FEDERAL RESERVE BANK
OF NEW YORK

[Circular No. 975
April 29, 1930]

A Comparison of the Operating Ratios of Representative Member Banks in the Second Federal Reserve District For the Year 1929

Grouped according to size of banks and character of business

THIS bank's annual study of the operating ratios of representative member banks in this district indicates that, notwithstanding the high level of interest rates, the past year was not an unusually profitable one for the banks. Gross earnings, it is true, increased, and the ratio of such earnings to total available funds was well above the average for the past six years, especially in the case of the large city banks. Losses, however, showed a considerable increase, so that the percentage of gross earnings left for net profits was in many cases noticeably smaller than in previous years. The only exceptions were the groups of large banks, both in New York City and elsewhere in this district, having loans and investments in excess of $10,000,000; these banks showed a slight increase in the percentage of earnings left for net profits after expenses, charge-offs, and recoveries.

These conclusions are based upon material contained in the tables on the following pages, which set forth the average operating ratios of representative member banks in the Second Federal Reserve District for 1929, together with comparative data for 1928 and averages for the years 1923 to 1928 inclusive. Inasmuch as more complete data concerning items of income and expense have been made available for the past few years through a revision of the semi-annual earnings reports of member banks to this bank, these tables will be found to contain several new ratios for 1928 and 1929.

The increase in gross earnings of the selected banks in 1929 was due partly to an increase in the proportion of loans to investments, since the rate of return on loans is usually somewhat higher than on investments, and partly to higher loan rates during the past year. The smaller banks, which tend to keep their interest rates relatively stable, showed only a slight increase in the rate of income from loans, but New York City banks, whose interest charges fluctuate more widely in response to changing money conditions, showed an increase from a little over 5 per cent in 1928 to 6 per cent in 1929. The percentage of gross earnings obtained from profits on securities sold declined further in 1929, accompanying the continued decline in bond prices, but income from trust departments (calculated this year for the first time) showed a noticeable increase, particularly in the larger banks.

Current expenses, including salaries, interest payments, and other expenses, took a somewhat smaller proportion of gross earnings in 1929 than in 1928, especially in the case of large New York City banks. In many cases, however, the declines in expense ratios were more than offset by increases in losses charged off, chiefly on investments. Losses charged off on securities were the largest in recent years, and for all banks combined exceeded profits on securities sold; losses charged off on loans and discounts also were somewhat larger in 1929 than in 1928. The result was that for all selected banks combined the percentage of gross earnings left for net profit was 19.5 per cent in 1929 as compared with 22.2 per cent in 1928, and 23.1 per cent in 1927. In the largest banks, however, the increase in charge-offs was counter-balanced by a decrease in the proportion of earnings required for current expenses, so that the percentage of gross earnings left for net profit was slightly larger in 1929 than in 1928.

Time deposits increased at a slower rate in 1929 than in 1928, but as the average of demand deposits showed no increase for the year, the tendency for time deposits to increase relative to gross deposits continued in 1929. The ratio of interest paid on time deposits to the amount of time deposits was somewhat higher in 1929, whereas the ratio of interest paid on demand deposits to the amount of demand deposits was not much changed.

A general tendency to increase the proportion of capital funds to deposits appeared in all groups of banks having loans and investments of $500,000 or more. For all groups combined, the ratio of capital funds to gross deposits was 16.9 per cent in 1929 as compared with an average of 15.6 per cent for the preceding six years; in the case of New York City banks the proportion was increased in 1929 to 20.4 per cent as compared with an average for the previous six years of 14.4 per cent. Due partly to the increase in capital, and partly to the lower ratio of net profit to gross earnings, the average rate of profit on capital funds for all selected banks combined was lower in 1929 than in either of the two previous years.

A space has been provided in the following tables for the insertion of the figures of any bank which may wish to compare its operations with those of other banks of a similar size or with a similar proportion of time deposits.

Table 1—Average Operating Ratios of Representative Member Banks in Seven Groups

(40 selected banks in each group *a*)

Read the table as follows: In the banks of Group I (banks with loans and investments under $500,000) capital funds averaged 18.5 per cent of gross deposits in 1928 and 18.3 per cent in 1929.

