

Accounting for Loan Charge-Offs

by John M. Godfrey

At the end of 1974, District member banks had loans outstanding of \$26.3 billion, an increase of \$1.7 billion during the year. While originally most of these loans were unquestionably sound credits and many would have remained so if the economy had remained strong and credit easy, some should have never been put on the banks' books in the first place. Acting both on their own initiative and under pressure from the regulatory authorities, District member banks "bit the bullet" and charged off \$201 million in bad loans during 1974 (see Table 1). And, although based upon past experience it is likely that up to one quarter of these reported losses will be at least partly recovered, banks still have a large volume of doubtful loans on their books; an equally large amount of these loans may well be written off during 1975. And, in addition to the loans actually charged off, an even larger amount are now substandard credits, even if they do not result in a direct loss of principal. But since banks generally expect to experience high loan losses at some time, District member banks have tried to provide for that possibility and have established reserves for bad loans equal to nearly twice last year's losses.

Compared to loan losses in 1973, last year marked an abrupt change. In 1973, District loan losses amounted to about one-half of last year's total, or \$102 million. By way of further comparison, gross loan losses amounted to 0.76 percent of total loans in 1974, in contrast to 0.41 percent in 1973 (see Table 2).

Despite the magnitude of last year's loan write-offs, higher losses were not entirely unexpected, since they generally rise during recessions. For example, banks had to charge off considerably more loans during 1970 (a recession year)

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TABLE 1
LOAN LOSSES
Sixth District Member Banks

(\$ Millions)

		All Banks	Large Banks*	Other Banks
District	1973	101.6	63.6	38.0
	1974	200.6	130.8	69.8
Alabama	1973	13.6	6.0	7.6
	1974	21.1	10.3	10.8
Florida	1973	25.2	7.4	17.8
	1974	58.2	23.5	34.7
Georgia	1973	32.7	27.3	5.4
	1974	68.7	56.9	11.8
Louisiana**	1973	9.7	7.0	2.7
	1974	15.6	10.3	5.3
Mississippi**	1973	6.1	4.7	1.4
	1974	8.8	7.0	1.8
Tennessee**	1973	14.3	11.2	3.1
	1974	28.2	22.8	5.4

*Banks with loans of \$100,000,000 and over as of December 1974

**Sixth District portion

than they did in 1969 (see Table 3.) And, although losses declined in 1971, they were still above 1969's rate. In this way, last year's rise was not unusual; and if the past is any guide, losses may be as large again this year.

Increased provisions for loan losses (and much larger payments for interest on deposits and borrowed funds) were significant factors in holding down the gain in net income at banks in 1974. Last year, net income at District member banks rose \$30 million to \$370 million, despite a 50-percent increase in total operating income to \$3,879 million. The profit rate on capital was 10.0 percent in 1974, down from 10.2 percent the previous year. However, if loan loss provisions had been at the same rate as in 1973, net income would have surged to \$452 million and the rate of return on capital would have risen to 12.2 percent.

While the average District rate of loan charge-off in 1974 was 0.76 percent, it varied considerably among the 646 member banks (see Table 4). The overwhelming majority of District member banks had loan losses of less than one percent last year. A large part of the charge-off was concentrated at relatively few banks, with one hundred and seven member banks charging off more than one percent of their loans. Four banks charged off more than 5 percent last year. By contrast, 56 banks reported no loan losses, and 59 more reported that they charged off less than one-tenth of one percent of their loans.

There was considerable variation among the District states in loan losses (see Tables 1 and 2). Over three-fourths of the total dollar losses last year were in Georgia, Tennessee, and Florida; banks in these same states also charged off a higher

proportion of their loans than those in the rest of the District. While on average District banks charged off 0.76 percent of their loans, Georgia member banks charged off 1.22 percent of their loans; Tennessee, 0.74 percent; and Florida, 0.68 percent. Of all District states, however, Georgia member banks accounted for a disproportionately large amount of loan losses. While Georgia banks have only 21 percent of District loans, they accounted for 34 percent of the losses.

