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Surviving Merger Mania—Effects of Commercial Bank and Farm Credit Mergers on Rural Credit: Discussion

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For over 50 years in the middle of the 20th century we had financial institutions that were bounded geographically as well as by type of product or service. They were insulated from other financial and non-financial institutions by restrictive charters and by regulations designed to limit competition between charters. All of this was in the name of safety and soundness, an outgrowth of the financial crisis of the 1920s and early 1930s. During this time, most financing in rural areas came through these regulated financial institutions.

In the 1970s and early 1980s this fixed regime began to evidence major strains from a changing economy. So began a period of evolution that is still underway. The boundaries of the regulated institutions were relaxed and the significance of unregulated suppliers grew. Innovations in computers, communications, and financial instruments also developed at a rapid pace, adding new kinds of strains. New economies of size caused institutions to need to grow. New complementarities among financial products and new substitutes for traditional products arose in a flurry of financial innovation.

A re-interpretation of the safety and soundness standards of the 1930s became necessary,

and the geographic, product, and other boundaries among institutions began to change. In addition, new kinds of non-traditional financial institutions began to emerge. These were nurtured by profits available under the umbrella of regulatory inefficiencies that were a legacy of the past environment. The response to a series of financial crises, which resulted from strain in the old system, compounded the forces for change. At different periods in the 1980s, all the major financial institutions encountered difficulty—first in housing loans, then agricultural loans, and finally commercial loans. These varied forces created new forms of competition. They changed the nature of rural financial markets and continue to encourage financial institutions to evolve.

The title and subtitle of this SAEA session clearly address one part of that evolution. Ahrendsen, Dodson, and Walraven consider how some of the traditional players have adjusted and the potential impacts of future adjustments. However, they do not address another part of the evolution—how new, nontraditional players have developed, what role they may play in the rural credit environment of the future, and how their competition may affect the traditional players and the market.

They also do not fully address what I had thought would be the central point—how people and businesses in rural areas are “Surviving Merger Mania.” Instead, Ahrendsen, Dodson, and Walraven discuss how two of the traditional kinds of institutions are changing as a result of merger mania and how these changes may affect the customers. Each tends

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to assume that the institutions involved are isolated from the environment of competitors and that demand forces are not a major element in determining the behavior of the institution class being addressed.

I will address that myopia throughout my comments. I will concentrate on the beginning and the end of their research processes—what their conclusions are, whether the conclusions seem to survive a reality check, and how each analyst models the world. I have time to highlight only a little of each paper. Many of the following comments apply to all three.

The Walraven Paper

Nick Walraven describes changes in commercial banks in rural areas and how they provide credit to non-agricultural businesses. He looks at three topics: recent structural changes in rural banking, changes in concentration of *deposits* among banks in different markets, and the factors related to the outcome of the non-farm applicant's most recent borrowing experience.

The descriptive first section leaves little to challenge other than definitions. He finds a large amount of structural change in both rural and urban banking—disappearance of 3780 commercial bank charters since June 1992 and change of control in another 3860. Over 40 percent of these involved merger targets that were rural banks. This is not particularly alarming, as most experts agree the US has been over banked.

As the barriers have come down, efficiency or perceived efficiency has become a driving force. Small banks have felt pressure to combine to increase their capital base, thereby expanding their single-borrower lending limit, helping keep up with the growth in the requirements of their customers. They also need to reduce their reliance on local deposits for funding, but this drives up their raw material costs and compounds the pressures to become more efficient. I expect the pace of consolidation to ease as the adjustments pent-up over the past 70 years get played out.

Surprisingly, about three-fourths of the remaining 9500 or so banking institutions are

part of a *holding company*, though that term includes everything from one-bank to many-bank situations. The percentages are higher in rural than urban areas, suggesting that we need to understand better the perceived economic advantages that the holding company structure offers for the less-leveraged, smaller institutions that typify rural areas. This could be to help them diversify into a broader range of financial services, to gain size economies available in some functions but not in others, to facilitate intergeneration transfer, to prepare them to grow in order to survive in a new era, or for other reasons.