Size of groups divided according to amount of loans and investments indicated

Ratios expressed in percentages	General Average All Groups 1923-1928 Av.	1923	1924	1925	1926	1927	1928	*1929*
CAPITAL								
1. Capital funds *b* to gross deposits	15.6	16.1	15.6	15.3	15.4	15.3	15.7	*16.9*
LOANS AND INVESTMENTS								
2. Loans and investments to total available funds *c*	84.8	85.1	84.4	84.8	84.3	85.0	85.3	*86.0*
3. Loans to loans and investments	58.2	56.9	56.9	56.9	58.8	59.3	60.2	*63.0*
DEPOSITS								
4. Demand deposits to gross deposits	52.7	57.2	55.2	54.4	52.0	50.2	47.4	*45.4*
5. Interest paid on demand deposits to demand deposits *d*							1.0	*0.9*
6. Interest paid on time deposits to time deposits *d*							3.4	*3.6*
EARNINGS								
7. Income from loans to loans *d*							5.7	*5.9*
8. Income from investments to investments *d*							5.3	*5.3*
9. Gross earnings to total available funds *c*	5.3	5.2	5.2	5.2	5.4	5.4	5.5	*5.7*
10. Net earnings to total available funds *c*	1.6	1.6	1.5	1.6	1.6	1.6	1.6	*1.7*
11. Net earnings to capital funds *b*	13.5	13.6	13.4	13.7	13.8	13.3	13.0	*13.3*
SOURCES OF EARNINGS Ratio of the following to gross earnings:								
12. Income from loans *d*						86.0 (12-13)	52.7	*56.1*
13. Income from investments *d*							34.0	*31.2*
14. Profit on securities sold *e* (deduct ratio 25 for net)						7.4	6.5	*5.7*
15. Income from Trust Department *d*						6.6 (15-16)	0.8	*1.2*
16. All other earnings *d*							6.0	*5.8*
DISPOSITION OF GROSS EARNINGS Ratio of the following to gross earnings:								
17. Salaries and wages	18.7	18.8	19.1	18.5	18.6	18.9	18.5	*18.1*
18. Interest paid on borrowed money	1.2	1.6	0.8	1.0	1.2	1.0	1.6	*2.1*
19. Interest paid on demand deposits *d*	36.1 (19-20)	34.3 (19-20)	35.9 (19-20)	36.2 (19-20)	36.1 (19-20)	36.7 (19-20)	8.2	*7.0*
20. Interest paid on time deposits *d*							29.0	*29.1*
21. All other expenses	15.0	15.9	15.5	15.0	15.0	14.5	14.2	*13.8*
22. Total current expenses	71.0	70.6	71.3	70.7	70.9	71.1	71.5	*70.1*
23. Net earnings (before charge-offs and recoveries)	29.0	29.4	28.7	29.3	29.1	28.9	28.5	*29.9*
24. Losses charged off on loans and discounts	3.6	4.0	4.3	3.7	3.4	2.8	3.5	*3.9*
25. Losses charged off on securities	2.6	4.4	2.6	2.0	2.0	2.0	2.7	*6.1*
26. Net profits *e* (after all losses and depreciation charged off and recoveries, but before dividends)						23.1	22.2	*19.5*

