

**COMPETITION, CONSOLIDATION, AND GOVERNANCE ISSUES FOR THE FARM CREDIT
SYSTEM**

David Freshwater

**Proceedings of a Seminar sponsored by
North Central Regional Project NC-207
“Regulatory, Efficiency and Management Issues Affecting Rural Financial Markets”
New York, NY
September 8-9, 1996**

Department of Agricultural and Consumer Economics
College of Agricultural, Consumer and Environmental Sciences
332 Mumford Hall
Urbana, IL 61801

June 1997

Copyright 1996 by author. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Competition, Consolidation and Governance Issues for the Farm Credit System

David Freshwater¹

When the first pieces of the Farm Credit System (FCS) were initially established by the Federal government at the beginning of this century, it was in response to the lack of sources of credit for farmers from commercial for-profit financial institutions. The FCS was created as the first Government Sponsored Enterprise (GSE) to address a perceived market failure. Over time the number of for-profit financial intermediaries providing credit to agriculture has increased, as have their complaints over having to compete with a non-profit government sponsored agency. As a result of the increase in lenders the notion of significant market failure in agricultural lending is less obvious. Preserving competition may now be the major rationale for the existence of the FCS. One consequence of the on-going competition between banks and the FCS for farm lending is pressure on both types of institutions to seek ways to improve their position. A significant part of the current consolidation process of the System was driven by this competitive pressure, but consolidation can now be seen as creating other problems.

As the FCS evolves, its structure as a non-profit, cooperatively owned financial intermediary is seen by some as placing it at a competitive disadvantage. However this particular ownership structure is also the key to its short to its medium term survival as a GSE. For the FCS a critical question appears to be how it rearranges its internal structure to make the best use of its legally mandated organizational structure. Whether this entails becoming more like for-profit lenders or less like them is a significant question that is influencing how consolidation within the System proceeds. The massive changes over the last ten years in the structure of the Farm Credit System suggest that more attention should be paid to issues of conduct and performance. Because a GSE exists to fulfill a public purpose it is important to periodically assess how well this role is being met, particularly after the organization experiences major change.

In a recent article Susan Rose-Ackerman examines how both for-profit and non-profit firms can survive as competitors in the same market (Rose-Ackerman). Her specific focus is on enterprises that provide medical, educational and social services, but the question is applicable to financial intermediaries. She begins by arguing, from the most simple models of the economics of organizational form, that over time a single type of firm should predominate. That is, either for-profit or non-profit enterprises should be able to drive out the other type. Yet, as she notes, we often observe the coexistence of both types of organization. Her research suggests that while non-profits may have certain disadvantages in the form of organizational slack these can be offset by advantages in the form of customer loyalty, trust and shared values.

¹ David Freshwater is an associate professor, Department of Agricultural Economics and Program Manager TVA Rural Studies, University of Kentucky. Much of the material in this paper is based upon presentations to: the Board of Directors of CoBank, Denver CO, Mar. 12, 1996; the Board of Directors of Northwest Farm Credit Services, Portland OR, Jul. 24, 1996; and the Senior Management Conference of the Western Farm Credit Bank, Monterey CA, Aug. 15, 1996. Comments of participants are gratefully acknowledged. Any errors or omissions are my responsibility.

Ten years ago the Farm Credit System was in the middle of its worst financial crisis since the Great Depression. In less than three years the System drained more than eight billion dollars in capital surplus that had been accumulated over the past fifty years. Three separate pieces of federal legislation were required to help resolve the problems of the FCS, and the structure of the FCS underwent rapid change as associations were merged in an effort to stem the hemorrhage of losses (Peoples et. al.). In 1996 conditions now appear greatly improved:

- the FCA suggested in its annual review of conditions that the System has recovered from the events of the early 1980s,
- federal financial assistance was repaid well ahead of schedule,
- capital levels, primarily in the form of earned surplus, are increasing and operating costs per dollar of loans outstanding are not growing,
- loan volume has started to increase and the decline in market share seems to be slowing, and
- interest margins have been high by historic standards and allowances for loan losses are falling, reflecting better quality borrowers (Irwin; USDA; FCA).