Walraven's second section concludes that generally banking has not become more concentrated over the 1992–98 period, where concentration is measured by deposits. But urban areas have about 6.5 commercial banks per market while rural markets have about three. If one thinks the significant measure is banking offices rather than banking institutions, rural markets have about 10, the same as in 1992.

I have a number of questions about this analysis. Is concentration or competition in deposits what one should be measuring in this presentation? If so, has electronic communication not given everyone access to money market funds and shouldn't they be counted as well? What about credit unions as a substitute? Is demand deposits a reasonable proxy for the bundle of financial products and services in which we are interested? Why not use loan portfolio concentration as the measure? How about the breadth of financial services offered? Should one not consider changes in quality of services or cost of services? Is a rural county or an MSA a reasonable definition for a market in an electronic age?

In short, the analysis takes a very traditional type of look at concentration, as if only depositories are the competitors (even so, it is a slight broadening from the old Fed posture of looking only at commercial banks). I suggest that future researchers need to take a serious look at the best dimensioning of both the competitors and the markets, in order to sharpen the analysis.

Walraven's third section provides an original analysis of the 1993 sample of rural and

urban small business borrowers, looking at detailed information on the most recent borrowing experience of each. He found that the rural business owners had less formal education, operated smaller businesses, were less leveraged, had less experience with credit denial and internal credit rationing, and had lower ROA.

Walraven analyzed the recent borrowing experience using a two-stage process. The first, a probit analysis, estimated the probability that a firm would seek to borrow. This provided one independent variable for a second stage, a logit analysis of the probability of being denied. The second stage also included an array of variables including merger status, bank performance, and specific local market conditions.

Just four variables proved statistically significant in Stage One, explaining the probability of seeking to be a borrower. The first three have the signs I would have expected. Larger firms were more likely to seek a loan and more recently established firms were less likely to do so. Firms whose owners had recently obtained equity from relatives were more likely to seek a new loan. This seems logical—a stronger balance sheet would facilitate borrowing.

But the fourth may not have a clear interpretation. Whether a small business sought a loan was negatively correlated with the number of banking offices available. However, the fact that more banking offices are available would seem to represent a business judgement that the size of the potential market will support more offices, and this would seem to encourage more borrowing. Might one consider whether the direction of causation is reversed—that the number of small businesses potentially needing financial services affects the number of banking offices? Or does the multiplicity of suppliers mean that the business is already well financed and thus does not seek a new loan during the period?

The second stage seeks explanation for the probability of a business being approved for a loan, once the business has applied. The analysis found just two significant explanatory variables: larger firms and those having access

to a greater number of providers of financial services were more likely to be approved. No surprise here—financial viability of the borrower and the extent of potential competition for his business are important.

After controlling for all the other variables, there seemed little difference between borrower success in rural vs urban credit markets. In short, there does not appear to be a uniquely rural credit gap for small business. This is the same conclusion as reached by the Economic Research Service study of two years ago. Despite both sets of analyses, politicians periodically disagree. I suspect the difference is that the studies address the present situation only, while the political discussion considers fears for gaps in the future, due to a rapidly changing financial environment.

The Ahrendsen, Dixon, and Lee Paper

The second paper also focuses on commercial banking institutions, but deals with the agricultural borrower as the customer base. The authors investigate the pattern of adjustments in the farm loan portfolio after a merger of a pair of institutions. Initially, they use a formal adjustment model adapted from earlier work by Walraven, to test two alternative hypotheses: (1) that the consolidated bank will “ape its new peers”, seeking the same ratio of agricultural loans in its new portfolio as existing banks in the size group it is joining or (2) that the consolidated bank will “stick with the familiar” by making the target partner’s portfolio mirror the existing portfolio of the acquiring bank. Later, they consider additional hypotheses, but none of them strike statistical pay dirt.