Ratios expressed in percentages	I Under $500,000 1923-1928 Av.	1928	*1929*	Your Figures	II $500,000 to $999,999 1923-1928 Av.	1928	*1929*	Your Figures	III $1,000,000 to $1,999,999 1923-1928 Av.	1928	*1929*	Your Figures
1. Capital funds *b* to gross deposits	20.3	18.5	*18.3*		20.7	18.6	*19.4*		15.2	15.8	*16.7*	
2. Loans and investments to total available funds *c*	84.3	84.8	*86.7*		85.8	86.0	*87.5*		87.6	88.3	*87.9*	
3. Loans to loans and investments	48.9	53.7	*55.1*		49.2	51.0	*54.5*		50.8	54.6	*58.5*	
4. Demand deposits to gross deposits	53.2	43.7	*39.7*		47.9	43.9	*42.0*		39.8	36.6	*35.3*	
5. Interest paid on demand deposits to demand deposits *d*		0.4	*0.3*			0.4	*0.4*			0.7	*0.7*	
6. Interest paid on time deposits to time deposits *d*		3.6	*3.7*			3.5	*3.7*			3.5	*3.7*	
7. Income from loans to loans *d*		5.8	*6.0*			5.8	*5.9*			5.8	*5.9*	
8. Income from investments to investments *d*		5.4	*5.2*			5.6	5.5			5.5	*5.4*	
9. Gross earnings to total available funds *c*	5.4	5.4	*5.6*		5.4	5.5	*5.6*		5.6	5.8	*5.7*	
10. Net earnings to total available funds *c*	1.6	1.4	*1.6*		1.8	1.7	*1.7*		1.7	1.7	*1.6*	
11. Net earnings to capital funds *b*	10.9	10.6	*11.8*		12.6	12.8	*12.2*		14.4	13.8	*12.8*	
12. Income from loans *d*		47.5	*52.1*			46.4	*48.7*			49.6	*54.6*	
13. Income from investments *d*		40.7	*37.3*			42.6	*41.9*			38.4	*34.9*	
14. Profit on securities sold *e* (deduct ratio 25 for net)		6.7	*5.6*			6.8	*5.6*			8.5	*6.7*	
15. Income from Trust Department *d*		0	*0*			0	*0*			0.1	*0.1*	
16. All other earnings *d*		5.1	*5.0*			4.2	*3.8*			3.4	*3.7*	
17. Salaries and wages	22.4	21.5	*21.1*		19.6	18.7	*19.5*		18.1	18.4	*18.2*	
18. Interest paid on borrowed money	1.2	1.6	*2.1*		1.2	1.4	*2.1*		1.0	1.1	*1.8*	
19. Interest paid on demand deposits *d*	30.9 (19-20)	3.6	*2.2*		31.6 (19-20)	3.3	*2.2*		37.7 (19-20)	3.1	*3.7*	
20. Interest paid on time deposits *d*		31.7	*32.4*			31.2	*31.5*			35.1	*34.9*	
21. All other expenses	17.2	15.4	*14.7*		15.9	15.2	*14.8*		13.7	13.5	*13.2*	
22. Total current expenses	71.7	73.8	*72.5*		68.3	69.8	*70.1*		70.5	71.2	*71.8*	
23. Net earnings (before charge-offs and recoveries)	28.3	26.2	*27.5*		31.7	30.2	*29.9*		29.5	28.8	*28.2*	
24. Losses charged off on loans and discounts	2.1	3.3	*2.4*		2.3	2.9	*4.1*		3.0	3.2	*2.4*	
25. Losses charged off on securities	2.8	1.8	*6.3*		3.2	2.5	*9.2*		3.0	4.3	*8.6*	
26. Net profits *e* (after all losses and depreciation charged off and recoveries, but before dividends)		20.1	*16.8*			25.1	*16.6*			21.9	*17.2*	

