OF MEMBER BANKS, AND AMOUNTS OF LOANS AND INVESTMENTS, TOTAL RESOURCES, AND INVESTED CAPITAL, BY CALENDAR YEARS, 1927-1936

[In thousands of dollars]

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Earnings:										
Interest and discount on loans	1, 254, 289	1, 374, 130	1, 562, 769	1, 349, 364	1, 072, 927	851, 007	604, 297	540, 014	498, 419	513, 399
Interest and dividends on investments	458, 401	498, 420	472, 868	472, 351	480, 296	457, 712	426, 391	473, 791	467, 217	487, 101
Interest on balances with other banks	36, 318	33, 178	33, 264	35, 799	28, 682	16, 759	7, 705	2, 425	1, 681	1, 207
Total interest earned	1, 749, 008	1, 905, 728	2, 068, 901	1, 857, 514	1, 581, 905	1, 325, 478	1, 038, 393	1, 016, 230	967, 317	1, 001, 707
Collection charges, commissions, fees, etc.	41, 127	44, 662	61, 299	50, 328	38, 389	27, 943	24, 487	27, 810	28, 825	31, 397
Foreign department	32, 352	22, 913	26, 209	25, 011	25, 727	22, 531	21, 791	17, 975	12, 282	12, 165
Trust department	52, 971	65, 956	77, 589	80, 280	75, 041	64, 822	59, 658	70, 994	77, 703	88, 297
Service charges on deposit accounts	(1)	(1)	(1)	(1)	(1)	(1)	20, 574	27, 619	35, 634	39, 415
Other current earnings	138, 112	154, 765	164, 995	144, 789	120, 302	112, 844	71, 961	83, 245	84, 888	97, 927
Gross earnings	2, 013, 570	2, 194, 024	2, 398, 993	2, 157, 922	1, 841, 424	1, 553, 618	1, 236, 864	1, 243, 873	1, 206, 649	1, 270, 908
Expenses:										
Interest on time deposits	405, 711	439, 384	444, 636	450, 865	387, 284	301, 863	231, 765	227, 371	196, 490	175, 164
Interest on demand deposits	225, 685	234, 926	246, 493	225, 280	140, 691	97, 862	42, 802	12, 494	9, 298	7, 137
Interest on bank deposits	81, 642	75, 352	68, 131	72, 847	52, 935	34, 599	13, 424	3, 498	2, 695	2, 175
Total interest on deposits	713, 038	749, 662	759, 260	748, 992	580, 910	434, 324	287, 991	243, 363	208, 483	184, 476
Interest and discount on borrowed money	24, 514	48, 443	64, 265	22, 001	19, 136	38, 814	15, 178	3, 637	1, 230	613
Salaries and wages	420, 128	440, 000	463, 847	451, 776	412, 531	356, 557	306, 021	327, 424	334, 468	351, 714
Fees paid to directors and members of executive, discount, and advisory committees	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	6, 269
Taxes	190, 778	113, 759	112, 476	113, 418	86, 367	67, 077	58, 028	62, 278	63, 680	81, 145
Other expenses	248, 246	261, 947	283, 872	268, 148	236, 435	246, 612	192, 082	212, 687	224, 654	247, 897
Total expenses	1, 515, 704	1, 613, 811	1, 683, 720	1, 604, 335	1, 335, 379	1, 143, 384	859, 300	849, 389	832, 515	872, 114
Net earnings (before losses)	497, 866	580, 213	715, 273	553, 587	506, 045	410, 234	377, 564	394, 484	374, 134	398, 794
Losses and depreciation:										
On loans	123, 745	119, 290	139, 588	194, 725	295, 241	403, 272	425, 442	451, 782	252, 374	206, 548
On investments	37, 284	45, 293	95, 465	109, 028	264, 170	304, 961	344, 053	320, 496	198, 765	131, 406
On banking house, furniture, and fixtures	27, 172	31, 832	33, 171	36, 601	29, 061	21, 370	35, 758	39, 422	33, 586	38, 721
All other	20, 492	20, 779	27, 249	24, 960	31, 984	48, 627	53, 026	61, 244	53, 537	64, 873
Total losses and depreciation	208, 693	217, 194	295, 473	365, 314	620, 456	778, 230	858, 279	872, 944	538, 262	441, 548
Recoveries, profits on securities, etc.:										
Recoveries on loans	26, 010	26, 502	25, 204	23, 402	28, 000	24, 584	28, 815	44, 389	71, 901	94, 247
Recoveries on investments	10, 830	11, 475	19, 956	12, 334	13, 541	60, 191	80, 072	185, 591	277, 027	160, 318
Profits on securities sold	106, 707	89, 974	75, 106	70, 852	70, 078					230, 698
All other	14, 289	12, 898	16, 448	11, 641	15, 053	28, 334	15, 998	23, 979	27, 078	22, 808
Total recoveries, etc.	157, 836	140, 849	136, 714	118, 229	126, 672	113, 109	124, 885	253, 959	376, 006	508, 071
Net profits [3]	447, 009	503, 868	556, 514	306, 502	12, 261	−254, 887	−355, 830	−224, 501	211, 878	465, 317
Loans and investments [4]	32, 755, 970	34, 721, 879	35, 727, 128	35, 395, 412	33, 431, 791	28, 522, 520	24, 986, 279	26, 930, 457	28, 898, 458	31, 382, 839
Total resources [4]	42, 800, 432	45, 596, 198	47, 533, 082	47, 164, 240	43, 991, 171	37, 042, 289	33, 366, 549	37, 176, 100	41, 613, 260	45, 903, 758
Invested capital [4]	5, 162, 702	5, 622, 312	6, 360, 306	6, 722, 782	6, 395, 866	5, 660, 145	4, 902, 319	5, 049, 525	5, 118, 478	5, 209, 486