In the end they find support for the “stick with the familiar” (or perhaps “stick it to the target bank”) behavior, but not for “ape the new peers.” From this, they conclude that if the acquiring bank is agricultural, the prospect for agricultural lending is good. But usually the acquiring bank has a lower agriculture loan ratio than the acquired. So agricultural lending by commercial banks will likely decrease as a result of mergers. This seems a reasonable

conclusion for the population of simple mergers that they analyzed.

The data period of this analysis is longer—from 1988 through 1997. Though the data period included 3758 commercial bank acquisitions, the authors end up using only 420 in their analysis. These are banks that underwent a single acquisition during the period.

This choice of banks to study is undoubtedly convenient as a tool to provide bounds for a masters degree study, but limits the usefulness as a tool for providing insights for the future of rural bank restructuring. The authors do not provide data, but I would hypothesize that the 20 percent of mergers that are included in their study represent a relatively small portion of bank assets or agricultural lending among the 3758 acquisitions. None of the largest agricultural lending banks has a high concentration in ag loans, and most of them have gone through a whole series of mergers. While I recognize the significant data problem in tracing a series of mergers, the current results cannot generalize to all agricultural banks without supporting evidence. The authors recognize this in their final section, and I encourage them to proceed with solving the data problem.

One point in their extensive and useful literature review suggests that small banks may have a competitive advantage over large banks in dealing with small customers, due to their familiarity in an information-intensive lending situation. It appears to me that this form of lending to small customers, and the related advantage, may be disappearing. The rapid increase in the use of credit scoring formulas and quick approval lending to smaller borrowers by both traditional and new-entry lenders reflects a major effort to cut the overhead costs on small loans.

At another point they cite Featherstone's finding that small and agricultural banks increased the intensity and volume of ag lending after a merger. I would think this might be because the merged bank has a higher capital level, hence a higher single customer lending limit, hence an increased ability to tap the middle- or larger-sized customer market. I will expand on this comment in the next section.

The Dodson and Duncan Paper

The third paper investigates merger effects in the other big institutional player in farm and rural credit, the cooperative Farm Credit System. The FCS has also seen massive consolidation, as well as greatly increased diversity in size and type of institutions. This diversity provides a natural experiment for asking whether the type of reorganization or size of institution has made a difference in the composition of the loan portfolios of the institution. The authors contrast the characteristics of the loan portfolios of various groups of FCS associations with the combined portfolios of commercial banks, life insurance companies, and merchants and dealers. They did the analysis separately for debt secured by real estate and non-real estate debt, by size of FCS association and by the size of branch offices in an association.

Consistent with earlier work, they found that for the population of all farms, as defined by USDA, the FCS associations had borrowers who were larger and had higher net worths than the portfolio of borrowers served by the other lenders. However, they also show that if one considers only the population of commercial farms with sales of \$50,000 or more, most of the FCS portfolios were very similar to those who received credit from the other lenders group. This gives only limited support to the hypotheses contained in an extensive introductory discussion.

The authors suggest that it may be socially desirable for the FCS to serve this group of small-output borrowers more heavily. I disagree, and suggest that promoting financing of units with less than \$50,000 in gross sales would amount to promoting a structure that is not economically viable as a full-time business for the future.

Analysis of the effect of the degree of branching was done using number of borrowers per branch. They found no significant differences in small business lending for real estate lending, and associations with a smaller customer base per branch in non-real estate lending tended to have larger and more established farmers in their non-real estate borrow-

er portfolio. But which drives which? I would suggest that this result might simply reflect the type of agriculture, defining a tradeoff between customer density and transportation costs in developing the branch network. I feel that institutional characteristics or constraints have much to do with the customer base attracted to an institution, and thus the portfolio composition should not be interpreted solely as institutional culture or biases.

Two elements lead me in this direction. The net result of these two forces is to skew the FCS portfolio toward commercial farms and away from the smaller group and to skew rural commercial bank lending in the opposite direction, regardless of the preferences of managers and directors in either group.

