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**FARM CREDIT SYSTEM PARTICIPATION IN THE FARM SERVICE AGENCY'S
GUARANTEED LOAN PROGRAMS**

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Farm Credit System Participation in the Farm Service Agency's Guaranteed Loan Programs

By Steven R. Koenig and Charles B. Dodson¹

Policy changes in the mid-1980s focused the delivery of the U.S. Department of Agriculture's farm credit assistance through its guaranteed lending programs as opposed to its direct lending programs. During fiscal 1997, nearly 70 percent of USDA's Farm Service Agency (FSA) total lending volume came under its guaranteed loan programs. The policy change leaves the guaranteed lending programs as the primary federal credit safety net for farmers. Thus, the delivery and targeting of federal farm credit assistance now depends on lender participation in guaranteed lending programs.

Koenig and Sullivan found that commercial banks dominated guaranteed lending in the late-1980s when loan guarantee programs were relatively young and farm financial stress was high compared with today's economic conditions. Commercial banks continue to dominate FSA guaranteed lending, accounting for over 80 percent of the total outstanding dollar volume at 1996 year-end (figure 1). The next largest user of FSA loan guarantees is the Farm Credit System (FCS), which accounted for 15 percent of outstanding FSA guaranteed farm debt at 1996 year-end. Commercial bank share of total guarantee volume is much greater than its 40 percent share of the total U.S. farm debt market, while the FCS use of loan guarantees remains below its overall 26 percent share of farm debt.

FCS involvement in loan guarantee programs is a policy concern because in some regions FCS lenders supply the greatest share of farm credit. Thus, if an FCS lender does not use loan guarantees, the delivery of FSA credit assistance in the effected service area could suffer. If the FCS lender serves a multi-state region, participation can have broader consequences for the delivery and objectives of FSA's programs. FCS participation also has implications for the government sponsored enterprise's (GSE) own mission. In particular, loan guarantees can serve as a mechanism to increase service to young, beginning, and small farmers, who often have higher credit risk profiles than other applicants.

This paper documents FCS participation in FSA's loan guarantee programs and examines the incentives and disincentives that may affect FCS and commercial bank participation. The paper provides an overview of FSA loan guarantee programs before presenting some patterns and trends in FCS use of federal loan guarantees. Some comparisons with commercial bank are made, but the focus of the paper is on the FCS's use of loan guarantees. A discussion of some policy implications and suggestions for further research are also included. The analysis

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uses 1995 and 1996 data obtained from the FSA, the Farm Credit Council, the Farm Credit Administration, and USDA's Farm Costs and Returns Survey.

Loan Guarantee Programs

FSA provides credit assistance to farmers through two mechanisms: direct and guaranteed loans. Direct loans are originated and serviced by FSA, whereas guaranteed loans are originated and serviced by qualified commercial, cooperative, or nonprofit participating lenders. To qualify as a guaranteed lender, expertise in agricultural lending must be demonstrated. FCS associations are automatically granted qualified lending status. In addition, FSA designates certified lending status to lenders meeting additional criteria based on their farm lending volume and loan losses. In return, lenders get expedited action on guarantee requests and streamlined processing.

FSA operates both a guaranteed farm ownership (FO) and a guaranteed operating loan (OL) program. Guaranteed OL loans are capped at \$400,000 and FO loans at \$300,000. Guaranteed OL loans can be for a variety of purposes, including the purchase of livestock, machinery, annual operating expenses, and the refinancing of existing debt. Loans eligible for guarantee under the FO program include those for the purchase or improvement or refinancing of farm real estate.

Under a loan guarantee, FSA guarantees repayment of up to 90 percent of a loan made by the lender. For loans to beginning farmers--those with less than 10 years of experience owning or operating a farm--and loans to refinance direct FO loans, FSA provides a 95-percent guarantee. Applications and decisions are made at one of FSA's 2,400 offices, but not all of these offices are staffed with credit specialist personnel. Nevertheless, the decisions on guaranteed loan applicants are disbursed over hundreds of county and multi-county offices. Interest rates are negotiated between the borrower and lender, with the stipulation that the lender charge rates not greater than their typical farm customers would receive on similar loans. FSA offers an interest rate subsidy program for OL loans, where the loan rate is reduced by 4 percentage points.

