Loan Quality of Bank Holding Companies

by Gary Whalen

Like most types of depository institu-
tions, commercial banks operate with a
high degree of financial leverage; that is,
their equity typically is far less than the
portfolio of assets on which it bears credit
risk while decreasing its exposure to
significant correlation between the loan
fixed-rate and floating-rate loans. How-
the company's loan portfolio also can affect its
earning loans and capital markets, particularly now that banking
composition ratios can be constructed by
by dividing each subtotal by total loans. Both
and the real estate construction loan ratios
are positively correlated with holding
company loan losses and non-
homogeneous loan and mortgage loan
and consumer loan ratios are
negatively correlated with holding
company loan losses. This finding is
somewhat surprising, as consumer loans
have been viewed as increasingly risky
since the 1979 changes in federal bank-
ruptcy laws.
The rate sensitivity of a holding com-
pany's loan portfolio also can affect its
ability to raise funds without paying
excessive risk premiums might be essen-
tial for survival in today's increasingly com-
petitive financial environment.
The data also suggest that loan quality
affects company performance. Thus, loan quality will have important
effects on the ability of holding companies to raise funds in national
and capital markets, particularly now that banking
organizations will be more sensitive to more detailed information about their
problem loans. Funds availability and cost may be the critical factors influencing
a holding company's prospects for survival and growth in today's increasingly
competitive financial environment.

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Table 3 Loan Quality Ratios vs.
Measures of Performance

<table>
<thead>
<tr>
<th>Loan quality ratios</th>
<th>Performance measures</th>
<th>Nonperforming loans</th>
<th>Net charge offs/average loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent charge off</td>
<td>Net interest margin</td>
<td>1981-82</td>
<td>0.14*</td>
</tr>
<tr>
<td>Average net interest margin</td>
<td>0.25*</td>
<td>1982</td>
<td>0.17</td>
</tr>
<tr>
<td>Average interest payments per share</td>
<td>0.27*</td>
<td>1978-82</td>
<td>0.28</td>
</tr>
<tr>
<td>Average net interest margin per share of equity</td>
<td>0.13</td>
<td>1978-82</td>
<td>0.18</td>
</tr>
</tbody>
</table>

* Significant at 5 percent level, two-tail test.
2. S.D.

The author wishes to thank the following individuals for their advice:
1. Companies were drawn nonrandomly from the twelve states in the study, as follows: Alabama, five; Arkansas, three; Michigan, two; Texas, one; Virginia, two; Washington, one; Wisconsin, four; and the Federal Reserve Bank of Cleveland or of the Board of Governors of
2. Recoveries average 15 to 22 percent of annual gross loan charge offs at bank holding companies.

The views stated herein are those of the author and do not necessarily reflect those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.

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Table 1
Indicators of Holding Company Loan Quality

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.8</td>
<td>3.9</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.31</td>
<td>0.35</td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td>Range</td>
<td>0.05-1.3</td>
<td>0.03-1.8</td>
<td>0.03-1.8</td>
<td>0.03-1.8</td>
</tr>
</tbody>
</table>

Table 2
Loan Quality Ratios vs. Potential Determinants

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>2.29*</td>
<td>0.52*</td>
<td>0.64*</td>
<td>0.64*</td>
</tr>
<tr>
<td>Change in net charge offs/average net loans</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>Change in nonperforming loans/average net loans</td>
<td>0.28*</td>
<td>0.28*</td>
<td>0.28*</td>
<td>0.28*</td>
</tr>
<tr>
<td>Consumer loans/average net loans, 1981</td>
<td>0.22</td>
<td>0.22</td>
<td>0.22</td>
<td>0.22</td>
</tr>
<tr>
<td>Mortgage loans/average net loans, 1981</td>
<td>0.51*</td>
<td>0.51*</td>
<td>0.51*</td>
<td>0.51*</td>
</tr>
<tr>
<td>Real estate construction loans/average net loans</td>
<td>0.09</td>
<td>0.09</td>
<td>0.09</td>
<td>0.09</td>
</tr>
<tr>
<td>Home equity loans/average net loans</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
</tr>
<tr>
<td>Holding company total assets</td>
<td>0.14</td>
<td>0.14</td>
<td>0.14</td>
<td>0.14</td>
</tr>
<tr>
<td>State unemployment rate (averages, 1982)</td>
<td>0.21</td>
<td>0.21</td>
<td>0.21</td>
<td>0.21</td>
</tr>
</tbody>
</table>

Even though loan losses generally increased after 1979, net charge offs have remained below holding company provisions for loan losses. The mean value of this ratio for the sample companies was 80.7 percent in 1980 and 1981, and it even declined slightly in 1982. The median value behaved similarly. Thus, sample holding companies evidently were able to boost their loan-loss reserves over the 1979-82 interval. Again, considerable variation among individual companies is apparent, but this finding does not suggest that net loan losses do not increase over time.

The larger means of these last two ratios (ratiow 6 and 7, net charge offs and non-performing loans) are due to holding companies with large loan-portfolio volumes and large charge-offs in a single year. These large charge-offs increase the mean relative to the median. However, in 1982 the minimum and maximum values of this ratio are both above their respective means in 1980 and 1981, and this ratio is very narrow. This finding, along with the decrease in the size of the standard deviation relative to the mean, suggests that loan quality became a bigger problem for many of the sample companies in 1982.

Examining net charge offs in relation to a bank's holding company's total assets (ratio 6), a bank holding company against anticipated loan losses is the valuation reserve for excess loan losses. This reserve is created because banks have been permitted to deduct amounts from taxable income for prospective loan losses (the provision for loan losses) in excess of their realized net loan charge offs in any particular year. At the end of the year, a banking organization's tax-loss reserve is "charged" against its loan-loss reserves rather than against its current earnings. An organization's earnings tax-loss reserve, in turn, is insolated from its loan losses, as long as its net loan charge offs in any year are less than its total loan-loss reserves.4

This discussion suggests that net charge offs should be compared not only with a holding company's total volume of net charge offs (ratio 2, table 1) but with its total loan-loss reserves. Over the past four years, loan-loss reserves in general have been sufficient to absorb realized loan losses. Like the net charge off ratio, the mean value of net charge offs relative to loan-loss reserves has not increased significantly over the past four years, but it was apparent, however, from 1982 than in the three previous years. Again, a great deal of variation in this ratio is associated with loan-loss reserves in companies in every year. This ratio is very high for several institutions in any one year; however, this ratio remains low relative to the median. Again, the minimum and maximum values of this ratio are both above their respective means in 1980 and 1981, and this ratio is very narrow. This finding, along with the decrease in the size of the standard deviation relative to the mean, suggests that loan quality became a bigger problem for many of the sample companies in 1982.

The mean value of ratio 7 has increased over the 1980-81 interval, and it should be even higher in 1982 because banks have been permitted to enhance their loan-loss reserves more than one year plus rising loan losses. This finding, along with the decrease in the size of the standard deviation relative to the mean, suggests that loan quality became a bigger problem for many of the sample companies in 1982.

Equity capital is the final defense against unusually large loan losses. In ratios 5 and 7, a bank holding company against anticipated loan losses is the valuation reserve for excess loan losses. The provision for loan losses (the ratio 3, table 1) has declined steadily since 1979. However, earnings available to cover loan losses at a typical holding company remain five times greater than 1982 charge offs. But this discussion suggests that net charge offs should be compared not only with a holding company's total volume of net charge offs (ratio 2, table 1) but with its total loan-loss reserves.