

TOP PERFORMING SMALL BANKS: MAKING MONEY THE OLD-FASHIONED WAY

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Introduction

Average profit rates of small banks (assets less than \$100 million) declined in the 1980s, but about 2 percent had persistently high returns. Some have attributed persistent profits to collusion, risk-taking, or chance. In contrast, this study finds that consistently profitable small banks were those that stressed basic banking, in other words, acquiring low-cost funds and making high-quality investments.

Small bank average profitability declined in the 1980s for several reasons. Losses at many small banks, especially at those located in regions of the country beset with problems in the agricultural or oil industries, accounted for much of the decline. Some of the decline may have resulted from the increased competition in the retail loan and deposits markets. Federal legislation expanded the number of retail deposit products banks and thrifts could offer and deregulated interest rates on existing deposits while allowing thrifts to compete more effectively with banks for both deposits and loans. The specific acts were the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA) and the Garn-St. Germain Depository Institutions Act of 1982.

In this study we compare small banks having persistently high profits to all small banks over the period 1982 through 1987. We identify differences in portfolio structure, income, and expense between the two groups of banks located throughout the country. Moreover, to determine how the factors associated with high performance may have differed from region-to-region, high performers and all small banks are grouped by region and compared on a regional basis.¹ Table I summarizes the significant differences

between the average high-performance small bank and the average small bank.

Theories of Persistent Profits

Mueller (1986) observed that in the long run, above- and below-average profits tend to converge toward the industry norm. Competition should eliminate abnormally high profits over time. Where *persistent* high profits occur, as they did at the 206 high-performance banks in our study, economists offer a variety of explanations, including the following four:

Collusion It has been argued that firms can maintain high profits by agreeing explicitly or tacitly to limit their competitive behavior. Collusion becomes more difficult as the number of competitors in a market increases; that is, as market concentration declines. We would expect the number of competitors in banking markets to be larger in more populated areas. Thus, if collusion is important to profitability, high-profit banks should be found more frequently in less populated areas. In our study, we defined a populated area as any metropolitan statistical area (MSA). While our data did show that non-MSA small banks were likelier to be persistently profitable than were MSA small banks, the difference was not significant. Therefore we find no evidence that collusion may have been responsible for the strong performance of the high-profit small banks. Using different proxies for market concentration, Kwast and Rose (1982) and Wall (1985) reached the same conclusion.

Greater Risk-Taking The consistently above-normal profits produced by the 206 high-performance small banks identified in our study cannot be explained by greater risk-taking since these banks operated in a less risky manner than average for all small banks. They had fewer loan losses than their peers, indicating that they were taking less credit risk. They were less dependent on debt financing because of stronger equity-to-assets ratios. Finally, they limited their credit and liquidity risks by holding more securities than did their peer group.

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¹ The regions are shown in Table II and are the same as those used by the Federal Deposit Insurance Corporation (FDIC) in its "Quarterly Banking Profile" (1989).

Table I

SUMMARY OF MAJOR FINDINGS OF STUDY**SIGNIFICANT DIFFERENCES BETWEEN HIGH-PERFORMANCE SMALL BANKS AND ALL SMALL BANKS:**

<u>Area of Difference</u>	<u>High-Performance Small Banks vs. All Small Banks</u>
Interest Income/Total Assets High-performance small banks produced significantly more interest income relative to assets than the average for small banks while bearing less credit risk	Higher
Loans/Total Assets The high-performance small banks had a significantly lower ratio of loans to total assets than the average small bank, meaning that they bore less credit risk since loans generally are more risky than the other major category of assets held by banks—securities	Lower
Securities/Total Assets Higher ratio at high-performance banks indicating lower credit risk	Higher
Municipal Securities/Total Securities High-performance banks had more income to shelter so they made greater use of the tax advantage of municipals	Higher
Earning Assets/Total Assets	Higher
Interest Expense/Total Assets High-performance banks funded themselves at lower cost by emphasizing a traditional liability structure and a conservative capital structure	Lower
Demand Deposit/Total Liabilities High-performance banks made greater use of the most traditional of funding sources	Higher
Interest Expense/Interest-Bearing Liabilities High-performance banks made greater use of low-cost retail deposits to gather funds	Lower
Capital/Total Assets High-performance banks had a stronger or more conservative capital structure	Higher
Noninterest Expense/Total Assets High-performance banks held these expenses to a lower level indicating a more efficient use of resources	Lower
Assets/Employees High-performance banks required fewer employees per million dollars in assets	Higher
Salaries/Employees High-performance banks' employees were better paid	Higher
Loan Loss Provisions/Total Assets High-performance banks limited their lending and only lent to high-quality borrowers—restraining their credit risk	Lower
Loan Charge-Offs/Total Loans Lending to high-quality borrowers meant fewer loan charge-offs at high-performance banks	Lower
Nonperforming Loans/Total Loans Lending to high-quality borrowers meant high-performance banks carried fewer bad loans on their books	Lower