Losses also varied according to bank size. For example, the District's larger banks (loans in excess of \$100 million) charged off 0.84 percent of their loans in 1974, up from 0.43 percent in 1973. In contrast, the medium- and smaller-sized banks charged off 0.65 percent of their loans last year and only 0.38 percent the year before. The largest banks had outstanding slightly more than 50 percent of the District's loans but accounted for 56 percent of loan losses. In Florida, Georgia, Mississippi, and Tennessee, the larger banks have tended to charge off a much higher proportion of their loans than have smaller banks. Both large and small banks in Georgia had higher rates of loan losses in 1974 than did banks in other states. In Alabama and Louisiana, however, the larger banks accounted for a smaller percentage of losses than they have loans outstanding, indicating that the smaller banks have disproportionately more losses.

While the larger banks tended to have a higher loss rate than smaller ones, there was considerable variation within each size group (see Table 4). Arranging the banks by loan volume and then distributing them according to the ratio of losses to total loans, the variation is apparent. Even though most of the smaller banks have a smaller average

TABLE 2
LOAN LOSSES AS A PERCENT OF TOTAL LOANS

Sixth District Member Banks

		All Banks	Large Banks*	Other Banks
District	1973	0.41	0.43	0.38
	1974	0.76	0.84	0.65
Alabama	1973	0.42	0.34	0.51
	1974	0.57	0.51	0.65
Florida	1973	0.31	0.25	0.34
	1974	0.68	0.76	0.63
Georgia	1973	0.59	0.66	0.39
	1974	1.22	1.34	0.87
Louisiana**	1973	0.33	0.31	0.43
	1974	0.50	0.42	0.78
Mississippi**	1973	0.45	0.45	0.46
	1974	0.63	0.72	0.43
Tennessee**	1973	0.42	0.43	0.38
	1974	0.74	0.81	0.53

*Banks with loans of \$100,000,000 and over as of December 1974

**Sixth District portion

TABLE 3
RESERVES FOR LOAN LOSSES

	Sixth District Member Banks (\$ Millions)					
	1969	1970	1971	1972	1973	1974
Beginning Balance	232.4	261.6	266.9	277.9	311.0	358.8
+Provision for Loan Losses	40.5	51.4	55.5	60.4	78.3	175.5
+Recoveries	13.2	18.6	25.4	30.4	29.8	36.1
+ Other Transfers to Reserves	37.4	25.5	20.1	27.8	41.9	28.2
Total Reserves	323.5	357.1	367.9	396.5	461.0	598.6
-Gross Loan Losses	57.2	88.8	83.9	82.7	101.6	200.6
-Other Transfers from Reserves	5.0	1.4	4.5	2.9	2.3	8.0
Ending Balance	261.3	266.9	279.5	310.9	357.1	390.0
Total Loans	13,452.6	14,089.5	16,081.7	20,151.0	24,596.9	26,321.7
Reserves as % of Loans	1.94	1.89	1.74	1.54	1.45	1.48
Gross Losses as % of Loans	0.43	0.63	0.52	0.41	0.41	0.76
Net Losses*	44.0	70.2	58.5	52.3	71.8	164.5
Net Losses as % of Loans	0.33	0.50	0.36	0.26	0.29	0.63

*Gross Losses Minus Recoveries

Note: Structural changes account for the difference between the ending balance in one year and the beginning balance in the following year.

ratio of loan losses, they do account for a high proportion of the number of banks with high loan-loss ratios. Of 107 banks with 1974 loss ratios exceeding 1 percent, 42 have loan volumes of less than \$10 million. In contrast, only 12 banks with loans in excess of \$100 million charged off more than 1 percent of their loans, but these 12 comprise one-fourth of that size category. In generalizing about the rate of loan loss and loan volume, we must keep in mind the considerable differences within each size group.