[1] Included in "other current earnings." [2] Included partly in "salaries and wages" and partly in "other expenses."

[3] Minus figures represent net deficits.

[4] For 1933, figures of loans, investments, total resources, and invested capital are averages of amounts from reports of condition for 3 call dates (June 30, October 25, and December 30, 1933); for other years they are averages of amounts for all call dates during the year and the last call date in the previous year.

Source: FEDERAL RESERVE BULLETIN and *Annual Reports of the Board of Governors of the Federal Reserve System.*

TABLE IX—INTEREST ON DEPOSITS, SALARIES AND WAGES, AND OTHER EXPENSES PER $100 OF LOANS AND INVESTMENTS OF KANSAS STATE BANKS[1] 1902-1935[2] AND OF ALL NATIONAL BANKS, 1918-1937[2]

Year	Interest on deposits		Salaries and wages		Other expenses	
	Kansas	National	Kansas	National	Kansas	National
1902	$ .76		$2.37		$1.84	
1903	.75		2.28		2.09	
1904	.88		2.31		1.79	
1905	.92		2.35		2.20	
1906	.99		2.31		1.80	
1907	.98		2.16		1.71	
1908	1.16		2.40		1.77	
1909	1.05		2.19		2.36	
1910	1.07		2.20		1.81	
1911	1.21		2.39		1.91	
1912	1.34		2.31		1.80	
1913	1.47		2.27		1.75	
1914	1.58		2.29		1.81	
1915	1.60		2.20		1.87	
1916	1.67		2.07		1.79	
1917	1.95		1.92		1.73	
1918	1.81	$1.79	1.81	$ .84	1.86	$1.12
1919	1.75	1.66	1.86	.89	2.07	1.36
1920	1.72	1.73	1.98	1.06	2.14	1.64
1921	1.81	1.92	2.23	1.34	2.46	2.21
1922	1.92	1.86	2.32	1.25	2.25	1.52
1923	1.85	1.89	2.29	1.20	2.13	1.27
1924	2.05	1.97	2.54	1.23	2.38	1.27
1925	2.06	2.03	2.39	1.18	2.29	1.13
1926	1.92	2.02	2.33	1.19	2.13	1.16
1927	1.86	2.00	2.38	1.19	2.08	1.14
1928	1.80	2.02	2.39	1.18	2.06	1.09
1929	1.72	2.12	2.39	1.27	1.96	1.21
1930	1.65	2.10	2.40	1.27	1.78	1.22
1931	1.68	2.11	2.62	1.32	1.75	1.11
1932	1.69	1.85	2.62	1.37	1.77	1.20
1933	1.65	1.64	2.59	1.32	1.79	1.34
1934	1.39	1.04	2.51	1.19	1.85	1.04
1935	1.10	.91	2.42	1.16	1.80	.99
1936		.69		1.06		.98
1937[3]		.63		1.09		1.04