The annual volume guaranteed under the OL program is more than twice the volume of the FO program (figure 2). Typically, the guaranteed OL program has unused lending authority at the end of each fiscal year, while the guaranteed FO program often uses most, if not all, of its annual lending authority. Sizable percentages of guaranteed OL and FO loan authority are reserved for loans to beginning farmers until mid-fiscal year, after which they can be used to guarantee loans to other applicants. At the end of 1996, outstanding guaranteed OL volume stood at \$3.6 billion and outstanding guaranteed FO volume stood at \$2.8 billion.

Trends in FCS Participation

Relative to commercial banks, the Farm Credit System is a less aggressive user of FSA loan guarantees. At 1995 year-end, 7.6 percent of bank-held farm business debt was guaranteed, but only 2.3 percent of outstanding FCS-held farm business debt was guaranteed (figure 3). FCS use of guarantees varies across Farm Credit Bank (FCB) districts, with use being greatest in the eastern half of the country. The Western, Wichita, and AgAmerica FCB districts have one percent or less of their farm business loan volume guaranteed. Collectively, associations in the CoBank district are the most aggressive users of guarantees, with about 5 percent of total farm loan volume guaranteed. Commercial bank use of loan guarantees is more uniform across the FCB districts, with guarantee use among banks being lowest in the Western FCB district and greatest in the CoBank FCB district.

FCS-held guaranteed loan volume is heavily concentrated in two FCB districts: AgriBank and AgFirst. At the end of 1996, 72 percent of FCS's \$945 million in guaranteed volume was held within these two FCB districts (figure 4). The AgriBank district alone accounted for 46 percent of the System's total guaranteed loan volume and a 54 percent share of its total guaranteed real estate loan volume. About a quarter of AgriBank's volume is held at the AgriBank FCB, with the remaining being held in the portfolios of the district's associations.

AgriBank, CoBank, and AgFirst FCB district shares of total FCS guaranteed loan volume exceed their respective shares of total FCS farm loan volume. All other FCB districts under-use guarantees relative to their shares of total FCS farm loan volume. At the extreme is the AgAmerica FCB district which has a 19 percent share of total FCS farm loan volume, but just a 3 percent share of the FCS's total guaranteed farm loan volume. With the exception of commercial banks in the Western FCB district, the geographical dispersion of bank-held guaranteed farm debt approximates that of all bank-held farm debt.

Volume is Growing

FCS use of the guaranteed programs has been rising in the 1990s (figure 5). In the 5 years after 1991, average FCS outstanding year-end guaranteed volume grew at a 7 percent pace, somewhat faster than the overall growth of outstanding guaranteed farm loan volume. The growth has varied, with AgriBank and Western FCB volume being flat and AgAmerica FCB district volume dropping 57 percent from 1991 to 1996. Much of the FCS volume growth came from the Wichita, Texas, and CoBank FCB districts. Until 1996, AgFirst was reporting growth in guarantee volume as well

The use of the guaranteed program may be associated with higher levels of financial stress. Previous studies have shown that farmers with FSA guaranteed loans display lower net worth and less income than other indebted farms (Dodson, Koenig, Ryan). Lenders may view the guaranteed program as a procedure to minimize their loss exposure when economic downturns occur rather than as a procedure to extend credit to individuals who may be on the

margin. During the mid-1990s, farmers in the Southwest US were adversely affected by a drought combined with lower returns to livestock producers. This might help explain the growth in loan guarantee use in the Texas and Wichita districts during the 1990s.

Most of the rise in total guaranteed loan volume resulted from real estate lending. Total outstanding FCS farm real estate volume having an FO guarantee grew 66 percent from 1991 to 1996 (figure 6). This growth occurred during a period when total System farm real estate loan volume was flat. During this period, non-real estate volume grew by 45 percent, but the amount of non-real estate volume having an FSA guarantee grew by only 12 percent. Still, at 1996 year-end, a greater percentage of total FCS non-real estate loan volume (2.7 percent) was guaranteed than real estate loan volume (2.0 percent).

Association Use Varies

Use of FSA guarantees varies considerably among FCS direct lending associations. Nearly one-third of the 157 direct lending associations at mid-1996 had less than 1 percent of their farm loan volume guaranteed by FSA (table 1). Of these, 13 associations reported no guaranteed loans in their portfolios (table 2). The Western FCB district had seven associations not participating in the program at mid-1996, six of which were serving California.