Ratios expressed in percentages	IV $2,000,000 to $4,999,999 1923-1928 Av.	1928	*1929*	Your Figures	V $5,000,000 to $9,999,999 1923-1928 Av.	1928	*1929*	Your Figures	VI $10,000,000 and up outside N. Y. C. 1923-1928 Av.	1928	*1929*	Your Figures	VIIa $10,000,000 and up N. Y. C. 1923-1928 Av.	1928	*1929*	Your Figures
1. Capital funds *b* to gross deposits	12.2	13.2	*14.3*		13.6	13.9	*14.6*		12.7	13.4	*14.9*		14.4	16.5	*20.4*	
2. Loans and investments to total available funds *c*	87.9	88.8	*89.1*		87.3	87.6	*88.7*		84.5	85.1	*87.8*		76.4	76.7	*74.0*	
3. Loans to loans and investments	57.0	59.2	*62.6*		62.4	63.1	*63.9*		64.9	65.1	*69.5*		74.1	74.9	*77.1*	
4. Demand deposits to gross deposits	39.1	35.0	*34.2*		46.8	42.6	*38.4*		58.1	49.6	*47.6*		84.3	80.6	*80.6*	
5. Interest paid on demand deposits to demand deposits *d*		1.0	*1.0*			1.4	*1.2*			1.6	*1.5*			1.3	*1.3*	
6. Interest paid on time deposits to time deposits *d*		3.6	*3.7*			3.5	*3.7*			3.6	*3.6*			2.7	*2.9*	
7. Income from loans to loans *d*		5.7	*5.9*			5.7	*6.0*			5.7	*5.8*			5.1	*6.0*	
8. Income from investments to investments *d*		5.7	*5.5*			5.2	*5.4*			5.1	*5.3*			4.8	*4.9*	
9. Gross earnings to total available funds *c*	5.5	5.6	*5.8*		5.5	5.6	*5.9*		5.2	5.5	*5.8*		4.8	5.0	*5.4*	
10. Net earnings to total available funds *c*	1.4	1.5	*1.6*		1.6	1.6	*1.8*		1.5	1.5	*1.7*		1.5	1.7	2.0	
11. Net earnings to capital funds *b*	14.6	13.7	*13.9*		14.8	14.0	*15.5*		13.9	13.4	*13.9*		13.2	12.8	*12.8*	
12. Income from loans *d*		52.7	*56.5*			55.1	*56.7*			58.2	*61.4*			58.9	*63.0*	
13. Income from investments *d*		36.5	*32.3*			32.1	*30.6*			28.3	*24.9*			19.6	*16.1*	
14. Profit on securities sold *e* (deduct ratio 25 for net)		5.9	*5.9*			7.4	*7.0*			5.9	*5.7*			4.5	*3.1*	
15. Income from Trust Department *d*		0.5	*0.5*			0.8	*1.0*			1.6	*2.1*			2.7	*4.9*	
16. All other earnings *d*		4.4	*4.8*			4.6	*4.7*			6.0	*5.9*			14.3	*12.9*	
17. Salaries and wages	17.3	17.3	*16.9*		16.6	16.6	*16.0*		16.6	16.3	*16.6*		20.6	20.5	*18.8*	
18. Interest paid on borrowed money	1.0	1.1	*1.7*		1.1	1.6	*2.1*		1.6	2.4	*2.8*		1.3	2.1	*1.9*	
19. Interest paid on demand deposits *d*	42.5 (19-20)	5.5	*5.7*		40.6 (19-20)	10.1	*7.9*		40.4 (19-20)	13.0	*11.0*		28.9 (19-20)	18.8	*16.1*	
20. Interest paid on time deposits *d*		37.0	*36.0*			31.1	*32.4*			28.2	*27.3*			8.6	*9.1*	
21. All other expenses	13.3	12.6	*12.1*		13.5	13.3	*12.3*		14.0	13.3	*12.8*		17.5	16.4	*16.7*	
22. Total current expenses	74.1	73.5	*72.4*		71.8	72.7	*70.7*		72.6	73.2	*70.5*		68.3	66.4	*62.6*	
23. Net earnings (before charge-offs and recoveries)	25.9	26.5	*27.6*		28.2	27.3	*29.3*		27.4	26.8	*29.5*		31.7	33.6	*37.4*	
24. Losses charged off on loans and discounts	3.9	4.2	*4.6*		4.0	3.3	*4.6*		5.1	4.4	*4.9*		5.2	3.2	*4.6*	
25. Losses charged off on securities	2.4	2.9	*5.3*		3.0	3.9	*6.4*		2.1	2.2	*3.6*		1.8	1.6	*3.3*	
26. Net profits *e* (after all losses and depreciation charged off and recoveries, but before dividends)		18.9	*15.5*			20.7	*19.0*			20.0	*21.2*			29.0	*30.0*	

a—Group VII, 30 banks in 1929, 35 banks in 1928, due to consolidations and mergers. *b*—Capital, surplus, and undivided profits. *c*—Capital, surplus, undivided profits, deposits, borrowed money, and notes in circulation. *d*—Not computed prior to 1928. *e*—Not computed prior to 1927.
Bank deposits are included in demand deposits.

Ratios 1 to 11 are computed from the average figures of condition reports, and from yearly aggregate figures of section one of the semi-annual earnings reports; ratios 12 to 23 from figures of section one of the semi-annual earnings reports; ratios 24 and 25 from figures of items 5 (*a*) and 5 (*b*) of section two, and item 1 of section one of the semi-annual earnings reports; ratio 26 from figures of item 6 of section two, and item 1 of section one of the semi-annual earnings reports.
The same banks were used in each year, except for a few substitutions for banks which changed their classes.

Table 2—Average Operating Ratios of Representative Member Banks Grouped According to Amount of Time Deposits

Read the table as follows: In banks with time deposits equal to less than 25 per cent of their gross deposits, capital funds averaged 18.8 per cent of gross deposits in 1928, and 21.4 per cent in 1929.