[1] Includes State and private banks and trust companies.
[2] Kansas figures for calendar years; national bank figures for fiscal years ending June 30.
[3] Member national banks.

Dollar amounts for Kansas State banks in table XI; for national banks computed from dollar figures shown in the *Annual Reports of the Comptroller of the Currency.*

TABLE X—GROSS EARNINGS, EXPENSES, NET EARNINGS, GROSS LOSSES, AND NET PROFITS PER $100 OF LOANS AND INVESTMENTS OF KANSAS STATE BANKS,[1] 1902-1935

Calendar year	Gross earnings	Expenses	Net earnings	Gross losses	Net profits
1902	$10.57	$4.97	$5.60	$ .94	$4.66
1903	10.26	5.12	5.14	.57	4.57
1904	10.30	4.98	5.32	.46	4.86
1905	10.40	5.47	4.93	.71	4.22
1906	9.89	5.10	4.79	.46	4.33
1907	9.10	4.85	4.25	.60	3.65
1908	10.22	5.33	4.89	.78	4.11
1909	9.98	5.60	4.38	.48	3.90
1910	9.26	5.08	4.18	.49	3.69
1911	9.35	5.51	3.84	.39	3.45
1912	9.27	5.45	3.82	.43	3.39
1913	9.31	5.49	3.82	.65	3.17
1914	8.95	5.67	3.28	.47	2.81
1915	9.09	5.67	3.42	.43	2.99
1916	9.18	5.53	3.65	.48	3.17
1917	8.81	5.60	3.21	.52	2.69
1918	8.11	5.48	2.63	.40	2.23
1919	8.29	5.68	2.61	.40	2.21
1920	8.10	5.84	2.26	.50	1.76
1921	8.41	6.50	1.91	.78	1.13
1922	8.44	6.49	1.95	1.05	.90
1923	8.13	6.27	1.86	1.05	.81
1924	8.75	6.97	1.78	1.03	.75
1925	8.61	6.74	1.87	1.12	.75
1926	8.38	6.38	2.00	1.32	.68
1927	8.38	6.32	2.06	1.39	.67
1928	8.47	6.25	2.22	1.17	1.05
1929	8.37	6.07	2.30	1.02	1.28
1930	8.51	5.83	2.68	1.52	1.16
1931	7.99	6.05	1.94	1.52	.42
1932	7.39	6.08	1.31	1.83	[2] −.52
1933	7.10	6.03	1.07	3.27	[2] −2.20
1934	8.04	5.75	2.29	4.18	[2] −1.89
1935	8.16	5.32	2.84	2.46	.38

[1] Includes State and private banks and trust companies.
[2] Deficit.

Dollar amounts shown in table XI.

TABLE XI—LOANS AND INVESTMENTS, ANNUAL GROSS EARNINGS, ANALYSIS OF EXPENSES, GROSS LOSSES, AND NET PROFITS OF KANSAS STATE BANKS,[1] 1902-1935 [2]

[In thousands of dollars]