At the middle of 1996, just 10 direct lending associations had a greater percentage of their total loan portfolios guaranteed than the average guarantee ratio for the banking industry (table 3). The AgriBank FCB district, which has the most direct lending associations, had the greatest number of high guarantee users. Yet, AgriBank also has an equal number of associations which have little or no guaranteed loan volume. Those associations with a high percentage of their portfolios guaranteed by FSA tend to serve areas where dairy enterprises dominate.

Participation Factors

This section explores some of the incentives and disincentives for participating in FSA loan guarantee programs facing the FCS and commercial banks. First, we consider the role that the structure and characteristics of the FCS and commercial banks may play in influencing participation. This includes analyzing the clientele these two lender groups tend to serve. Next, we examine issues of cost, experience, and funding. Finally, we discuss the role regulations may play in encouraging or discouraging guarantee loan use.

Some of these incentives or disincentives are harder to quantify and require further study. For example, the relative low use of federal guarantees by the FCS might merely reflect personal relationships between local FSA and FCS managers or local FCS lending policies. A survey of FCS managers and boards of directors would shed light on this possible explanation, which

is now only supported by anecdotal evidence.

Association and Lending Characteristics

As Duncan and Dodson suggest, FCS lenders do not act as one unit, but function more like independent entities. This means that a wide variation in loan guarantee usage might be expected among FCS lenders. The relatively concentrated structure of FCS assets, management, and lending policies also means overall FCS participation will be impacted by any single factor more so than overall commercial bank participation. In 1996, the FCS consisted of just 164 associations and FCBs with direct lending authority--a significant number of which were jointly managed. In comparison, 7,800 banks held farm loans in their loan portfolios at mid-1997, of which 3,300 were agricultural banks.¹ Furthermore, FCS lending is highly concentrated among its few remaining institutions. While half of all FCS farm loan volume is held by just 8 institutions, 3,300 agricultural banks hold about half of all bank farm loan volume. Thus, FCS's policies toward loan guarantee use depend on a small cadre of managers and boards of directors relative to commercial bankers.

FCS loan portfolios are especially concentrated in some regions. Lending in the CoBank, AgriBank, and AgAmerica FCB districts is dominated by associations with over \$1 billion in total assets, many of which are jointly managed. In the CoBank district, 60 percent of all farm lending occurs through just one association (First Pioneer-Empire). AgAmerica, which covers eight states from Iowa to Washington, has only three lending associations, two of which are jointly managed.

Association Characteristics. While a more rigorous analysis may be warranted, only a few characteristics of associations were found that distinguish frequent guarantee users from infrequent guarantee users. Associations with over 5 percent of their loans guaranteed did report greater capital ratios. But, this is likely a consequence of reduced risk-weighting on guaranteed loans rather than reflecting greater risk aversion on the part of managers.

FCS associations which had a history of restructuring problem loans were more likely to utilize loan guarantee programs (table 5). However, among associations where FSA guarantees are more commonly used, restructuring was still used sparingly with less than 0.5 percent of all loans classified as restructured during 1996. Also, the presence of financial stress does not necessarily imply increased use of FSA guarantees. Over the 1993-96 period, associations without any guaranteed loans had higher levels of non-accrual loans than associations with guaranteed loans.

There is some evidence that associations may be utilizing loan guarantees as a strategy to reduce loan portfolio risk.² Associations with higher than average concentration of loans backed by a single commodity or group of commodities had a greater tendency to use guarantees. FCS borrowers with guaranteed loans were more likely to specialize in dairy production and to borrow from associations in the Northeast or Lake States with high

concentrations of dairy loans in their loan portfolios.

Associations with greater guarantee usage were smaller than associations not using loan guarantees. Those frequently using guarantees had total loan volumes of \$125 million as opposed to \$216 million for all associations. Large association size does not necessarily mean lower loan guarantee use. During 1991-96, the large CoBank associations were among the most aggressive users of guarantees, whereas the large AgAmerica associations were systematically reducing guaranteed lending.

Further evidence of AgAmerica's withdrawal comes from an opinion poll of some agricultural bankers conducted in 1996 by the American Bankers Association. In the CoBank FCB district, most bankers indicated the FCS was actively making loans using FSA guarantees in their marketing area. However, only 38 percent of bankers polled in the AgAmerica FCB district made that indication.