FACTORS NOT SHOWING SIGNIFICANT DIFFERENCES BETWEEN HIGH-PERFORMANCE SMALL BANKS AND ALL SMALL BANKS:

Location in a Metropolitan Area
 Bank Holding Company Affiliation
 Loan Income/Total Loans
 Securities Income/Total Securities
 Loan Portfolio Composition
 Loan Maturity

Noninterest Income/Total Assets
 High-performance small banks placed no more emphasis on these less traditional sources of income than the average small bank

Fee Income/Total Assets
 Gains or Losses on Securities/Total Assets

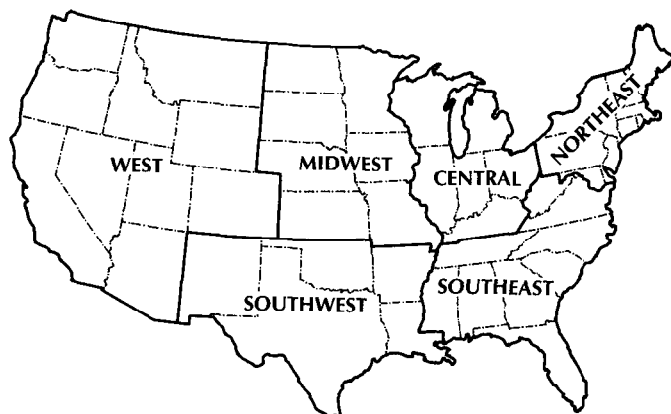
Table II
SMALL BANKS BY GEOGRAPHIC REGION, 1987^a

Region ^c	All Banks		High-Performance Banks ^b	
	Number	Number	As a Percent of All Small Banks	As a Percent of All High-Performance Banks
Northeast	377	25	6.6	12.1
Southeast	1,196	54	4.5	26.2
Central	2,290	44	1.9	21.4
Midwest	2,841	34	1.2	16.5
Southwest	1,909	33	1.7	16.0
West	880	16	1.8	7.8
Total	9,493	206		100.0
Average			2.2	

^a Small banks are those with end-of-year assets of \$100 million or less that were opened on or before December 31, 1982.

^b High-performance small banks have ROAs of 1.5 percent or more for all years, 1982-87.

^c For regions, see map below.



Unique Qualities These include leadership in the market, provision of services other firms cannot duplicate, having the dominant market share, or being first to arrive in the market. Perhaps one or more of these apply to the high-performance banks.

Stochastic Process Persistent profits may result from historical chance. The basic idea of the stochastic process, as explained by Alchian, is that "where there is uncertainty, people's judgments and opinions, even when based on the best available evidence, will differ; no one of them may be making his choice by tossing coins; yet the aggregate set of actions of the entire group of participants may be indistinguishable from a set of individual actions, each selected at

random."² According to this theory the high-performance banks in this study may have selected, by chance, the management, investment, and lending policies that turned out to be very profitable during the 1980s. To test if this was so, the average ROA for the 206 high-performance small banks and all small banks were calculated for each year between 1970 and 1981. The average for the high-performers was considerably above the average for all small banks for each of the twelve years, indicating that the high performers of the 1980s produced supernormal profits during the 1970s as well. Chance alone is an unlikely explanation of almost two decades of persistently high profits.

Prior Empirical Research

Several other analysts have attempted to pinpoint factors associated with bank profitability. A study of bank profitability in the 1970s by Kwast and Rose (1982) included large banks from throughout the nation. The authors determined that neither pricing, operating costs, market concentration, or macroeconomic effects were responsible for the higher earnings of some banks. They hypothesized, instead, that differences in regional factors, portfolio make-up, or managerial abilities must explain the better earnings of high-performance banks. Wall (1985) examined small and mid-sized banks over the period 1972 to 1981 to identify factors important to bank profits. Wall found that consistently profitable banks had lower interest and noninterest expenses than did their less profitable counterparts because of more capital, more demand deposits, slightly lower rates paid on liabilities overall, greater holdings of securities, and more efficient management. Wall concluded that interest and noninterest income at consistently profitable banks was no

higher than at less profitable banks, and that asset size, number of branches, and market concentration did not explain higher earnings. Wall's findings on the factors associated with small and mid-sized bank profits in the 1972 through 1981 period differ little from our findings for small banks in the 1980s.