Year	Loans and investments	Gross earnings	Expenses: Total	Expenses: Salaries and wages	Expenses: Interest on deposits	Expenses: Other expenses	Gross losses	Net profits
1902	32, 483	3, 433	1, 616	769	248	599	306	1, 511
1903	37, 677	3, 866	1, 929	859	282	788	216	1, 721
1904	40, 510	4, 172	2, 019	935	359	725	187	1, 966
1905	44, 657	4, 644	2, 442	1, 051	412	979	319	1, 883
1906	50, 985	5, 042	2, 602	1, 179	503	920	232	2, 208
1907	61, 514	5, 597	2, 982	1, 325	604	1, 053	371	2, 244
1908	60, 854	6, 217	3, 241	1, 458	708	1, 075	472	2, 504
1909	75, 593	7, 542	4, 236	1, 653	797	1, 786	361	2, 945
1910	84, 878	7, 856	4, 308	1, 863	910	1, 535	417	3, 131
1911	83, 510	7, 806	4, 605	2, 000	1, 007	1, 598	322	2, 879
1912	92, 200	8, 550	5, 026	2, 131	1, 239	1, 656	398	3, 126
1913	99, 155	9, 230	5, 445	2, 255	1, 456	1, 734	642	3, 143
1914	102, 929	9, 209	5, 837	2, 354	1, 623	1, 860	480	2, 892
1915	115, 170	10, 464	6, 527	2, 529	1, 847	2, 151	493	3, 444
1916	132, 705	12, 183	7, 344	2, 747	2, 223	2, 374	635	4, 204
1917	162, 615	14, 332	9, 112	3, 115	3, 178	2, 819	849	4, 371
1918	208, 155	16, 872	11, 399	3, 766	3, 772	3, 861	830	4, 643
1919	245, 510	20, 349	13, 949	4, 584	4, 291	5, 074	978	5, 422
1920	287, 313	23, 264	16, 773	5, 696	4, 937	6, 140	1, 437	5, 054
1921	266, 724	22, 423	17, 346	5, 960	4, 820	6, 566	2, 093	2, 984
1922	244, 192	20, 616	15, 851	5, 660	4, 702	5, 489	2, 575	2, 190
1923	240, 024	19, 517	15, 040	5, 490	4, 437	5, 113	2, 514	1, 963
1924	219, 649	19, 210	15, 311	5, 568	4, 508	5, 235	2, 262	1, 637
1925	224, 299	19, 316	15, 122	5, 352	4, 625	5, 145	2, 519	1, 675
1926	223, 201	18, 703	14, 235	5, 199	4, 293	4, 743	2, 955	1, 513
1927	210, 113	17, 604	13, 286	5, 011	3, 909	4, 366	2, 923	1, 395
1928	207, 265	17, 564	12, 947	4, 950	3, 725	4, 272	2, 430	2, 187
1929	207, 693	17, 385	12, 600	4, 960	3, 566	4, 074	2, 117	2, 668
1930	193, 590	16, 484	11, 296	4, 737	3, 200	3, 359	2, 934	2, 254
1931	155, 967	12, 460	9, 430	4, 094	2, 617	2, 719	2, 371	659
1932	129, 842	9, 597	7, 893	3, 406	2, 195	2, 292	2, 376	[3] −672
1933	105, 737	7, 508	6, 375	2, 737	1, 744	1, 894	3, 457	[3] −2, 324
1934	104, 351	8, 394	6, 004	2, 622	1, 453	1, 929	4, 362	[3] −1, 972
1935	108, 828	8, 882	5, 794	2, 640	1, 195	1, 959	2, 682	406

[1] Includes State and private banks and trust companies.
[2] Loans and investments as of June 30 each year; other data on calendar year basis.
[3] Deficit.

Source: Biennial reports of the Bank Commissioner of the State of Kansas.

TABLE XII—INTEREST RECEIVED, INTEREST PAID, EXPENSE OTHER THAN INTEREST, AND THE DIFFERENCE BETWEEN INTEREST RECEIVED AND INTEREST PAID PER $100 OF LOANS AND INVESTMENTS OF KANSAS STATE BANKS,[1] 1902-1935