Defaults on bank loans in the Southeast were not caused by any one single business failure or generally lax credit standards, but by many different situations. There is no doubt, however, that in

many situations banks did make some unsound loans and they have been hit by losses on these credits. Some loans were made for speculative purposes without adequate security and a sound plan for making repayments. Businesses, both large and small, were confronted by a sluggish economy and were unable to repay bank loans they had taken out to finance increased inventories, accounts receivable, working capital needs, and capital expenditures. Businesses associated with various aspects of construction and real estate development were especially hard hit by cost overruns, overbuilding, high interest rates, and a lack of permanent financing. Higher unemployment and the rising cost of living hit many consumers and

TABLE 4
DISTRIBUTION OF DISTRICT MEMBER BANKS BY LOAN-LOSS RATIO AND SIZE OF LOAN PORTFOLIO

Loans (\$ millions)	Loan Loss Ratio						
	Under .25	.25-.50	.50-.75	.75-1.00	1.00-5.00	Over 5.00	Total
under 10	125	48	28	14	41	1	257
10 - 25	66	54	33	11	29	2	195
25 - 50	38	30	17	12	14	0	111
50 - 100	7	12	6	2	7	1	35
100 - 500	3	12	8	6	9	0	38
500	1	3	1	2	3	0	10
Total	240	159	93	47	103	4	646

caused them to default on loans taken out to purchase homes, autos, and other goods. Some loans that were sound when they were made deteriorated as adverse economic conditions intensified during 1974. When the borrowers defaulted, the collateral securing these loans was not sufficient to repay the loan.

Providing for Loan Losses

Banks typically do not treat a loan charge-off as a current expense. Instead, standard bank accounting techniques call for establishing a reserve account for possible loan losses and adding to it each year. Banks build up reserves for loan losses in years when losses are low; in years when losses are large, they draw down these reserves. In this way, the impact of exceptionally large loan losses in any one year does not necessarily result in higher expenses and reduced net income. This procedure also has the effect of tending to smooth out net income insofar as it is affected by varying loan charge-offs. Larger reserves also keep the bank from having to reduce a capital account when the large amounts of loans are charged off. (See the example of Conservative Bank and Aggressive Bank.)

Banks generally follow one of three methods in providing minimum reserves for loan losses each year.¹ One method is to base the current year's provision on the average net charge-offs (losses less recoveries) as a percent of total loans over the most recent five-year period. For newly established banks, an interim measure may be used that makes use of a moving average of loan-loss rates until five years have elapsed and the first method can be used. Finally, banks may elect to provide for loan losses based upon their actual experience each year and not establish reserves at all.

While these methods represent minimal provisions for possible losses, a bank may want to provide more than a minimum. There are advantages and disadvantages, however, to a bank's building up its loan-loss reserves in its published financial reports. A "conservatively" managed

bank might wish to ensure that its reserves are more than adequate to meet the worst possible situation. But a conservative stance means that provision for loan losses (an expense) will be higher than what is currently necessary and, therefore, that net income will be lower. If the bank is conscious of its image in the investment community, it may be reluctant to report a lower rate of return on capital than its competitors or to curtail its dividends.

On the plus side, provisions for loan losses represent an addition to a tax-free quasi-capital account. If a bank provides for possible losses in excess of its actual experience, it accrues an expense (like depreciation) for which it does not have to pay out any money. Therefore, its balance sheet projects a solid image because of substantial reserves. An "aggressive" bank, on the other hand, may want to provide only minimum current expenses for possible loan losses in order to report higher profits. This bank faces the possibility, however, of large loan losses in a given year, losses it will have to charge to current income. The higher charge will tend to cause earnings to fall sharply in that year. The conservative bank, in contrast, may report a lower level of profits in years it is building its reserves but will report constant earnings in a year of heavy losses.

District Loan-Loss Reserves

How adequate are loan-loss reserves in the Sixth District?² Is the Sixth District like a "conservative bank" or an "aggressive bank?" The answers clearly suggest that aggregate loan-loss reserves appear adequate and that the District appears to be represented most closely by a "conservative bank." However, this should not be construed to mean that all banks have taken a conservative approach to loan-loss reserves.