Yet, despite the appearance of a full recovery, a somewhat deeper examination of the FCS suggests that conditions are not as favorable as appears. Some of these are obvious issues like the increased risk facing agriculture and its lenders with the passage of the 1995 Farm Bill, and the rise of new forms of competition from non-conventional sources of credit that compete with both the banks and the FCS for what is a shrinking market (Barry; Duncan and Taylor). While these are serious issues, perhaps the more compelling challenges are internal to the System and they revolve around its function, its structure, and its governance.

Function

Various studies have pointed out that the original function of the Farm Credit System is no longer compelling reason for its continued survival. From a national perspective not only is commercial agriculture not seen as being under-served by lenders but there have been arguments that a contributing factor in the financial problems of the 1980s was too easy access to credit (GAO, Ahrendson). On average, farmers are now far wealthier than the average citizen and have net incomes that are slightly above the national mean. This suggests that the underlying public purpose that led to the FCS originally receiving GSE status is no longer in place. Yet, it is clear that in many cases the FCS continues to serve as a competitive yardstick for commercial banks, and in some parts of the country serves markets that banks have not shown any particular interest in serving. It is also clear that for the foreseeable future the survival of the FCS continues to depend upon the continuation of GSE status.

While most commercial farmers now have ready access to credit, it is less certain that they would continue to do so in the absence of the FCS. Thus the continuing survival of the System may be important in contributing to the preservation of a well functioning capital market for agriculture. When agriculture enters one of its periodic downturns and other lenders reassess

their commitment to agriculture the presence of the FCS as a stable source of credit may be particularly important. If the FCS is to serve this function of a competitive yardstick and stable source of funds it will have to continue to attract borrowers who will invest the time to provide leadership for the organizations that comprise the System.

Although the survival of the FCS may be vital to the credit needs of farmers, it is less certain that farmers currently appreciate its importance, or are prepared to support a cooperative source of credit. In the mid 1980s the problems of the System were exacerbated by "borrower flight" as farmers with good financial health left the System and took their borrower stock with them despite the adverse consequences to the institution. The most telling recent example of this problem may be the experience with "hedge-to-arrive" contracts where farmers who had obligations with local cooperatives are now seeking ways out their contracts, despite the fact that this will jeopardize both the survival of the cooperative and the welfare of their neighbors. While this is an extreme example some recent analysis by AgriBank suggests a similar conclusion about the degree of loyalty and support for the institution.

AgriBank has the largest farm loan volume of the System farm banks and serves much of the territory where farming remains the dominant form of rural economic activity. If the FCS might be expected to have strong support anywhere, it is here². Yet its market share has fallen steadily from 50 percent in 1987 to just over 35 percent in 1995, and only one quarter of the farmers in the district borrow from the associations that make up AgriBank. On the basis of customer surveys, AgriBank concludes that only 14% of its customers can be considered loyal to the FCS. The balance could easily shift to some other source of credit. What this points out is the limited commitment of farmers to maintaining the FCS.

The question of farmer support will be vital for the future of the FCS, for if those who are the intended beneficiary of the GSE do not exhibit much concern for its survival, it will be unlikely to receive any favorable interest by a Congress and Administration that is looking for ways to trim Federal debt exposure. In addition it is clear that the 1986 amendments unleashed a set of forces that are radically changing the governance and structure of the System, and that these changes will create pressures for changes in the governing legislation and regulations.

One consequence of the amendments passed by Congress in 1986 was a weakening of the financial commitment of farmers to the FCS. Now that borrower stock has become a token investment, farmers truly have no financial investment in the System and hence less incentive to be concerned with its survival. Indeed one might argue that the employees of the System have a greater amount at risk in the form of pensions and deferred compensation, than the farmer/owners³. This absence of at-risk capital leads to questions about how the System will motivate new farmers to become actively engaged in the governance of the organization to replace the older directors. Absent this infusion of leaders, the System runs the risk of being driven by the interests of its professional managers, but without the ultimate check provided by at-risk investors in the for-profit sector.