Clientele Served. FCS's use of loan guarantees may be influenced by the clientele it serves. Previous studies have shown that FCS farm borrowers are older, more wealthy, and operate larger farms than bank borrowers (Dodson and Koenig). This is also true when FCS borrowers with guarantees are compared with bank borrowers with guarantees. The average net worth for FCS borrowers with guaranteed loans exceeded bank borrowers with guaranteed loans by \$120,000 (table 4). FCS guaranteed borrowers also operated farms with more farm assets and greater farm production. The average FCS guaranteed borrower was older than the average bank guarantee borrower. These findings tend to support the hypothesis that FCS is generally serving a clientele which is less likely to need FSA assistance.

Guarantee Experience and Costs

Familiarity with guaranteed lending and costs associated with guaranteed lending are factors that will influence guarantee program usage among lenders. With some 6,000 banks participating in SBA's Section 7(a) small business loan guarantee program, many banks are already familiar with processing federal guarantees and hence may enjoy some informational and processing advantages over FCS lenders. Yet, these advantages might be mitigated by some significant operational differences between the FSA and SBA programs. Also, banks are now using SBA's programs to service their farm and farm-related customers, and to some extent may be substituting SBA guarantees for FSA guarantees (Stam, Wallace, and Koenig). Thus, the influence of familiarity with other federal guarantees is ambiguous and warrants further study.

FCS's use of guarantees may also reflect an FCS perception that loan guarantees are an unnecessary and costly administrative expense that can be avoided if loans are properly chosen and administered (Koenig and Sullivan). Unquestionably, additional costs are associated with a guaranteed loan relative to an unguaranteed loan. However, these costs should not be systematically higher for FCS lenders.

One argument against using federal guarantees for smaller credit requests is that additional processing and servicing costs make these loans unprofitable. For all loans guaranteed by FSA in fiscal 1996, the average size was \$127,000--\$116,000 for OL loans and \$172,000 for FO loans. The average size of a new FCS non-real estate loan and real estate loan in 1996 was \$49,000 and \$180,000, respectively (Goktepe). Walraven and Post reported the average new commercial bank non-real estate loan in 1996 totaled \$39,000.

This data suggests that lenders are reluctant to seek guarantees on short-term smaller loan requests because the additional origination and servicing costs, including FSA's 1 percent guarantee fee, can not be fully recouped in a short lending period. Lenders can pass the cost of the guarantee fee along to borrowers, but the rate charged on guaranteed loans cannot exceed the rate charged their typical farm customer. Therefore, it is difficult for many lenders to pass along higher loan costs through interest rate charges.

The FCS does enjoy the advantage of automatically receiving qualified lender status and because its lenders specialize in farm lending and have larger farm loan portfolios than the typical agricultural bank, they may be better equipped to absorb the fixed costs of administering a guaranteed loan. Interestingly, when examining commercial bank use of FSA loan guarantees in Arkansas, McCollum et. al. found that bank size did not substantially impact guarantee use among banks in that state. Finally, banks can profit from other financial relationships with the customer, such as checking and time deposits, and hence are better able to spread guarantee costs over a wider array of products and services. More research on FCS and bank ability to absorb guaranteed lending costs seems appropriate given the evidence reviewed.

Agricultural lenders have been turning to credit scoring and low documentation techniques to reduce the cost of credit decisions, especially on smaller credits (Henricksen and Boehlje). Credit scoring, where the financial strength of a borrower is rated by a set procedure, could adversely impact guarantee use because FSA guaranteed borrowers typically have higher risk profiles and hence are less qualified under credit scoring. Low documentation procedures could deter loan guarantee use because FSA documentation requirements are likely to exceed those of low-document lending procedures. To address this issue, FSA is in the process of rewriting regulations to streamline documentation requirements for small loans. While some FCS lenders and banks have adopted credit scoring and low documentation techniques, little data exists on the extent to which these practices have been employed by either lender group.

Capital Needs

Banks and the FCS have very different organizational and capital structures. Banks must attract equity capital from investors, creating an incentive to maximize their return on equity. Because a guarantee reduces the amount required to capitalize a loan, banks can use guarantees to obtain greater leverage, thus increasing returns to equity while controlling risk.

The FCS lenders are organized as cooperatives and obtain equity capital from their borrowers. Since there is no market for FCS borrower stock, there is less of an incentive to maximize return on equity.