Calendar year	Interest received	Interest paid	Expense other than interest	Difference between interest received and interest paid
1902	$9. 16	$. 81	$4. 17	$8. 35
1903	8. 80	. 81	4. 31	7. 99
1904	9. 07	. 93	4. 05	8. 14
1905	8. 97	. 98	4. 49	7. 99
1906	8. 92	1. 04	4. 06	7. 88
1907	8. 20	1. 03	3. 82	7. 17
1908	8. 97	1. 21	4. 11	7. 76
1909	8. 38	1. 18	4. 43	7. 20
1910	8. 23	1. 19	3. 88	7. 04
1911	8. 66	1. 32	4. 20	7. 34
1912	8. 51	1. 48	3. 98	7. 03
1913	8. 46	1. 57	3. 92	6. 89
1914	8. 34	1. 78	3. 89	6. 56
1915	8. 44	1. 78	3. 89	6. 66
1916	8. 44	1. 82	3. 72	6. 62
1917	8. 25	2. 05	3. 56	6. 20
1918	7. 63	2. 00	3. 48	5. 63
1919	7. 75	2. 09	3. 59	5. 66
1920	7. 58	2. 16	3. 68	5. 42
1921	7. 84	2. 29	4. 22	5. 55
1922	7. 53	2. 22	4. 27	5. 31
1923	7. 15	2. 10	4. 17	5. 05
1924	7. 66	2. 27	4. 70	5. 39
1925	7. 43	2. 24	4. 50	5. 19
1926	7. 17	2. 10	4. 28	5. 07
1927	7. 01	2. 02	4. 31	4. 99
1928	7. 09	1. 92	4. 33	5. 17
1929	7. 06	1. 85	4. 22	5. 21
1930	6. 73	1. 75	4. 08	4. 98
1931	6. 60	1. 85	4. 20	4. 75
1932	6. 16	1. 94	4. 14	4. 22
1933	5. 84	1. 81	4. 22	4. 03
1934	5. 77	1. 50	4. 25	4. 27
1935	5. 45	1. 17	4. 15	4. 28

[1] Includes State and private banks and trust companies.
Dollar amounts shown in table XIII.

TABLE XIII—INTEREST RECEIVED, INTEREST PAID, AND EXPENSE OTHER THAN INTEREST OF KANSAS STATE BANKS,[1] 1902-1935

[In thousands of dollars]

Calendar year	Interest received	Interest paid: On deposits	Interest paid: Other	Interest paid: Total	Expense other than interest	Calendar year	Interest received	Interest paid: On deposits	Interest paid: Other	Interest paid: Total	Expense other than interest
1902	2, 975	248	15	263	1, 353	1919	19, 020	4, 291	833	5, 124	8, 825
1903	3, 314	282	24	306	1, 623	1920	21, 775	4, 937	1, 258	6, 195	10, 578
1904	3, 673	359	18	377	1, 642	1921	20, 912	4, 820	1, 278	6, 098	11, 248
1905	4, 007	412	26	438	2, 004	1922	18, 398	4, 702	723	5, 425	10, 426
1906	4, 549	503	27	530	2, 072	1923	17, 164	4, 437	606	5, 043	9, 997
1907	5, 043	604	27	631	2, 351	1924	16, 815	4, 508	473	4, 981	10, 330
1908	5, 460	708	31	739	2, 502	1925	16, 662	4, 625	407	5, 032	10, 090
1909	6, 331	797	94	891	3, 345	1926	16, 006	4, 293	390	4, 683	9, 552
1910	6, 989	910	103	1, 013	3, 295	1927	14, 733	3, 909	329	4, 238	9, 048
1911	7, 228	1, 007	94	1, 101	3, 504	1928	14, 701	3, 725	247	3, 972	8, 975
1912	7, 849	1, 239	122	1, 361	3, 665	1929	14, 659	3, 566	269	3, 835	8, 765
1913	8, 393	1, 456	102	1, 558	3, 887	1930	13, 029	3, 200	196	3, 396	7, 900
1914	8, 577	1, 623	208	1, 831	4, 006	1931	10, 298	2, 617	271	2, 888	6, 543
1915	9, 719	1, 847	198	2, 045	4, 482	1932	8, 003	2, 195	321	2, 516	5, 377
1916	11, 199	2, 223	187	2, 410	4, 934	1933	6, 174	1, 744	166	1, 910	4, 465
1917	13, 409	3, 178	149	3, 327	5, 785	1934	6, 019	1, 453	112	1, 565	4, 439
1918	15, 890	3, 772	384	4, 156	7, 243	1935	5, 927	1, 195	83	1, 278	4, 516

[1] Includes State and private banks and trust companies.

