



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

The structure of the financial services industry in rural areas is undergoing substantial transformation. The consolidation and restructuring of rural financial markets, coupled with the fundamental changes in agriculture, are affecting the delivery of credit to agricultural producers. The number of commercial banks declined from a peak of 14,496 in 1984 to 7,966 in 2002, a notable decrease of 45 percent. Moreover, the number of Farm Credit System associations decreased from 377 in 1988 to 118 in 2001 – a 69 percent decrease.

Banking Consolidation and Its Impact on Rural Banking Markets

by:
Paul N. Ellinger

The ongoing concern is that larger regional institutions may not have the same expertise or motivation to reinvest in local production processes. A reduction and consolidation of physical facilities in rural areas may also confuse local customers or give a perception of a locally disinterested institution. The extent that rural banks have been involved in consolidation and the level of agricultural lending affected are presented in this article.

Previous research has suggested small business borrowers with strong lender-borrower relationships tend to pay lower interest rates, have lower collateral requirements and tend to consolidate their loans at a single bank (Berger and Udell 1995). They also find that as institutions become more complex, they may become less inclined to lend to small businesses. These previous studies have primarily evaluated lending in non-rural markets.

The shares of commercial bank agricultural debt held by bank size and location within a metropolitan area are reported in Table 1. Overall, the share of agricultural debt held by banks with head offices in rural counties decreased from 59 percent in 1997 to slightly less than 54 percent in 2001. The largest

Paul N. Ellinger is associate professor at the Center for Farm and Rural Business Finance, University of Illinois, Urbana, Ill.

Table 1. Shares of Agricultural Loans Held at Commercial Banks by Bank Size and Location

Bank Size in \$ Assets	1997		1999		2001	
	Rural	MSA	Rural	MSA	Rural	MSA
0-50M	18.8%	2.5%	15.1%	1.8%	12.0%	1.4%
50M - 100M	18.1	2.8	16.8	2.6	15.1	2.1
100M - 500M	19.6	7.2	22.3	6.9	23.1	6.6
500M - 10B	2.4	25.1	2.7	26.9	3.6	27.0
Over 10B	0.0	3.5	0.0	4.9	0.0	9.1
<u>Total</u>	<u>59.0%</u>	<u>41.0%</u>	<u>56.9%</u>	<u>43.1%</u>	<u>53.8%</u>	<u>46.2%</u>

MSA is a Metropolitan Statistical Area

Shares are for agricultural loans secured by real estate and agricultural production loans

Source: Call and Income Reports

increases in shares occur with institutions greater than \$500 million in assets located in metropolitan statistical areas (MSA). The shares at these banks increased from 28.6 percent to 36.1 percent. The largest declines occurred with small rural banks. Banks with assets less than \$100 million located in rural areas saw their market share decrease from 36.9 percent in 1997 to 27.1 percent in 2001. The share of agricultural debt at all banks with assets less than \$100 million declined from 56 percent in 1989 to approximately 30 percent in 2001.

Part of this shift could be attributed to the changing structure of agriculture. The structure is becoming increasingly tri-modal with industrialized commercial farms, large family operations and small, part-farms predominating (Barry). The larger industrialized and family farms are often more complex than their predecessors. The loans on these farms often are held at larger institutions due to legal lending limits, risk-bearing capacity and other financial service demands by these

more complex firms. Thus, there will be a tendency to observe a shift in shares simply because of consolidation of agricultural firms.

Observing the trends in shares of small agricultural loans helps identify the shifts in loans of traditional family-size operations. Commercial banks are required to report their level of lending to small businesses.

Table 2 shows the shares of all agricultural loans smaller than \$100,000 in size held at commercial banks. As expected, smaller banks tend to hold a higher proportion of smaller loans. Similar shifts in shares occur across banks as with all agricultural loans. The share of debt held by small rural banks with assets less than \$100 million decreased from 51 percent in 1997 to 43 percent in 2001, while non-rural banks with assets greater than \$500 million saw their share of small agricultural debt increase from 12 percent in 1997 to 17 percent in 2001.