Methodology

Data for our study came from the Reports of Condition and Income (call report), a detailed financial

² Alchian (1950), p. 216. Alchian is an excellent background source for understanding the issues involved in stochastic growth. Also see Nelson and Winter (1982) and Steindl (1965).

statement filed quarterly by banks with their regulators. A set of income, expense, and portfolio ratios were calculated for all small U.S. banks established in 1982 or before. Ratios were then averaged across all small banks and all high-performance small banks throughout the nation for each year from 1982 through 1987.

Because economic conditions varied from region to region, ratios for both groups of banks were also computed on a regional basis. For each of the six years, the average ratios, regional and national, for high-performance small banks and all small banks were compared using a standard t test to determine statistically significant differences (see Table III). A difference between the ratios of high-performance small banks and all small banks is considered to be due to factors other than chance if the t statistic is significant at the 5 percent level. Regional patterns in the ratios are identified and discussed.

The same banks are included in the high-performance group for each year of the study while the number of banks in the all-small-banks category varies. The all-small-banks category, for any given year, includes all banks throughout the nation that had assets less than \$100 million at the end of that

year and had been established in 1982 or before.³ The number of banks in this category declined each year, from 12,353 in 1982 to 9,493 in 1987 as the banks grew in asset size, merged, or failed. To be included in the high-performance subset a bank must have had no more than \$100 million in assets and must have produced a return on assets (ROA) greater than 1.5 percent for each of the six years from 1982 through 1987. Banks with ROAs greater than 1.5 percent have very strong profits. Banks established after 1982 could not have had high ROA in that year, so are excluded from the high-performance group by our convention that requires high ROA in every year. There are 206 high-performance banks. They are listed in Table IA in the appendix.

The period 1982-87 is used in this study for two reasons. First, it offers the most recent extended period since the passage of DIDMCA and the Garn-St. Germain Act. Second, it provides an interval long enough to be sure that luck or accounting choices alone did not influence the selection of the high-performance small banks.

³ Unless otherwise stated, the phrase *all small banks* or *average small bank* should be assumed to include only those banks meeting these two requirements.

Table III

COMPARISON OF SELECTED RATIOS: HIGH-PERFORMANCE BANKS VERSUS ALL SMALL BANKS

	1982						1983						1984									
	NE	SE	CN	MW	SW	W U.S.	NE	SE	CN	MW	SW	W U.S.	NE	SE	CN	MW	SW	W U.S.				
1		P	P		P	P	P	P	P	P	P		P		na	na	na	na	na	na	1	Interest Income/Assets
2	N	N	N	N		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2	Interest Expense/Assets
3	N						N														3	Noninterest Income/Assets
4	N		N		N	N	N		N		N	N		N		N	N	N			4	Noninterest Expense/Assets
5	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5	Loan Loss Provision/Assets
6						N															6	Securities Gains/Assets
7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	7	Return on Assets
8		N	N	N	N	N	N		N	N	N	N	N		N	N	N	N	N	N	8	Loans/Assets
9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	9	Securities/Assets
10	P	P	P	P	P		P	P	P	P	P		P	P	P	P	P		P		10	Equity/Assets
11	N	N	N	N	N	N		N	N		N	N					N				11	Total Assets

na indicates that data were not available.

P indicates that the mean for the ratio for the high-performance small banks (h.p.s.b.) exceeded that for all small banks and was statistically significantly different at the 1 percent level.

P indicates that the mean for the ratio for the h.p.s.b. exceeded that for all small banks and was statistically significantly different at the 5 percent level.

Blank space indicates that there was no significant difference between h.p.s.b. and all small banks for the ratio.

N indicates that the mean for the ratio for all small banks exceeded that for the h.p.s.b. and was statistically significantly different at the 1 percent level.

N indicates that the mean for the ratio for all small banks exceeded that for the h.p.s.b. and was statistically significantly different at the 5 percent level.

SEE TABLE IIA IN APPENDIX FOR RATIO AND T STATISTIC VALUES.

Characteristics of High-Performance Small Banks

Table II shows that high-performance small banks were not distributed proportionately throughout the country. The Northeast had the highest, and the Midwest the lowest, proportion of high-performance small banks relative to all small banks. During the 1982 through 1987 period, there were substantial differences in regional economic performance which likely caused some of the corresponding regional differences in the proportion of high-performance small banks. Slumping prices for energy, real estate, and farm commodities had adverse effects on the Southwest, Midwest, and Central regions, while strong economic growth was occurring in the Northeast and Southeast through the period.

Although not shown in Table II, approximately 30 percent of high-performance small banks were headquartered in or near large population centers, represented here by metropolitan statistical areas (MSAs), while the figure averaged a slightly higher 33 percent for all small banks. Only in 1982 and 1983 were the differences statistically significant when small banks, high-performance versus total, were

compared for the nation. When tested by region and across years, only in the Southwest were high-performance small banks significantly less likely to be located in MSAs.