When calculating risk-based capital, the Farm Credit Administration (FCA) applies a 10 percent weight to guaranteed loan volume, while federal bank regulators apply a 20 percent weight.³ This means that banks must hold twice as much capital on federally guaranteed loans than do FCS lenders. Thus, FCS lenders facing capital constraints might have a stronger incentive to utilize loan guarantees. But, FCS lenders are now well capitalized with no association reporting permanent capital ratios below 11.4 percent (Duncan and Dodson).

If FCS loan growth accelerates, capital ratios may decline as loan volume grows faster than capital. There is some evidence that this is already occurring. Over the 1994-96 period, non-real estate loan volume grew by over 25 percent for 49 associations. Correspondingly, these associations had notable declines in their permanent capital ratios. Thus, there may be greater incentives in the future for fast growing associations to utilize loan guarantees as a method to preserve their capital.

Funding New Loans

Compared to banks, liquidity is less likely to be an issue for the FCS lenders because of their high capital levels and their preferential access to capital markets afforded by their GSE status. When a government guarantee is obtained, the loan becomes more liquid because the guaranteed portion of the loan can be more readily sold through informal or formal secondary loan markets. By selling loans, a bank frees up resources for additional lending. Obtaining a loan guarantee can be a more important incentive for rural banks because their greater dependence on local deposit taking as a loan funding source means they are more likely to face liquidity problems (Barry and Ellinger). Furthermore, even if additional lending funds are not needed, banks have an incentive to obtain guarantees because their presence favorably impacts a bank's overall regulatory performance rating (CAMEL).

While loan guarantee use can improve bank liquidity, a USDA study found little evidence to suggest that new lending by rural and agricultural banks, as a group, was significantly impaired by a lack of loanable funds during the 1990s (USDA 1997b). Moreover, rural banks have access to a variety of non-deposit and non-moral sources of funds, such as those from Federal Home Banks, and these sources have been underutilized by rural banks relative their urban counterparts (Collender).⁴ Therefore, improving liquidity has not likely been a major incentive for banks to participate in FSA's programs during the 1990s.

Regulatory Considerations

Loan Quality Ratings. Commercial bank regulators and the FCA consider the presence of a government guarantee to improve loan quality. While both regulators treat guarantees

similarly when rating a lender's loans, there may be more encouragement on the part of bank regulators to use federal guarantees than the FCA. With over 6,000 banks participating in SBA's Section 7 (a) small business loan guarantee program, bank regulators are more likely to be familiar with federal guarantees and, consequently, more likely to be critical of any risky farm loan which is not guaranteed.

Loan Limits. FCS lenders are prohibited from making farm real estate loans that exceed 85 percent of the appraised value of the real estate taken as the primary collateral. This should not be a deterrent to use of the FSA guarantee programs, because FCA regulations allow the loan-to-value ratio to rise to 97 percent with a government guarantee. Therefore, this regulation should serve as an incentive for FCS lenders to use guarantees when serving lower-equity applicants.

Borrower Limits. Banks may be encouraged to obtain loan guarantees because such loans are exempt from statutory lending limits to a single borrower. Although lending limits imposed on banks vary by state, for National banks the total outstanding loans and extensions to one borrower may not exceed 15 percent of the bank's capital and surplus, plus an additional 10 percent if the amount in excess of 15 percent is fully secured by readily marketable collateral. There are special rules for certain farm lending activities, such as livestock financing (Federal Register 1995).

The influence of this statutory requirement is mostly limited to smaller banks, especially the 1,656 banks with less than \$25 million in assets (USDA 1997a). This is because the average total indebtedness of an FSA borrower is not likely to be of sufficient size to be affected by statutory limits. On September 30, 1996, when farm loan balances were near seasonal peaks, the average FSA guaranteed indebtedness per borrower was \$161,000. A typical \$25 million national bank can supply a \$400,000 loan to a borrower without exceeding the statutory limit. Banks with less than \$25 million in assets accounted for just 8 percent of total bank held farm debt at mid-1996. Even if total borrower indebtedness reached \$700,000 (FSA's maximum program indebtedness to a single borrower), only banks with \$50 million or less in total assets would likely be subject to the statutory limit.

Prudent lending policies would likely motivate smaller banks to reduce portfolio risk before the statutory threshold limits were ever reached. Loan guarantees, like loan sales or entering into participations with other lenders, are a primary tool available to reduce concentration of risk in a lending portfolio. The smaller the bank, the more likely concentration of risk in a single borrowing entity or a group of like entities will be an issue.