Ratios expressed in percentages	Groups of banks divided according to the percentage of time deposits to gross deposits											
	Under 25			25-49.9			50-74.9			75 and up		
	1928	*1929*	Your figures	1928	*1929*	Your figures	1928	*1929*	Your figures	1928	*1929*	Your figures
CAPITAL												
1. Capital funds b to gross deposits	18.8	*21.4*		17.1	*18.1*		14.8	*15.9*		13.9	*15.0*	
LOANS AND INVESTMENTS												
2. Loans and investments to total available funds c	78.3	*74.8*		85.2	*86.0*		86.3	*88.0*		89.4	*90.9*	
3. Loans to loans and investments	70.7	*74.0*		65.1	*68.4*		58.0	*61.1*		49.5	*52.1*	
DEPOSITS												
4. Demand deposits to gross deposits	90.0	*90.9*		58.8	*60.0*		36.9	*35.8*		20.5	*20.2*	
5. Interest paid on demand deposits to demand deposits	1.3	*1.3*		1.2	*1.2*		0.8	*0.8*		0.7	*0.7*	
6. Interest paid on time deposits to time deposits	2.4	*2.6*		3.4	*3.4*		3.6	*3.7*		3.7	*3.9*	
EARNINGS												
7. Income from loans to loans	5.3	*6.0*		5.7	*5.9*		5.7	*5.9*		5.7	*5.9*	
8. Income from investments to investments	4.9	*4.8*		5.2	*5.3*		5.4	*5.5*		5.6	*5.5*	
9. Gross earnings to total available funds c	4.9	*5.2*		5.4	*5.6*		5.6	*5.7*		5.9	*6.0*	
10. Net earnings to total available funds c	1.6	*2.0*		1.6	*1.8*		1.5	*1.6*		1.6	*1.7*	
11. Net earnings to capital funds b	12.1	*12.7*		12.7	*13.5*		13.1	*12.9*		14.3	*14.9*	
SOURCES OF EARNINGS Ratio of the following to gross earnings:												
12. Income from loans	59.4	*63.7*		59.5	*62.4*		51.2	*54.7*		43.9	*47.0*	
13. Income from investments	23.7	*18.1*		28.3	*24.9*		36.5	*34.2*		43.6	*40.7*	
14. Profit on securities sold (deduct ratio 25 for net)	4.0	*3.4*		5.0	*6.1*		7.1	*5.5*		9.2	*8.5*	
15. Income from Trust Department	2.4	*4.6*		0.9	*1.1*		0.3	*0.5*		0.3	*0.4*	
16. All other earnings	10.5	*10.2*		6.3	*5.5*		4.9	*5.1*		3.0	*3.4*	
DISPOSITION OF GROSS EARNINGS Ratio of the following to gross earnings:												
17. Salaries and wages	22.5	*20.3*		20.4	*20.8*		17.6	*17.9*		14.8	*14.1*	
18. Interest paid on borrowed money	2.5	*2.5*		2.2	*1.9*		1.4	*2.2*		0.8	*1.4*	
19. Interest paid on demand deposits	20.6	*18.2*		11.6	*10.6*		4.6	*4.3*		2.0	*1.8*	
20. Interest paid on time deposits	5.1	*4.4*		21.6	*20.1*		35.1	*34.5*		44.4	*43.7*	
21. All other expenses	16.3	*16.4*		15.5	*15.6*		14.1	*13.5*		10.8	*10.1*	
22. Total current expenses	67.0	*61.8*		71.3	*69.0*		72.8	*72.4*		72.8	*71.1*	
23. Net earnings (before charge-offs and recoveries)	33.0	*38.2*		28.7	*31.0*		27.2	*27.6*		27.2	*28.9*	
24. Losses charged off on loans and discounts	3.3	*2.6*		2.4	*4.7*		3.7	*4.2*		3.7	*2.9*	
25. Losses charged off on securities	2.0	*3.6*		1.9	*6.5*		3.0	*6.5*		3.5	*6.9*	
26. Net profits (after all losses and depreciation charged off and recoveries, but before dividends)	27.5	*32.3*		23.6	*19.3*		20.6	*15.9*		20.0	*19.1*	
Number of banks in group	47	*35*		39	*39*		151	*156*		38	*40*	

For footnotes see Table 1.