The changes in the number and location of branches also provide

Table 2. Shares of Small Agricultural Loans Held at Commercial Banks by Bank Size and Location

Bank Size in Assets	1997		1999		2001	
	Rural	MSA	Rural	MSA	Rural	MSA
\$0-50M	28%	4%	25%	3%	21%	2%
50M - 100M	23	3	23	3	22	3
100M - 500M	21	6	25	6	27	6
500M - 10B	2	11	2	13	3	16
Over 10B	0	1	0	1	0	1

MSA is a Metropolitan Statistical Area

Shares are for agricultural loans secured by real estate and production loans less than \$100,000

Source: Call and Income Reports

evidence of the presence of banking services in rural communities. Information on the growth of branch locations across different county designations is provided in Table 3.

A *farming county* is one that generates 20 percent or more of its income from farming. *Completely rural counties* are those with no towns greater than 2,500 people. *Completely rural counties* are separated between counties that are adjacent and not adjacent to metropolitan areas.

The number of branches from 1995 to 2001 increased across all county

types. The slowest growth occurred in completely rural counties not adjacent to a metropolitan area, while the highest growth occurred in completely rural counties that were adjacent to metropolitan areas.

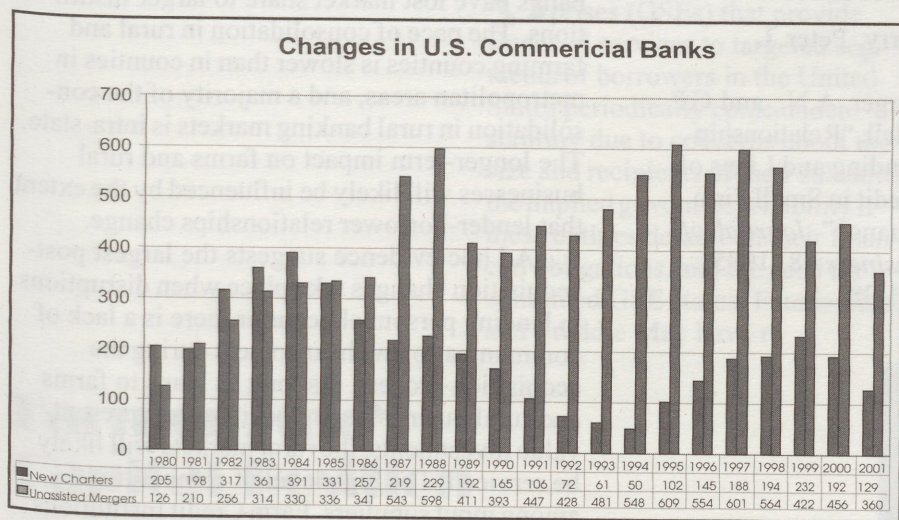
Another factor potentially influencing a bank's interest in local customers is the location of the head office relative to the branch. Out-

Table 3. Annual Growth Rate in the Number of Branches by County Type: 1995-2001

County Type	Annual Growth Rate
Farming County: Completely Rural: Non-Adjacent	0.29%
Farming County: Completely Rural: Adjacent	1.84
Farming County: Other	0.40
Other Rural County	1.16
MSA County	0.99
Total	1.02%

Farming County: County with 20% income from farming
Completely Rural: No town with greater than 2,500 people
Non-adjacent/Adjacent: Indicates whether the county is located next to a metropolitan area

Figure 1. Changes in the Number of Commercial Banks: Mergers and Denovo Entries



Source: FDIC

of-state banks may be more likely than in-state banks to adjust services and prices in a local economy. In 2001, more than 90 percent of the branches in farming counties had head offices in the same state compared with 84 percent for other rural counties and 70 percent for metropolitan counties. Banking markets in farming counties are still largely controlled within the same state. Moreover, more than three-fourths of the bank mergers in rural counties are intrastate.