The FCS also faces lending limits to a single borrower. FCA regulations specify that outstanding loans to a borrower are not to exceed 25 percent of the lender's permanent capital, which is subject to some adjustments (12 CFR 614.4351-5). The large size of FCS lenders, high capital positions, and ability to participate with other FCS and non-FCS lenders, also lessens the possibility that FCS lenders will reach the single borrower lending limit.

Associations with under \$50 million in total assets are most likely to be affected by these limits or more likely to be concerned about concentration of risk in a single borrower. However, only 2 percent of FCS loan volume is held by these small associations (Duncan and Dodson).

Community Reinvestment Act. Some banks may have an incentive to use FSA guarantees to fulfill their requirements under the Community Reinvestment Act of 1977 (CRA). The Act was passed to assure that creditworthy borrowers in all communities, especially those with a high proportion of low-to-moderate income households, have access to credit and banking services. Under CRA, banks are rated by their primary regulator based upon reports submitted on their lending, investment, and services provided in their market territory (Board of Governors of the Federal Reserve System). Obtaining a satisfactory CRA rating is important since it can be used as a condition for approval for branching and bank acquisitions. The FCS is not subject to CRA.

Farm loans under \$500,000 can be considered in meeting CRA requirements. Since presumably some of these loans are to low-to-moderate income households, using guarantees to reach these customers may be a prudent method for a bank to meet CRA objectives. A cursory review of some CRA reports found that banks are including farm loans in their CRA reports. But, CRA is less likely to be an incentive for banks with less than \$250 million in assets, many of which are in rural areas, because CRA requirements for these institutions are streamlined.

A FCS Policy Implication

System participation in FSA loan guarantee programs has implications to its own Congressional mandate that it serve young, beginning, and small farmers and ranchers under Section 4.19 of the Farm Credit Act of 1971 (12 U.S.C. 2207). Besides requiring an accounting of service to these borrowers, the Act requires that FCS lenders "prepare a program for furnishing sound and constructive credit and related services to young, beginning, and small farmers and ranchers," and that such programs "shall assure that such credit and services are available in coordination with other units of the FCS and with other governmental sources of credit....." With about a third of FCS associations reporting little or no guaranteed loan volume, loan guarantees appear to be playing only a minor role in many of these targeting programs.⁵

A USDA study concluded that some FCS lenders take both the reporting and targeting requirements of the Act more seriously, with formal programs in place and monitoring of progress evident (USDA 1997b). For others, reporting and meeting statute objectives appeared to be a low priority. Research by Dodson and Koenig (1994) and Dodson indicates FCS lenders tend to under serve small, young, and beginning farmers relative to their overall market share of farm debt. One method for the FCS to expand its customer base might be to

adopt lending policies that better utilize FSA loan guarantee programs.

Newly revised regulations may not encourage greater use of FSA guarantees for targeted lending purposes (Federal Register 1997a). As part of a far reaching effort to reduce regulatory burden for the System, the FCA recently issued regulations that greatly simplify FCS requirements for its young, beginning, and small farmer lending programs. The new regulations (12 CFR 614.4165, September 30, 1997) give FCS lenders full discretion when developing policies to serve these borrowers. Dropped from previous regulations (12 CFR 614.4165, June 19, 1990) was language that spelled out minimum requirements for targeted loan programs, as well as the definitions of these targeted groups. Also dropped was a statutory requirement that these lending programs "emphasize coordination or participation with other credit institutions, especially governmental sources of credit or guarantees."

Conclusions

Farm Service Agency's loan guarantee programs are now the primary federal credit safety net, making access to federal credit assistance dependent on lender participation in these programs. The Farm Credit System's use of FSA loan guarantees remains small relative to its overall share of the farm debt market. Commercial banks account for 80 percent of FSA loan guarantee volume; the FCS accounts for just 15 percent of FSA loan guarantee volume.

System use of guaranteed loan programs has been growing in the 1990s, but growth varies considerably across and within Farm Credit Bank districts. In some regions, such as the Northeast, FCS use of loan guarantees is growing rapidly, while in others, such as the Western states, it is contracting. FCS use of loan guarantees is highly concentrated, with over 72 percent of the volume located in the AgriBank and AgFirst FCB districts. There are substantial areas of the country where little or no participation by FCS lenders is evident. In these regions, the availability of credit for FSA eligible borrowers may suffer.