² Material in this paragraph is drawn primarily from Fredrickson.

³ I thank Marvin Duncan who initially suggested this point to me.

Structure

The structure of the Farm Credit System has changed greatly over the last ten years and it is unlikely that the period of change is over. So far three waves of changes have occurred:

- consolidation of associations in the early 1980s in order to spread capital to associations where it was needed,
- separation of the Banks for Cooperatives from the farm lending operations and
- merging of farm lending associations into ACAs as a result of the 1987 Act, (although there are still fewer ACAs than PCAs and LBAs the ACAs tend to be larger), and,
- an initial round of bank mergers between 1990 and 1995 that reduced the number of banks to eight.

The current organization has reduced the number of entities within the System from 37 banks and more than 1,000 associations in 1981, to 8 banks and 232 associations in 1995. This simple accounting misses the important fact that in the process of consolidation the nature of the FCS has been fundamentally changed and it is likely that further consolidation will take place.

Prior to 1987, the System was structured with distinct geographic service areas and a single organizational form. The 12 districts had three banks and two distinct types of organization, all of which served a specific function. This structure virtually eliminated the possibility of direct competition among System entities and provided a hierarchical framework that facilitated cooperation among the districts. The fact that cooperation even under these circumstances was difficult to achieve is perhaps significant.

While in principle the ownership by farmers of the associations and the ownership by associations of banks suggests an upside down pyramid, the usual narrow end up pyramid more closely describes the old organizational structure. Bank presidents dominated the policy direction, and having a mix of different types of banks organized by geographic region made it difficult for any single individual or component to gain clear dominance.

The amendments passed in 1986 formally introduced the opportunity for competition among System entities and we are now seeing the beginnings of that process. As a result of mergers to date, there is now overlapping service areas in parts of the old Louisville, Sacramento and Spokane districts and the former Jackson district has been split along association lines among two districts. There are arguments why competition among cooperatives providing the same service is undesirable (Rhodes) and they would certainly seem to hold when the cooperatives are linked through their debt obligations in as strong a manner as the members of the FCS are.

At the most simple level, competition can unleash pressures to drive costs down or it can lead to efforts to differentiate products. The first round of mergers through the early 1990s were driven by cost considerations. Creating a larger unit was seen as an obvious way to spread overhead costs and make the FCS more competitive with commercial banks. The logic of this

model leads to the conclusion that consolidation should proceed in a direction that results in large associations and a single bank.

However, firms can respond to competition by trying to differentiate themselves and capture customer loyalty. This now seems to be the direction that parts of the System are proceeding. It reflects the fact that within the System there are great differences both in vision and in capacity. While in principle a single bank could minimize credit delivery costs it is unlikely to happen because factors other than cost are also important. In a cooperative structure that is governed on the basis of consensus there are potentially large increases in "costs" from getting too large. Even prior to the 1980s when conditions were good and internal competition was not an issue, it was difficult to develop a consensus within the FCS. Assembling a single bank would require degrees of agreement and relinquishment of control by those who own and now control the pieces of the FCS that are unlikely. In addition, while credit is becoming more of a commodity, even commercial banks continue to adopt different strategies in credit delivery.

Despite the obvious perils of internal competition, it may be the case that competition will provide a mechanism that allows the FCS to complete a reorganization process that will make it a more effective lender. The next round of mergers are likely to break the pattern where either an entire district or the vast majority of a district moves to a new bank. Instead, we will see further fragmentation of the geographic boundaries that limit competition as associations try to find patterns who share a similar management philosophy or vision for the future.