The asset size of the average high-performance small bank was \$40.8 million in 1987 compared with \$37.5 million for all small banks. Asset size of the average high-performance small bank increased by 56 percent from 1982 through 1987, while the asset size of the average small bank increased by only 20 percent. The percentage of high-performance and all small banks that were subsidiaries of bank holding companies (BHCs) increased through the period. In 1987, 46 percent of high-performance and 66 percent of all small banks were subsidiaries of BHCs. A test was performed to determine if the difference in BHC affiliation between the two groups of banks was statistically significant across the years. For the nation as a whole the difference was significant, but statistically significant regional differences were not found except in the Northeast and Southwest regions. Firm conclusions about the relationship between BHC ownership and profits based on these data are difficult to draw.

	1985							1986							1987							
	NE	SE	CN	MW	SW	W	U.S.	NE	SE	CN	MW	SW	W	U.S.	NE	SE	CN	MW	SW	W	U.S.	
1	P	P	P		P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	1
2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2
3																						3
4	N		N		N	N	N	N		N		N	N	N	N		N		N	N		4
5	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5
6		N					N		N		N	N	N									6
7	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	7
8		N	N	N	N	N	N	N	N	N	N	N		N	N	N	N	N		N		8
9	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	9
10	P	P	P	P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	10
11																						11

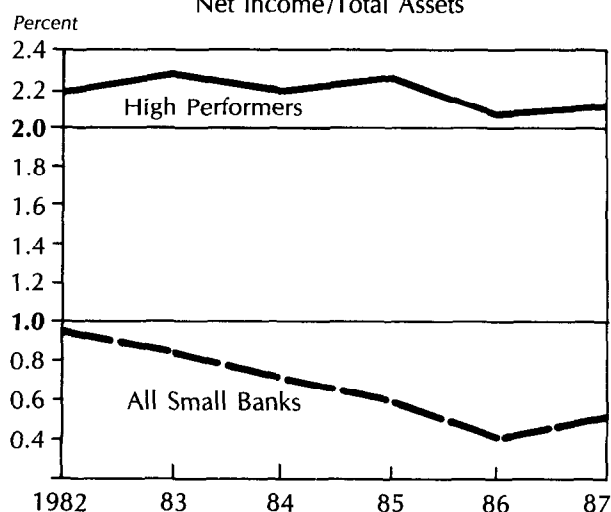
How The High Performers Did It

The high-performance small banks identified in this study differed from the average small bank in several ways. They depended more on low-cost demand deposits, invested more in securities (especially long-term and municipal securities), made more high-quality loans, and were more highly capitalized. As a result, the high-performance small banks produced higher interest income, lower interest expense, lower noninterest expenses, and lower provision for loan losses than did the average small bank. The high-performance small banks did not differ significantly from the average small bank in interest income from loans and securities, in loan portfolio makeup, in noninterest income, or in income from securities gains. There was little variation among regions in how the high-performance small banks operated. As shown in the chart, average ROA for the 206 high performers exceeded 2 percent in every year and was fairly stable, while average ROA for all small banks declined in every year except 1987 and ended the period at .51 percent.

Interest Income Except for one or two years' observations for three regions, high-performance small banks produced significantly more tax-equivalent interest income relative to assets than the average for all small banks (see Table III, line 1).⁴ Among the major categories of income and expense, higher interest income was second only to lower interest expense as a contributor to the earnings differential of the high-performance banks across the years and regions of the study. Averaged for the six years of the study, high-performance small banks' interest income relative to assets was 58 basis points higher than the average small bank's. Wall (1985) found that higher interest income was not associated with higher profits for small and medium-sized banks between 1972 and 1981. Greater pressure on interest expense resulting from deregulation in the early 1980s of rates paid on deposits may have made interest income more important to profitability for our study period. Interest income relative to assets depends on the earnings per dollar of the various types of interest-

⁴ The interest income on most securities issued by local and state governments is exempt from federal income taxes. These securities, therefore, pay lower rates of interest than taxable securities of equivalent risk and maturity. To put the tax-exempt income on a basis comparable to the pretax return on taxable securities, or on a tax-equivalent basis, an adjustment is made to income from state and local securities. For banks with positive profits before taxes, income from state and local securities is increased by $t/(1-t)$ times the lesser of profits before taxes or interest earned on state and local securities, where t is the bank's marginal federal tax rate.

ROA OF SMALL BANKS
Net Income/Total Assets



earning assets, their proportions in the asset portfolio, and the proportion of nonearning assets to all assets.