The number of mergers and new charters are shown in Figure 1. One peak in the number of mergers occurred in 1997 and 1988 shortly after the nullification of the Douglas amendment of the Bank Holding Company Act. The second major peak in the number of mergers occurred from 1995 to 1997 after the 1994 Riegle-Neal Interstate Banking and Branching Efficiency Act.

The proportions of rural bank mergers to all bank mergers ranged from 47 percent to 52 percent. The peak in size of mergers by asset size occurred in 1998 after the mega mergers of Citigroup with Travelers, Bank of America with NationsBank, Wells Fargo with Norwest, and Bank One with First Chicago. Only 28 percent of the denovo entries during the past three years have been in rural counties.

Figure 2 shows the proportion of agricultural loans held by all merger targets. The only year the proportion exceeded 6 percent was 1998. The increased level of agricultural loans affected in 1998 was largely influenced by the four mega mergers mentioned earlier. On an aggregate basis, the extent that agricultural loans are affected in an individual year is not substantial and would not suggest major short-run shifts in credit delivery in rural financial markets.

References

Barry, Peter J.

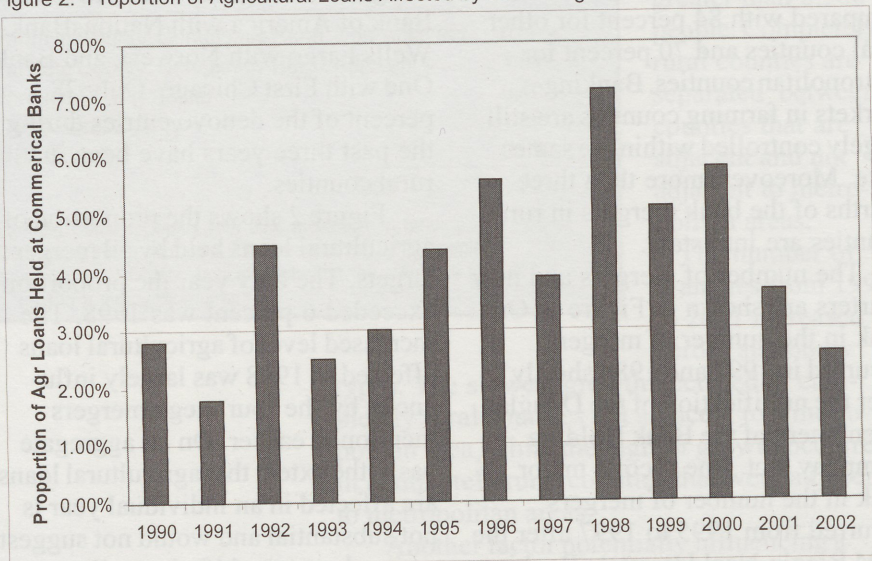
Berger, A.N., and G.F. Udell. "Relationship Lending and Lines of Credit in Small Firm Finance" *Journal of Business* 68 (1995): 351-381.

There is evidence that independent rural banks have lost market share to larger institutions. The pace of consolidation in rural and farming counties is slower than in counties in metropolitan areas, and a majority of the consolidation in rural banking markets is intra-state. The longer-term impact on farms and rural businesses will likely be influenced by the extent that lender-borrower relationships change.

Ad hoc evidence suggests the largest post-acquisition changes take place when disruptions in lending personnel occur or there is a lack of communication with customers during the acquisition process. As long as loans to farms and rural businesses are positive, net present-value investments, the rural markets will likely be serviced. The high level of competition among input suppliers, Farm Credit Institutions and commercial banks indicates that lending to rural areas can be profitable if appropriately managed and priced.

jal

Figure 2. Proportion of Agricultural Loans Affected by Bank Mergers: 1990-2002.



Source: Chicago Federal Reserve and Call and Income Reports
2002 data through July 1, 2002.