One of the other crucial differences in the new structure is the dominance of large diverse banks. Where districts have merged the resulting bank now covers territories of two to three times the size of a district prior to 1987. The large banks now have loan volumes well in excess of the smaller ones, and their dominance gives them correspondingly stronger voice in guiding the direction of the System.

The set of mergers to date have created four new enlarged districts and it seems reasonable to look to these four new structures as a guide to the direction that future mergers will take. The associations and banks that remain outside one of these new units face a situation where they tend to have higher unit costs because their loan volume is smaller and also face the problem of being dominated by the larger districts in internal decisions of the FCS. Thus, the four remaining smaller organizations face a choice of merging among themselves, or merging with a larger district.

Interestingly the four enlarged districts reflect distinct differences in management philosophy and these differences provide a key clue to the possible future evolution of the FCS. Each of the four districts has a different perspective on the appropriate structure of the System and how it should be serving its customers. These differences form the basis for future competition within the System, both internally for associations and externally for customers.

The first is AgriBank FCB, which has taken on many of the practices of some commercial bank holding companies in that sets stringent financial performance targets and general practice standards for operations but leave considerable discretion to individual managers of units in meeting the targets. In the AgriBank model, the primary focus of management seems to be on providing funds to borrowers at low costs, with far less emphasis on maintaining the traditional cooperative relationship with borrowers and its associated range of services. This philosophy is

based on a belief that cost is the overwhelmingly dominant factor in attracting and keeping borrowers.

The second is AgFirst Farm Credit Bank which has maintained much of the traditional FCS management style from the period before the 1980s. This is characterized by a strong bank and small associations, with the bank taking a major role in setting policy and providing support to the associations. Associations remain locally based and deal on a relationship basis. This philosophy assumes that there are inherent benefits to a "cooperative" structure and that borrowers want more than low interest rates, although they are certainly important.

The third management style is that of CoBank, which operates almost as a merchant bank that provides money to either cooperatives or associations but exerts very little influence on the management practices of the borrower. In the CoBank model, the primary relationship between the bank and the borrower is captured in the loan document. The CoBank model maintains very little of the Farm Credit System as a distinct entity with shared values and objectives.

The final model is that of AgAmerica which can be characterized as a weak bank model, that is patterned on the old Louisville district where the bank served as an appendage to the association that covered virtually the entire service area. AgAmerica serves two large multi-state districts and as a result of the amendments in 1986 the balance of power is clearly at the association level. However the existence of a weak bank in a sense violates the internal structure of the FCS. Despite all the changes in its structure, meetings of bank presidents are still the main forum for coordinating activity and association presidents are not fully accepted as members. But where a bank cannot commit the associations it has little credibility. Because these associations are as large as some district banks they cannot be readily excluded from the governance process, but the System has not been able to find a way to integrate them other than by bringing them into an even bigger district, as in the case of the Mid America district. This suggests that in the longer run the weak bank - strong association model is not viable without much change in how the FCS operates.

The existence of these distinct management philosophies within a single organizational structure inevitably creates the potential for additional conflicts. Since the cost of funds from the Farm Credit Funding Corporation is the same for all the System banks, their differences in management philosophy are embedded in the margins they charge, their relationship to the associations and the way they relate to borrowers. They may also want the Funding Corporation to operate in different ways to better suit their philosophies. Conflict may also be enhanced by the external and other internal pressures facing the system. Increasingly other banks may find that they have to align themselves with one of the three viable types, both in terms of managing their internal operations and in setting policy for the direction of the System as a whole. Each of these forms faces different challenges in motivating increased customer loyalty and participation in governance.

With an increase in territorial competition, the traditional geographic organization of the FCS appears likely to collapse into a group of organizations that is based upon differences in management practices. To the extent that associations remain autonomous entities, they could agree to contract with a bank for a specific period, and then move to another bank if it seemed more favorable once the period of the contract was reached. This competition is likely to lead to the collapse of weaker associations and at the same time strengthen those that do a good job of

identifying what the customers in their area want. In addition it sets the stage for charges of predatory practices by banks and associations which will increase the strain of holding the FCS together as a System and increase the pressures facing the regulator.