Source: Biennial reports of the Bank Commissioner of the State of Kansas.

TABLE XIV—AVERAGE LOANS,[1] AVERAGE INVESTMENTS,[1] AND GROSS RETURN, GROSS LOSSES, RECOVERIES, NET LOSSES, AND NET RETURN ON LOANS AND ON INVESTMENTS OF ALL MEMBER BANKS, ANNUALLY, 1927-1936

[In millions of dollars]

Calendar year	Average		Gross return[2] on		Gross losses on		Recoveries on		Net losses on		Net return on	
	Loans	Investments	Loans	Investments	Loans	Investments	Loans	Investments[3]	Loans	Investments[4]	Loans	Investments
1927	23,006	9,750	1,254	458	124	37	26	118	98	+80	1,157	539
1928	24,154	10,568	1,374	498	119	45	27	101	93	+56	1,281	555
1929	25,615	10,112	1,563	473	140	95	25	95	114	--------	1,448	472
1930	25,018	10,377	1,349	472	195	109	23	83	171	26	1,178	447
1931	21,732	11,700	1,073	480	295	264	28	84	267	181	806	300
1932	16,744	11,779	851	458	403	305	25	60	379	245	472	213
1933	12,917	12,070	604	426	425	344	29	80	397	264	208	162
1934	12,477	14,454	540	474	452	320	44	186	407	135	133	339
1935	11,985	16,913	498	467	252	199	72	277	180	+78	318	545
1936	12,544	18,839	513	487	207	131	94	391	112	+260	401	747

[1] Average of amounts reported on call dates, December through December, except in 1933.
[2] Gross return is comprised of interest and discount on loans, and interest and dividends on investments.
[3] Profits on securities sold are included in recoveries on investments.
[4] A plus sign indicates an excess of recoveries and profits on securities sold over gross losses.
Source: FEDERAL RESERVE BULLETIN and *Annual Reports of the Board of Governors of the Federal Reserve System.*

TABLE XV—GROSS ANNUAL RATES OF RETURN ON LOANS AND ON INVESTMENTS OF MEMBER BANKS, BY FEDERAL RESERVE DISTRICTS, 1927-1936

[Figures in percentages]

Calendar year	All member banks	Federal Reserve districts											
		Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
	Gross return[1] on loans												
1927	5.5	5.0	4.7	5.4	5.8	6.0	6.3	5.4	5.8	6.3	6.7	7.1	6.0
1928	5.7	5.4	5.2	5.5	5.9	6.1	6.4	5.5	5.9	6.4	6.8	7.0	6.2
1929	6.1	6.1	5.9	5.8	6.1	6.1	6.6	6.0	6.2	6.8	7.0	7.4	6.3
1930	5.4	5.2	4.6	5.4	5.8	5.8	6.1	5.6	5.6	6.5	6.8	7.0	6.1
1931	4.9	4.8	4.1	5.2	5.4	5.6	5.8	4.6	5.3	6.0	6.5	6.6	5.9
1932	5.1	5.0	4.4	5.1	5.5	5.5	5.7	4.9	5.6	5.9	6.5	6.6	5.7
1933	4.7	4.6	3.8	4.9	5.5	5.5	5.3	4.3	5.2	5.5	6.3	6.4	5.6
1934	4.3	4.3	3.3	4.6	5.2	5.3	5.1	4.2	4.9	5.0	6.0	6.3	5.2
1935	4.2	4.1	3.0	4.5	5.0	5.2	5.0	4.2	4.7	4.7	5.8	6.4	5.0
1936	4.1	4.0	2.9	4.5	4.9	5.2	5.1	4.0	4.7	4.7	5.8	6.5	5.1
	Gross return[2] on investments												
1927	4.7	5.1	5.1	5.0	4.9	4.0	4.1	4.3	4.6	3.9	4.3	3.4	4.1
1928	4.7	4.9	5.0	5.0	5.0	4.1	4.2	4.6	4.6	4.2	4.3	3.5	4.3
1929	4.7	4.8	4.9	5.2	5.0	4.1	4.0	4.4	4.7	4.4	4.4	3.9	4.2
1930	4.5	4.8	4.5	5.1	4.8	4.1	4.0	4.4	4.6	4.4	4.4	3.7	4.4
1931	4.1	4.3	3.9	4.7	4.6	3.8	3.8	3.8	4.3	4.3	4.2	3.4	4.0
1932	3.9	4.0	3.7	4.4	4.3	3.6	3.7	3.7	3.9	4.4	4.0	3.5	3.8
1933	3.5	3.6	3.5	4.0	3.8	3.5	3.2	3.0	3.5	4.0	3.4	3.3	3.6
1934	3.3	3.6	3.0	3.9	3.7	3.4	3.4	2.9	3.3	3.8	3.4	3.3	3.5
1935	2.8	3.0	2.3	3.7	3.3	3.1	3.0	2.4	3.1	3.1	3.0	2.9	3.1
1936	2.6	3.0	2.2	3.5	3.1	2.8	2.9	2.3	2.7	2.9	2.6	2.9	2.8