LOANS The difference between loan income relative to total loans at the high-performance small banks and at the average small bank was not significant for most regions across years or for the national average except in 1982 and 1983. As shown on line 8 of Table III, the ratio of total loans to total assets was significantly lower for high performers than for all small banks. In the Southwest and Midwest where agriculture and oil industry problems were prevalent, the high performers eschewed lending, especially in the later years of the study. While at the national level the high-performance small banks differed statistically from the average of all small banks in terms of loan composition, the regional data do not corroborate this finding. The high performers in the West and Midwest made fewer commercial and industrial loans than average for small banks in those regions and high-performance small banks in the Southeast made more loans to individuals than average for small banks in that region. Other regions show no consistent differences in portfolio makeup. There was no difference in the maturities of loans made by high performers and all small banks.

SECURITIES High-performance small banks had a much higher ratio of securities to total assets than did all small banks (Table III, line 9). The difference was statistically significant across all regions and all years in the study. High-performance banks also had more municipal securities than their counterparts, accounting for most, but not all, of the higher

securities-to-assets ratios of high-performance banks. Municipal securities are generally tax-exempt and pay tax-adjusted rates comparable to other securities only for those holders with high marginal tax rates. As a bank's net income increases, its ability to make use of the tax-free income these securities generate increases. Accordingly, high-income banks would be expected to hold more municipal securities than less profitable banks.

At the national level the ratio of taxable securities to total assets was higher at the high-performance small banks than at the average small bank for the years 1982 through 1984 only. On a regional basis, the difference was consistently significant only for the Southwest, probably because of the lack of good lending opportunities in depressed oil industry areas of the region.

On average the high-performance banks generally had more securities with maturities greater than one year than did their counterparts. The difference was significant for the nation across all years but only consistently different for three of the regions in all the years.

High-performance small banks did not consistently earn more on securities than did all small banks. Securities income relative to total securities was significantly greater at the high-performance small banks than at the average small bank in some years but not in others at the national level and varied from region to region across the years. In addition, there was no significant difference between securities gains and losses relative to assets between high-performance small banks and all small banks (Table III, line 6). Securities gains or losses are realized when a bank sells a security, prior to the maturity of the security, for a price different than that paid to purchase it.⁵

EARNING ASSETS-TO-TOTAL ASSETS The national average proportion of earning assets-to-total assets at high-performance small banks was 91.4 percent in 1987 compared with 90.4 percent at the average small bank. High-performance small banks' earning assets-to-total assets ratio exceeded the average small banks' ratio significantly in every year from 1982 through 1987 at the national level and for most regions across the years. This accounts for some of the higher interest income relative to assets of the high performers. Examples of nonearning assets are buildings, equipment, cash, and foreclosed real estate.

⁵ For additional information on the relationship between market rates of interest and securities prices see Gup, Fraser, and Kolari (1989), Chapters 2 and 5.

Interest Expense Interest expense relative to assets in 1987 was 3.9 percent for the average of all high-performance small banks in the nation and 4.6 percent for the average of all small banks. The difference was significant across all regions and years with the exception of the Southwest and West regions in 1982 (Table III, line 2). Among the major income and expense categories, interest expense was the largest contributor to higher ROA at the high-performance banks. Interest expense relative to assets depends on the proportion of liabilities that are interest-paying, the rates paid on the interest-paying liabilities, and the level of the capital-to-assets ratio.

DEMAND DEPOSITS TO TOTAL LIABILITIES The major liability not paying interest is demand deposits. The high-performance small banks had a lower level of interest expense relative to assets than the average small bank, in part because they had more demand deposits. The difference between the ratio of demand deposits to total liabilities for high-performance small banks and that of the average small bank was significant in all years for the nation and for varying regions across the years.

RATES PAID ON INTEREST-BEARING LIABILITIES Interest expense relative to interest-paying liabilities was lower at the high-performance small banks than at the average small bank. The difference was significant across most regions and at the national level for all six years and accounted for one-third to one-fourth of the total difference in interest expense relative to assets. For the national average, the high-performance banks were able to gather a higher proportion of their liabilities from passbook and statement savings, normally the least costly of the interest-bearing liabilities, and were less dependent on expensive large certificates of deposit (CDs) than average for all small banks throughout the nation. Again, the regional data are not consistent in their support of this finding. High performers made greater use of savings only in the Northeast and Central regions and lower use of large CDs in only the Southwest and West regions. Other regions show no consistent patterns.

CAPITAL-TO-ASSETS RATIO The average high-performance small bank had a significantly greater equity-to-assets ratio than the average for all small banks (Table III, line 10). That is, the high-performance banks had more capital than did their counterparts. The difference was significant across all regions in all years except for the West and was significant at the national level for all years. Since equity funds do not pay interest, they do not add to interest expenses, so that higher ratios of equity-

to-assets tended to lower interest expense-to-assets ratios. Because one method of increasing equity is to retain earnings, banks that maintain consistently high-earnings can be expected to have more capital than the average bank.