Joint and several liability is the remaining strong force that binds the FCS together. Banks remain bound to each other because of their financial commitments. Building loan volume at the expense of another System entity exposes all the system to increased financial risk. As long as joint and several liability remains in place, there is a fairly strong incentive to mute competition, but it could be overwhelmed by pressure to increase market share or maintain loan volume in a period of low demand.

As the various entities adopt different strategies and even potentially different funding sources, the question of preserving joint and several liability will become more difficult. If the level of risk that different banks take on diverges too greatly, then pressure to revert to individual bank bonds and notes may increase. However without joint and several liability there will be even less reason to believe that the Farm Credit System is anything more than a trade association, like the American Bankers Association. If this opinion becomes widely held, maintaining GSE status may be even more difficult.

Management philosophy is, in a sense, one of the root issues. The other problems can either be magnified or reduced depending on how differences in management philosophy are resolved. As indicated above, prior to 1987, the FCS could be considered a system, in the sense that each district had the same organizational structure and followed the same basic set of practices. Even then different districts had somewhat different philosophies of what the Farm Credit System was, and how it should be managed, but the structure limited flexibility. The 1987 Farm Credit Act removed these restrictions and now three distinct philosophies at the bank level seem to be appearing and they in turn become the focus for realignment of the System.

One manifestation of these philosophical differences is likely to be differences in the types of services offered borrowers and indirectly the types of borrowers served. If differences among the groups become wide enough then competitive pressures may be manageable. Each group could offer enough of a differentiated product that they will have a core clientele group that may develop loyalty to that product. While there will still be competition at the margins it may be possible to maintain a more coordinated aggregate System structure. However, if the differences in philosophy do not amount to significant differences in products and target borrowers, then competition could unleash forces that will tear the System apart.

Governance

The third critical issue is governance. As noted above, governance of the System has always been a contentious issue. Governance issues contributed to the fracturing of the Banks for Cooperatives from the farm lending component of the System in 1988. Although farmer/borrowers technically own the associations and the associations in turn own the banks; in practice much of the System operated with the banks imposing fairly strong rules upon associations.

Consolidation has exacerbated this problem at all levels. Large associations that cover multiple states have reduced both the number of farmer/borrowers who actively participate in the

management of the association and the contact between management and membership. AgFirst has adopted a strategy that is most compatible with the traditional governance structure, but in other districts it appears that many borrower/owners have been willing to give up local participation in a search for lower borrowing costs. In the AgriBank model, financial performance criteria are established by the bank and the association is managed to meet them. The CoBank model finesses the issue somewhat by limiting the relationship between borrower and bank, but this provides less opportunity for direction from the borrower/owners to reach the bank. However, the System must ultimately find a way to motivate borrower interest in exercising true ownership responsibility or the basis for the structure will collapse.

This issue of governance is one that has caused problems for the FCS in the past. The notion of one member one vote was predicated on all borrowers being relatively homogeneous in terms of farm size and type of production. As agriculture becomes more diverse both in terms of the interests and associated risks of the borrowers a new way of assigning ownership rights and control over operations of the System may be required. The old notion of cooperative governance was based upon local leaders both understanding the interests of their neighbors and being willing to act to protect them (Barton). Increased complexity in the financial management of the System and geographically larger associations are making it harder for this to happen. Borrower stock was intended to create an incentive for farmers to care about the management of the FCS, but since stock purchases were typically financed as a part of the loan, the stock was not seen by borrowers as conveying ownership responsibility. Since borrower stock is now an even more incidental financial commitment, even less of a sense of ownership exists.

Smith notes that there are ways to increase the involvement of the farmer/owners of the organization by providing them with the tools to become effective directors. However in his example he shows that this can cause challenges to current management. However if organizational slack and the self-interest of management are significant potential impediments to the ongoing survival of the System such changes are important to implement. At least some parts of the System clearly perceive the lack of loyalty as a problem, but it is not clear that one can stimulate loyalty without providing an effective opportunity for the owners to direct both associations and banks.