[1] Interest and discount.
[2] Interest and dividends.
Source of basic figures from which percentages were computed: FEDERAL RESERVE BULLETIN.

TABLE XVI—NET ANNUAL RATES OF LOSS ON LOANS AND ON INVESTMENTS OF MEMBER BANKS, BY FEDERAL RESERVE DISTRICTS, 1927-1936

[Figures in percentages]

Calendar year	All member banks	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
		Federal Reserve districts											
	Net loss[1] on loans												
1927	.4	.5	.3	.3	.4	.6	.7	.4	.4	.8	1.0	.9	.5
1928	.4	.6	.2	.4	.3	.5	.8	.3	.4	.8	.7	.8	.4
1929	.4	.5	.4	.3	.3	.6	.9	.5	.4	.7	.6	.8	.3
1930	.7	.7	.8	.6	.5	.6	1.3	.5	.5	.6	.8	1.3	.5
1931	1.2	1.0	1.5	1.2	.7	1.3	1.7	1.1	.9	.9	1.5	2.1	.6
1932	2.3	1.8	3.1	2.3	1.5	1.6	1.3	2.2	1.3	1.8	2.5	2.8	1.3
1933	3.1	3.4	2.7	2.6	2.5	3.1	3.1	6.2	3.2	2.8	3.3	4.2	1.9
1934	3.3	2.8	3.7	3.2	3.5	3.1	3.2	3.4	2.7	4.3	3.1	3.3	2.3
1935	1.5	1.0	1.7	2.2	1.3	1.5	1.4	1.6	1.1	1.3	1.6	1.3	1.2
1936	.9	1.0	.8	1.4	1.2	.6	.9	1.0	.3	.2	.2	.4	1.2
	Net loss[2] on investments												
1927[3]	+.8	+.6	+1.1	+1.0	+.7	+.6	+.4	+.8	+.7	+.2	+.3	+.3	+.7
1928[3]	+.5	+.6	+.6	+.8	+.6	+.3	+.4	+.6	+.5	+.1	----	+.1	+.6
1929[3]	----	1.8	+.2	+.3	+.2	.2	.1	+.1	+.1	.1	.2	.1	+.2
1930[3]	.2	.2	.7	.3	----	.2	.3	+.3	.3	.1	.2	+.2	----
1931	1.5	1.8	1.8	2.5	1.7	1.8	1.3	1.0	1.7	1.0	1.0	.7	.4
1932	2.1	2.8	2.0	4.2	1.9	2.4	1.0	2.3	1.6	2.6	1.0	.8	.6
1933	2.2	2.4	2.8	2.2	1.3	3.0	1.5	2.6	2.4	3.1	1.0	.5	.6
1934[3]	.9	.7	1.3	1.4	1.0	+.1	.1	.4	1.1	1.9	.4	+.2	.5
1935[3]	+.4	+.4	+.5	+.1	.1	+.3	+.7	+.4	+.5	+.4	+.6	+1.0	+1.0
1936[3]	+1.4	+1.1	+1.9	+1.0	+.9	+.8	+.9	+1.3	+1.1	+.5	+.6	+.9	+1.2