After 1974 charge-offs, District loan-loss reserves totaled \$390 million, nearly twice the gross amount of loans charged off. In theory, then, District banks could sustain twice the gross losses charged off

¹Since banks typically establish loan-loss reserves out of pretax income, they are limited by Federal tax laws as to the amount of income they can set aside each year for reserves in excess of current losses. The Tax Reform Act of 1969 allows banks to make additions to reserves up to 1.8 percent of eligible loans until 1976, when the limit declines to 1.2 percent. Previous IRS rulings had allowed banks to build up their reserves to 2.4 percent. In 1982, reserves established out of pretax income cannot exceed 0.6 percent of loans; and after 1988, all banks will be allowed to establish reserves only to the extent of average loan losses during the previous six years. Of course, nothing will prevent banks from establishing more reserves out of after-tax income if they wish; but based on past experience, they are not likely to build reserves out of after-tax income.

²The adequacy of loan-loss reserves depends upon the functions these reserves should serve. One study has identified four functions. The Golembé Study specified the purpose of reserves in the following manner: (1) the experience function: "to absorb losses which can reasonably be anticipated on an experience basis from the loan portfolio" of an individual bank; (2) the catastrophe function: "to enable banks to withstand the exceptionally heavy loan losses to be expected from such unforeseen circumstances as a major depression"; (3) the stability function: "to serve as a stabilizing force for the industry by holding to a minimum the number of banks that might experience serious capital impairment because of loan losses"; and (4) the capital supplement function: "to serve as a supplement to bank capital." See **The Adequacy of Bad Debt Reserves For Banks—A Preliminary Study**, Carter H. Golembé Associates, Inc. This analysis will consider only the experience and stability functions.

TABLE 5
RESERVES FOR LOAN LOSSES, 1974

	District	Ala.	Fla.	Ga.	La.*	Miss.*	Tenn.*
Beginning Balance	358.8	53.2	118.9	77.6	43.3	20.6	45.2
+Prov. for Loan Losses	175.5	15.0	55.0	62.4	12.4	7.5	23.2
+Recoveries	36.1	6.6	10.0	7.2	3.2	1.9	7.2
+Other Transfers to Res.	28.2	4.9	7.9	4.6	5.7	1.0	4.1
Total	598.6	79.7	191.8	151.8	64.6	31.0	79.7
-Loan Losses	200.6	21.1	58.2	68.7	15.6	8.8	28.2
-Other Transfers from Res.	8.0	.1	5.9	.9	.2	.1	.8
Ending Balance	390.0	58.5	127.7	82.2	48.8	22.1	50.7

*District Portion

last year even if current loan reserves were not augmented further. Alternatively, District loan-loss reserves now almost equal the total losses charged off from 1969 through 1973. Therefore, reserves appear to be adequate, based upon the criterion of stability.

While total loss reserves may be adequate, there has been a decided decline in the proportion of loan-loss reserves to total loans (see Table 3). In 1969, reserves amounted to 1.94 percent of loans, but by 1973 they had deteriorated to 1.45 percent. By the end of 1974, the proportion had improved slightly, however, to 1.48 percent.

Early in 1974, District member banks had \$359 million in loan-loss reserves (see Table 5), plus an additional capital cushion of \$3,690 million. During 1974, they added \$176 million as a provision for possible loan losses and increased reserves another \$28 million by transferring some capital funds to bad debt reserves and recovering \$36 million from loans previously charged off. From this balance of \$599 million, banks charged off \$201 million in bad loans and transferred out \$8 million. So by the end of the year, reserves for loan losses totaled \$390 million, up 9 percent, despite the much larger losses.