These issues are exacerbated by the consolidation of the System, which has the effect of diluting any individual's interest in becoming involved in management. As the farmer/borrower loses both the ability to manage the System and the incentive to behave according to cooperative principles, the basic premises underpinning the governance of the FCS are challenged. Whether it can or should remain a cooperative is a basic question that will have to be faced.

As the System contemplates broader lending authority to both diversify and expand its loan volume, the question of governance becomes more complex. Cooperative principals suggest that all borrowers should be treated equally, but many traditional farmer borrowers fear a dilution of control. If all borrowers are given equal rights in management then decision-making can only become more complicated as conflicting interests have to be worked out. Historically, the System has shown little ability to deal with controversy, so this problem could be significant in the future.

The final issue is the tension between dominant and secondary banks. With the creation of CoBank and then AgriBank, the structure of the System was significantly changed. In 1992

these two entities accounted for more than half the total loans outstanding of the FCS. Traditional cooperative principals of one vote per member did not hold up under this divergence in scale. Since than additional mergers have occurred but there are still four banks of a size that makes them second tier players. Of the four, Texas, Western, Wichita and the St. Paul Bank for Cooperatives only the latter seems to have certain partner, AgriBank. As territorial competition increases and now that CoBank has entered farm lending, a logical step for AgriBank is to try to fold the Bank for Cooperatives back into its structure. This would give it immediate diversity and limit CoBank's ability to control this type of lending. The fate of the other three banks is less certain, but continued independence is unlikely - the question is how mergers will take place.

To date mergers have taken place mainly at a district level. Although a few associations have chosen to affiliate with a different bank the general pattern has preserved geographically contiguous areas. The next round of mergers may break that pattern. There is no reason that all of the Wichita or Texas districts has to go to one bank, and as differences among banks in terms of management philosophies and practices increase, the odds of splintering increase. The actual pattern of mergers is unknown but it is likely to depend upon who acts first. The first of the small three to make a decision will preclude certain paths for the others. For example one option is for Texas, Western and Wichita to merge, but if one bank chooses a different strategy then this option is closed.

Conclusion

Although there have always been internal conflicts within the System the old rules provided a structure that kept them checked. Now competitive pressures both inside and outside the FCS are leading to consolidation (Riemenschneider and Freshwater). While competition is a dangerous force to unleash within the System the old requirements of a consensus bordering on unanimity before actions were undertaken made the System unresponsive to change. While all of the existing pieces of the System may not survive the new competition the fact that there are competing visions being implemented provides the potential for at least some of the System to restructure itself in a way that it can face the challenges from the for-profit sector.

In what is now a fiercely competitive market maintaining customer loyalty is vital to success. It is far easier to maintain profitability if the existing customer base can be counted on as staying largely intact. To date the FCS has focused on keeping costs competitive with other lenders and on trying to provide a broad enough mix of services to meet customer needs. These are certainly necessary steps to maintain loyalty. However in a cost driven environment it is not clear that the FCS can match for-profit lenders. The inherent costs intrinsic in a cooperative in the form of political bargaining and the greater separation of ownership and control may put the System at a disadvantage with the more efficient banks. But as Rose-Ackerman notes a non-profit can exploit other advantages that can counteract its weaknesses. These require making investments in the farmer/borrowers who own the System to encourage their participation in governance and to make them feel a part of the System. By building loyalty to the System it may be possible to differentiate the services provided sufficiently to maintain a large enough core customer base to remain competitive.