[1] Gross losses on loans less recoveries on loans.
[2] Gross losses on investments less recoveries on investments and profits on securities sold.
[3] A plus sign indicates an excess of recoveries and profits on securities sold over gross losses.
Source of basic figures from which percentages were computed: FEDERAL RESERVE BULLETIN.

TABLE XVII—NET ANNUAL RATES OF RETURN ON LOANS AND ON INVESTMENTS OF MEMBER BANKS, BY FEDERAL RESERVE DISTRICTS, 1927-1936

[Figures in percentages]

Calendar year	All member banks	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
		Federal Reserve districts											
	Net return[1] on loans												
1927	5.1	4.5	4.4	5.1	5.4	5.4	5.6	5.0	5.4	5.5	5.7	6.2	5.5
1928	5.3	4.8	5.0	5.1	5.6	5.6	5.6	5.2	5.5	5.6	6.1	6.2	5.8
1929	5.7	5.6	5.5	5.5	5.8	5.5	5.7	5.5	5.8	6.1	6.4	6.6	6.0
1930	4.7	4.5	3.8	4.8	5.3	5.2	4.8	5.1	5.1	5.9	6.0	5.7	5.6
1931	3.7	3.8	2.6	4.0	4.7	4.3	4.1	3.5	4.4	5.1	5.0	4.5	5.3
1932	2.8	3.2	1.3	2.8	4.0	3.9	4.4	2.7	4.3	4.1	4.0	3.8	4.4
1933	1.6	1.2	1.1	2.3	3.0	2.4	2.2	[2] −1.9	2.0	2.7	3.0	2.2	3.7
1934	1.0	1.5	[2] −.4	1.4	1.7	2.2	1.9	.8	2.2	.7	2.9	3.0	2.9
1935	2.7	3.1	1.3	2.3	3.7	3.7	3.6	2.6	3.6	3.4	4.2	5.1	3.8
1936	3.2	3.0	2.1	3.1	3.7	4.6	4.2	3.0	4.4	4.5	5.6	6.1	3.9
	Net return[3] on investments												
1927	5.5	5.7	6.2	6.0	5.6	4.6	4.5	5.1	5.3	4.1	4.6	3.7	4.8
1928	5.2	5.5	5.6	5.8	5.6	4.4	4.6	5.2	5.1	4.3	4.3	3.4	4.9
1929	4.7	3.0	5.1	5.5	5.2	3.9	3.9	4.5	4.8	4.3	4.2	3.8	4.4
1930	4.3	4.6	3.8	4.8	4.8	3.9	3.7	4.7	4.3	4.5	4.2	3.9	4.4
1931	2.6	2.5	2.1	2.2	2.9	2.0	2.5	2.8	2.6	3.3	3.2	2.7	3.6
1932	1.8	1.2	1.7	.2	2.4	1.2	2.7	1.4	2.3	1.8	3.0	2.7	3.2
1933	1.3	1.2	.7	1.8	2.5	.5	1.7	.4	1.1	.9	2.4	2.8	3.0
1934	2.4	2.9	1.7	2.5	2.7	3.3	3.5	2.5	2.2	1.9	3.0	3.5	3.0
1935	3.2	3.4	2.8	3.8	3.2	3.4	3.7	2.8	3.6	3.5	3.6	3.9	4.1
1936	4.0	4.1	4.1	4.5	4.0	3.6	3.8	3.6	3.8	3.4	3.2	3.8	4.0

[1] Interest and discount, less net losses or plus net recoveries.
[2] Deficit.
[3] Interest and dividends, less net losses or plus net recoveries.
Source of basic figures from which percentages were computed: FEDERAL RESERVE BULLETIN.