Noninterest Income and Expense With the exception of the Northeast region in 1982 and 1983, non-interest income from fees and other sources was never, in the period under study, significantly different at the high performers than at small banks in general (Table III, line 3). High-performance small banks apparently did not make fee income a priority.

The high-performance banks had lower noninterest expense relative to assets than did their counterparts except in the Southeast and Midwest regions (Table III, line 4). Relative to assets, the difference averaged 37 basis points for the 1982-87 period. Non-interest expense includes salaries expense, bank premises and fixed asset expenses, and a category reported on the call report as "other noninterest expense," including legal fees, deposit insurance fees, advertising expenses, management fees paid to parent BHCs, and other expenses. Bank premises and fixed assets expenses and other noninterest expenses were significantly lower at high-performance small banks, though salaries expense was not. Assets per employee also were higher at high-performance banks. However, higher average salaries at those banks made salaries relative to assets about the same as at the typical small bank. A lower noninterest expense-to-assets ratio could indicate more efficient management. But it is difficult to tell simply from call report data what, if anything, was being managed more efficiently.

As mentioned previously, a smaller percentage of high-performance small banks were BHC subsidiaries than was the case for all small banks. Since management fees paid to parent BHCs are an expense faced only by BHC subsidiaries, banks not owned by BHCs might tend to show up more frequently in the high-performance group. Management fees are included in other noninterest expenses on the call report. Small BHC subsidiary banks had only a five basis points higher other noninterest expense in 1987 than did small banks without a holding company affiliation. This difference is so small it is not likely to have biased the selection of high-performance small banks in favor of non-BHC banks.

Provision for Loan Losses For every region in every year and for the national averages for every year, provision for loan losses relative to assets was significantly lower at high-performance small banks than at the average small bank (Table III, line 5). Provision for loan losses relative to assets was, on average

for the six years of the study, 49 basis points lower at the high-performance banks. By substituting investments in securities for lending, that is, by holding fewer loans relative to assets, the high-performance banks decreased the proportion of the asset portfolio subject to credit risk and therefore lowered their level of loan losses relative to assets. In addition, the high-performance banks made higher quality loans. They had significantly fewer charge-offs and nonperforming loans relative to total loans than other banks, suggesting that the high performers lent to low-risk borrowers. While many small banks in depressed regions were having serious problems with their loan portfolios, some banks in those same regions were able to prosper. For example, 20 of the 206 high-performance small banks were located in Texas, where many banks were having trouble producing profits. As of 1987, there were 1,066 small banks in Texas, so that 1.9 percent were high-performance, close to the national average.

Conclusion

While the average small bank's profits were fairly low and falling for most of the 1982 through 1987 period, there were 206 banks, out of 9,493 small banks (assets of \$100 million or less) operating in 1987, that had a return on assets of 1.5 percent or more in each of those six years. Although there were fewer high-performance small banks in geographic regions that had economic difficulties, high-performance banks were found in all regions. High-performance small banks seemed to choose similar strategies in all regions.

The high-performance banks did not engage in exotic financial activities. Instead, they did a very good job of basic banking—acquiring funds at low cost and making high-quality, profitable investments. Wall (1985) found much the same for the 1972 through 1981 period. Our study provides evidence that the deregulation of the early 1980s did not change the methods for producing profits at small banks.

The high-performance small banks earned abnormally high returns for long periods. On the contrary, economic theory suggests that abnormally high profits should be short-lived. Other banks, seeking higher returns, will engage in similar activities and drive down returns to the industry norms. The high-performance banks we studied were able to maintain persistent profits in the face of competition. Importantly, the high-performance banks were able to acquire funds at lower cost than their competition through demand and other low-cost deposits. How they were able to attract these deposits in the face of competition is a subject that deserves further research.