Five years ago the set of GSEs was collectively able to maintain their status after considerable effort to weaken or remove their authority. Analysis at the time showed that the

FCS was the one GSE that would be most unlikely to withstand the loss of agency status. Strong support from powerful legislators, primarily Speaker Foley, for the System held off pressure for reform. What saved the FCS, and implicitly the other GSEs, was effective pressure from the farmer/borrowers on Members of the Congress. As borrower loyalty becomes more diluted, the ability of the FCS to mobilize this type of support will limit its political capacity. If the System is to receive favorable treatment from the Congress in the future it has to have the active support of the farm population since bankers will clearly fight any legislation that favors the FCS.

To date consolidation has been seen as a providing competitive benefits for the System in its struggle to recapture market share from commercial banks. However little attention has been paid to how consolidation affects the fundamental issues of loyalty and governance. At some point the incremental benefits of larger scale may be more than offset by losses in loyalty and shared values. Loyalty seems to be defined in terms of willingness to maintain a financial relationship with the System, but this is a weak form of loyalty. If farmers leave the future of the System to the interests of its managers that will not escape the notice of Congress. While in the short run such a strategy avoids the cost associated with investing in developing cooperative behavior among borrowers it will leave the System without advocates and in a position where it may not be able to define a function that justifies the continuation of its Congressional charter.

In the short term the various entities that make up the System will have to decide whether they want to remain affiliated, and the extent to which they will cooperate and compete. How they address this issue will lead to the longer term viability and structure of the System. If the System units can rebuild borrower support for the institution, find ways to manage competition amongst themselves and agree to seek a new public purpose mandate by serving parts of rural America that have limited access to credit, then they may be able to preserve their GSE status. Without effective borrower/owner governance and if competition among System institutions becomes intense, it is unlikely that there will be any public support for maintaining the System as a GSE.

References

- Ahrendson, Bruce. 1995. Federal Legislation: Agricultural Credit Issues and Institutions. Special Report 171. Arkansas Agricultural Experiment Station, University of Arkansas, Fayetteville, AK.
- Barton, David. 1989. What Is A Cooperative? in David Cobia (Ed.) *Cooperatives In Agriculture*. Prentice Hall, N.Y, N.Y.
- Barry, Peter. 1995. *The Effects of Credit Policies On U.S. Agriculture*. AEI Press, Washington, D.C.
- Duncan, Marvin and Charles Taylor. 1993. Financial Institutions for Agriculture: A View to the Future. *CHOICES* vol. 8, no. 1.
- Farm Credit Administration. 1995. *Annual Report 1994*. FCA, McLean VA.
- Fredrickson, Terry. 1996. The Real Strategic Challenge. notes from a presentation to the Western Farm Credit District Senior Management Conference. Monterey, CA, August.
- General Accounting Office (GAO). 1992. Rural Credit: *Availability of Credit for Agriculture, Rural Development and Infrastructure*. GAO/RCED-93-27. General Accounting Office Washington, D.C.
- Irwin, George. 1995. An Overview of System Lending. in *FCA Quarterly Report, Third Quarter 1995*. FCA, McLean VA.
- Peoples, Kenneth, et. al.. 1992. *Anatomy of an Agricultural Credit Crisis*. Rowman and Littlefield. Lanham, MD.
- Riemenschneider, Charles and David Freshwater. 1995. Is a Revised Mandate Needed For the U.S. Farm Credit System Needed? *Agribusiness*. vol. 11 no. 3.
- Rhodes James. 1983. The Large Agricultural Cooperative as a Competitor. *American Journal of Agricultural Economics*. vol. 65 no. 4.
- Rose-Ackerman, Susan. 1996. Altruism, Nonprofits and Economic Theory. *Journal of Economic Literature* , vol. XXXIV, no. 2, pp.701-728.
- Smith, Eldon. 1992. The Cooperative As A System Of Economic Governance: A Retrospective View Of What We Thought We Knew Three Decades Agr.Econ. Staff Paper 318, Department of Agricultural Economics, University of Kentucky, Lexington, KY.
- USDA. 1996. *Agricultural Income and Finance: Annual Lender Issue*. USDA, ERS AIS-60, Washington, D.C.