First, as I noted earlier, smaller agricultural banks have a confining single-borrower lending limit, based on the limited capital of the bank. Many of these banks have not grown as fast as the business borrowing needs of the typical farm borrowers, and hence they cannot fully serve the largest borrowers. On the other hand, most of these customers will be within the lending limits of the FCS institution and certainly within lending plus loan participation limits. Borrowers know this, and shop accordingly. The effect is to create a difference in loan portfolios that is not based on conscious or unconscious bias of lenders.

The second element provides additional skew. Law and regulation focus FCS associations on agricultural lending to commercially creditworthy customers. They also have limits, in particular, in serving the non-agricultural needs of borrowers other than full-time farmers—such as part timers and rural residents. The other lending group—commercial banks, insurance companies, and merchants and dealers—has no such limits. Borrowers know this difference, or they quickly find it out. In this situation, the advantage is with the non-FCS group. Recent litigation demonstrates that commercial bankers value this advantage and are aggressive in protecting it.

In sum, I think the significant question, especially on small farmer lending, is the extent to which the FCS association can choose its customers, versus accept whatever comes

through the door as a result of customer initiative. The same point applies in evaluating commercial bank lending by rural banks—do the institutions primarily manage the selection of loans in their portfolio, or do they primarily accept the business that is available in their market area? I recognize there is a degree of both, and think that all three papers could do more to consider the demand side of the market in their analysis.

Finally, I want to say a word on the FCA decision to allow associations to compete with each other across geographic boundaries. I have been a strong proponent of this broadened policy for over a decade. I believe it can enhance competitive market behavior, to the benefit of the farm sector, in situations where the FCS association has only limited non-FCS competition. As Dodson and Duncan recognize, the primary concern is the possibility of predatory pricing behavior by larger institutions. FCA also has recognized this problem, as well as the threat to FCS cooperation in funding, product, and policy efforts that may be implied. However, it is no more difficult to regulate against predatory behavior between FCS associations than it is to regulate exclusive-territory associations to encourage efficiency and service, where they lack significant third party competitors. This is also consistent with the trend toward letting the markets do the regulation, whenever possible.

Researchers have a basis for investigating the effects of intra-FCS competition, to get beyond the speculation stage. We have at least a decade of experience with overlapping lending charters. Since 1987, Banks for Cooperatives have competed nationally and farmers in some 113 counties have service from multiple FCS associations as a result of "Section 411" mergers.

I have looked at the cost data in more detail than the authors provide in Figure 1, and also found that the potential benefits to borrowers of more competition could be very significant. In general, cost rates dropped rapidly up to about \$250 million in association assets, and became flat beyond the \$500–600 million dollar size.

The Broader Issue for the Future

From my perspective, the next big issue on the research agenda should be to address how the new players and approaches to rural credit will fit competitively, and how the interplay of these new and traditional suppliers will play out. I have in mind:

- The entry of mortgage banker type institutions, such as GE Credit and others using Farmer Mac (in housing, mortgage bankers and the secondary market nearly drove the thrifts out of business),
- The great expansion of trade credit offered as a complementary product with farm inputs or as a stand alone product by Deere, Case-IH, Pioneer Seeds, and some agricultural supply cooperatives (how strong is the complementarity, and how does it affect resource allocation decisions by the rural cus-

tomers, and will it be equally available to all sizes and types of customers?)

- The entry of Wall Street into providing financing for large-scale livestock operations (is this going to be wiped out in the current downcycle, or is it going to continue to propel changes in the customer base of traditional lenders for livestock loans?)

We have in this set of papers evaluations of how two of the traditional institutional lenders have been adjusting. We need to add some focus on how well the ag sector will be served by the full range of players. These two regulated groups could spend so much time continuing the traditional battles with each other that they fail to see that new lending parties are about to overtake them. Researchers need to avoid a similar myopia, an inherent danger if they focus on only one class of institutions at a time.