While aggregate loan-loss reserves appear adequate, the same cannot be said of reserves at

some individual banks. At 116 District banks, 1974 loan losses exceeded the amount of reserves held at the beginning of the year. These 116 banks held only 14 percent of the District's loans and 11 percent of the reserves but accounted for 36 percent of losses. This also indicates the concentration of loan losses. And of the 116 banks, 77 had notably large losses in 1974 (over 1 percent of loans). While these banks' total reserves amounted to \$39 million, they charged off \$72 million in bad loans. As a result, these banks had to make large provisions during the year in order to maintain some reserves for future losses. In many respects, these banks more closely approximated the behavior of the "aggressive bank" because their reserves were not sufficient to cover their bad loans. From the standpoint of the "experience function," many individual District banks may not have sufficient reserves without further augmentation.

During 1974, loan losses were much higher than in previous years. The high charge-off rate points out the need for adequate loan-loss reserves. Nearly 20 percent of District member banks charged off loans in excess of their current reserves. To avoid seriously impairing their capital base, many banks have realized the need to raise credit standards and reserve levels.

APPENDIX

Providing for Loan Losses: A Conservative and An Aggressive Bank

	Conservative Bank \$10 Million Capital			Aggressive Bank \$10 Million Capital		
	\$ Thousands					
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Income	6,000	6,000	6,000	6,000	6,000	6,000
Less:						
Expenses	-4,000	-4,000	-4,000	-4,000	-4,000	-4,000
Provision for Loan Losses	-1,000	-1,000	-1,000	- 500	- 500	-2,000
Net Income	1,000	1,000	1,000	1,500	1,500	-0-
Rate of Profits	10%	10%	10%	15%	15%	-0-
Reserves for Loan Losses						
Beginning Balance	-0-	500	1,000	-0-	-0-	-0-
Provision for Losses	1,000	1,000	1,000	500	500	2,000
Actual Losses	- 500	- 500	-2,000	- 500	- 500	-2,000
Ending Balance	500	1,000	-0-	-0-	-0-	-0-

In this example, there are two banks identical in every respect except their approach to providing for loan losses. Each bank generates \$6 million a year in income and has general expenses of \$4 million. The conservative bank takes a relatively prudent approach, which provides for loan losses each year based upon past experience. It knows that in some years loan losses will total less than its provisions for them and that reserves will increase. This happens in years 1 and 2 in the example. At some point, however, it expects loan losses to exceed that year's provision and it will have reserves to fall back on. This happens in year 3, when losses total \$2 million and it charges reserves to meet these losses. Over this period, the conservative bank will report a constant amount of net income and rate of return on capital. Furthermore, when losses are low, the conservative bank will strengthen its balance sheet by building up loan-loss reserves.

The aggressive bank, on the other hand, wishes to report the maximum annual net income and a high rate of return on capital in order to impress the investment community and pay out more dividends to stockholders. In order to maximize net income, this bank elects to charge current income only for that year's loan losses. As a result, the aggressive bank does not build up any reserves. During years 1 and 2, this bank reports net income and a rate of return 50 percent greater than does the conservative bank. But when loan losses rise in year 3, the aggressive bank must charge all of that year's losses against current income and report a net income of zero.

Although each bank ends up with the same results over the three-year period, the pattern is different. (This simple example ignores, among other factors, the income tax effect, which in actuality may be significant.) The conservative bank was able to report a constant profit level and presumably would have paid the same dividends in each of the three years. And, although some investors may not have purchased its stock because its profit rate was lower, this bank did have a strong balance sheet and consistent earnings. The aggressive bank at first may have attracted the attention of investors by its high rate of profits and higher dividends, but by year 3, these previous advantages would no longer be in its favor. By reporting no earnings and having to eliminate dividends entirely, the very reason that investors were attracted to this bank would cause them to desert it as an investment.

While this example assumes that both banks are the same except for the manner in which they provide for loan losses, in actual practice this is not likely to be the case. A bank that takes a conservative approach to loan losses is also likely to take a conservative approach in other respects, and a bank that is aggressive in not providing for loan losses is apt to be aggressive in other parts of its operations. Therefore, while the conservative bank may not grow the most rapidly, it will be a consistent and sound institution. The aggressive bank may draw attention with its rapid growth and new innovations, but its performance may be more volatile and risky as a result.