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APPENDIX

Table IA

HIGH-PERFORMANCE SMALL BANKS

Bank	City	State	Bank	City	State
Brunswick Bank & Trust Co.	Manalapan TWP	NJ	First National Bank in Sylacauga	Sylacauga	AL
Community Bank of Bergen City	Maywood	NJ	National Trust Co. of Ft. Myers	Ft. Myers	FL
Putnam County National Bank of Carmel	Carmel	NY	Peoples Bank of Graceville	Graceville	FL
National Bank of Coxsackie	Coxsackie	NY	Peoples State Bank	Groveland	FL
First National Bank of Dryden	Dryden	NY	Springfield Commercial Bank	Springfield	FL
National Bank of Florida	Florida	NY	Capital City Second National Bank	Tallahassee	FL
First National Bank of Hermon	Hermon	NY	Wilcox County State Bank	Abbeville	GA
Bank of Millbrook	Millbrook	NY	Braselton Banking Co.	Braselton	GA
National Bank of Stamford	Stamford	NY	Bank of Camilla	Camilla	GA
First National Bank of Wyoming	Wyoming	DE	First National Bank of Polk County	Cedartown	GA
First National Bank of Tuckahoe	Tuckahoe	NJ	Merchants & Farmers Bank	Comer	GA
Citizens National Bank of Ashland	Ashland	PA	Commercial Bank	Crawford	GA
East Prospect State Bank	East Prospect	PA	Bank of Danielsville	Danielsville	GA
Citizens National Bank of Lansford	Lansford	PA	Darien Bank	Darien	GA
New Tripoli National Bank	New Tripoli	PA	Fairburn Banking Co.	Fairburn	GA
Union Bank & Trust Co.	Pottsville	PA	Citizens Bank	Folkston	GA
Summit Hill Trust Co.	Summit Hill	PA	Bank of Hazlehurst	Hazlehurst	GA
Guaranty Deposit Bank	Cumberland	KY	Hinesville Bank	Hinesville	GA
Harlan National Bank	Harlan	KY	Wilkinson County Bank	Irwinton	GA
Jackson County Bank	McKee	KY	Bank of La Fayette	La Fayette	GA
First State Bank	Manchester	KY	Farmers & Merchants Bank	Lakeland	GA
Farmers & Trades Bank	Mt. Olivet	KY	Security State Bank	McRae	GA
Baltic State Bank	Baltic	OH	Pembroke State Bank	Pembroke	GA
Custar State Bank Co.	Custar	OH	First State Bank	Stockbridge	GA
Corn City State Bank	Deshler	OH	Farmers & Merchants Bank	Summerville	GA
Junction City Banking Co.	Junction City	OH	Bank of Thomson	Thomson	GA
Farmers National Bank of Plain City	Plain City	OH	Darby Bank & Trust Co.	Vidalia	GA
Farmers Bank	West Union	OH	First National Bank of West Point	West Point	GA
Valley National Bank	Freeport	PA	First National Bank in Deridder	Deridder	LA
Peoples National Bank of Rural Valley	Rural Valley	PA	Bank of Sunset & Trust Co.	Sunset	LA
National Capital Bank of Washington	Washington	DC	Citizens Bank & Trust Co. of Grainger Co.	Rutledge	TN
Centreville National Bank of Maryland	Centreville	MD	Abingdon Bank & Trust Co.	Abingdon	IL
Caroline County Bank	Greensboro	MD	First Trust & Savings Bank	Albany	IL
Bank of Southern Maryland	La Plata	MD	Algonquin State Bank	Algonquin	IL
New Windsor State Bank	New Windsor	MD	District National Bank of Chicago	Chicago	IL
Bank of Ocean City	Ocean City	MD	Irving Bank	Chicago	IL
Bank of Currituck	Moyock	NC	National Bank of N. Evanston	Evanston	IL
Avery County Bank	Newland	NC	First National Bank of Fairmount	Fairmount	IL
Bank of Heath Springs	Heath Springs	SC	First Bank & Trust Co.	Palatine	IL
Latta Bank & Trust Co.	Latta	SC	Reynolds State Bank	Reynolds	IL
Dorn Banking Co.	McCormick	SC	First National Bank of Schiller Park	Schiller Park	IL
Bank of Ridgeway	Ridgeway	SC	Tiskilwa State Bank	Tiskilwa	IL
Bank of York	York	SC	Vermont State Bank	Vermont	IL
Middleburg National Bank	Middleburg	VA	Auburn State Bank	Auburn	IN
First & Citizens Bank	Monterey	VA	Rockville National Bank	Rockville	IN
Tazewell National Bank	Tazewell	VA	Iowa State Bank	Calmar	IA
Bank of Waverly	Waverly	VA	Ossian State Bank	Ossian	IA
Farmers Bank	Windsor	VA	Palmer State Bank	Palmer	IA
Lincoln National Bank of Hamlin	Hamlin	WV	Home State Bank	Royal	IA
First Clark National Bank of Northfork	Northfork	WV	Solon State Bank	Solon	IA
First State Bank & Trust Co.	Rainelle	WV	State Bank of Hesperia	Hesperia	MI
Western Greenbrier National Bank	Rainelle	WV	Cleveland State Bank	Cleveland	WI
Bank of War	War	WV	Citizens Bank	Delavan	WI
Citizens Bank	Fayette	AL	Kilbourn State Bank	Milwaukee	WI
First National Bank of Fayette	Fayette	AL	Palmyra State Bank	Palmyra	WI
Peoples Bank of Greensboro	Greensboro	AL	Sharon State Bank	Sharon	WI
Peoples Bank	Red Level	AL	Bank of South Wayne	South Wayne	WI

Bank	City	State	Bank	City	State
Stoughton State Bank	Stoughton	WI	Citizens Bank & Trust Co.	Smithville	MO
First National Bank of Altheimer	Altheimer	AR	Ashton State Bank	Ashton	NE
Farmers & Merchants Bank	Des Arc	AR	State Bank of Du Bois	Du Bois	NE
Leachville State Bank	Leachville	AR	First National Bank of Friend	Friend	NE
Smackover State Bank	Smackover	AR	First National Bank of Hooper	Hooper	NE
Egyptian State Bank	Carriers Mills	IL	First State Bank	Randolph	NE
Bank of Christopher	Christopher	IL	State Bank of Riverdale	Riverdale	NE
State Bank of Farina	Farina	IL	State Bank of Table Rock	Table Rock	NE
First National Bank of Staunton	Staunton	IL	Bank of Talmage	Talmage	NE
Fort Knox National Bank	Fort Knox	KY	First National Bank of West Point	West Point	NE
Fredonia Valley Bank	Fredonia	KY	American Exchange Bank	Lindsay	OK
Poole Deposit Bank	Poole	KY	Bank of Locust Grove	Locust Grove	OK
Sacramento Deposit Bank	Sacramento	KY	Park State Bank	Nicomar Park	OK
Peoples Bank	Shepherdsville	KY	First National Bank of Pryor	Pryor	OK
Iuka Guaranty Bank	Iuka	MS	Vian State Bank	Vian	OK
Bank of Okolona	Okolona	MS	Farmers State Bank	Pine Bluffs	WY
First National Bank of Pontotoc	Pontotoc	MS	Western Commerce Bank	Carlsbad	NM
Mechanics Savings Bank	Water Valley	MS	Citizens Bank	Tucumcari	NM
Citizens Bank	Dexter	MO	First National Bank of Albany	Albany	TX
Bank of Wellsville	Wellsville	MO	Farmers State Bank	Bertram	TX
First Bank of Coon Rapids	Coon Rapids	MN	First State Bank	Big Sandy	TX
Farmers State Bank	Lester Prairie	MN	First State Bank	Columbus	TX
Town & Country Bank—Maplewood	Maplewood	MN	Medina Valley State Bank	Devine	TX
Farmers State Bank	Rothsay	MN	Dilley State Bank	Dilley	TX
First WE Savings Bank of St. Louis Park	St. Louis Park	MN	First National Bank in Falfurrias	Falfurrias	TX
Northern State Bank	Thief River Falls	MN	First State Bank	Frankston	TX
Peoples State Bank	Warren	MN	First National Bank of Hebronville	Hebronville	TX
Farmers State Bank	Conrad	MT	Border Bank	Hidalgo	TX
Sargent County Bank	Forman	ND	Citizens National Bank of Hillsboro	Hillsboro	TX
Stock Growers Bank	Napoleon	ND	Industry State Bank	Industry	TX
First Western Bank	Wall	SD	Muenster State Bank	Muenster	TX
Security National Bank of Durand	Durand	WI	First National Bank of Odonnell	Odonnell	TX
Security State Bank	Ladysmith	WI	First State Bank	Premont	TX
Firstbank of Gunbarrel NA	Boulder County	CO	Peoples State Bank	Rocksprings	TX
Metropolitan State Bank	Commerce City	CO	Citizens Bank	Rusk	TX
Century Bank & Trust Co.	Denver	CO	First State Bank	Rusk	TX
Omnibank Southeast	Denver	CO	Eisenhower National Bank	San Antonio	TX
Haxtun Community Bank	Haxtun	CO	First State Bank	Three Rivers	TX
State Bank of Wiley	Wiley	CO	First National Bank in Coachella	Coachella	CA
Fort Riley National Bank	Fort Riley	KS	Bank of Montreal California	San Francisco	CA
Miners State Bank	Frontenac	KS	First Bank of San Luis Obispo	San Luis Obispo	CA
Gypsum Valley Bank	Gypsum	KS	Torrance National Bank	Torrance	CA
First National Bank of Howard	Howard	KS	First National Bank of Ely	Ely	NV
Citizens State Bank	Moundridge	KS	Pioneer Trust Co.	Salem	OR
Farmers State Bank	Winona	KS	Barnes Banking Co.	Kaysville	UT
Bank of Leeton	Leeton	MO	First National Bank of Morgan	Morgan	UT