A number of factors were examined that might explain the relatively low use of loan guarantees by much of the Farm Credit System. Serving a farmer clientele that is less likely to need an FSA guarantee appears to be one likely explanation. FCS borrowers with guaranteed debt were larger and more financially secure than bank customers with guarantees. Personal relationships between FSA and FCS managers and local FCS lending philosophies are also likely affecting FCS participation. These factors have become more important factors over time because the management and lending policies of the FCS are consolidating. With just 8 lenders controlling half of the System's total farm loan volume, overall FCS use of loan guarantees is dependent on a relatively small cadre of managers and boards of directors.

FCS lenders that were smaller or had higher concentrations of lending risk were more likely to use loan guarantees. The presence of a dairy enterprise increased the likelihood that FCS lenders sought a loan guarantee. Commercial banks have incentives to use loan guarantees to

finance further lending and improve returns to equity capital than many FCS lenders might not have, but the magnitude of these incentives for banks remains a topic for further study. An examination of other factors, such as regulatory treatment of federal guarantees and ability to competitively price a guaranteed loan, provide less compelling arguments that the FCS is disadvantaged relative to commercial banks, but further study of some of these other issues is warranted.

Finally, low loan guarantee use by the FCS has implications for its own Congressional mandate to serve young, beginning, and small farmers through special credit programs. These special credit programs are supposed to operate in coordination with other governmental sources of credit to facilitate federal assistance to these targeted borrowers. With about a third of FCS associations reporting few or no guaranteed loans, loan guarantees appear to be playing only a minor role in many of these targeting programs. One method for FCS lenders to expand their service to beginning farmers, socially disadvantaged applicants, and others, would be through policies that include more active use of FSA loan guarantee programs.

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Table 1. Farm Credit System associations reporting federally guaranteed loans, by district farm credit bank, June 1996.¹

Percent of Farm Loan Volume Guaranteed								
	CoBank	AgFirst	AgriBank	Wichita	Texas	Western	AgAmerica	Total
Number of associations								
No use	0	1	2	2	1	7	0	13
0 to 1	0	3	13	4	2	11	2	35
1 to 5	4	29	24	8	9	5	1	80
5 or more	1	7	10	3	4	4	0	29
Total	5	40	49	17	16	27	3	157

Source: Farm Credit Administration, Call Reports for June 30, 1996.

¹ Data restated for merger of Central Kansas and South Central Kansas PCAs which occurred in 1996. Data does not account for mergers occurring in 1997. Empire and First Pioneer ACA merged on July 1, 1997. Also, PCA of Southeast Wisconsin, Western Wisconsin PCA and FLCA of Southeast Wisconsin merged in 1997 leaving 155 direct lending associations.

Table 2. Farm Credit System associations not reporting a federally guaranteed loan, June 1996.

State	Association	Charter ¹	FCS district	Commodity concentration ²
Arkansas	Eastern Arkansas	FLCA	AgriBank	35
Illinois	Central Illinois	FLCA	AgriBank	83
Virginia	Staunton	ACA	AgFirst	36
Texas	Amarillo	PCA	Texas	45
California	Pacific Coast	ACA	Western	46
California	Southern California	ACA	Western	36
California	Kingsburg	FLCA	Western	31
California	Sierra-Bay	FLCA	Western	17
California	Sacramento Valley	FLCA	Western	20
California	Central Valley	PCA	Western	53
Hawaii	Hawaii	FLCA	Western	31
Colorado	S.E. Colorado	PCA	Wichita	19
Kansas	Garden City	PCA	Wichita	60

Source: Farm Credit Administration, Call Reports for June 30, 1996.

¹ ACA equals Agricultural Credit Association; FLCA equals Federal Land Credit Association; and PCA equals Production Credit Association.

² Percentage of total loan volume owed by borrowers classified within a single commodity or group of commodities, as reported in the association's annual report.

Table 3. Top 10 Farm Credit System associations according to percent of total farm loan volume that is federally guaranteed, June 1996.

State	Association	Charter ¹	District	Percent ²	Commodity Concentration ³
Wisconsin	Badgerland	FLCA	AgriBank	21.4	72
Michigan	Southeastern Michigan	PCA	AgriBank	10.5	30
Michigan	Michigan's Heartland	FLCA	AgriBank	10.0	28
Wisconsin	Northeast Wisconsin	PCA	AgriBank	8.6	71
Wisconsin	Northeast Wisconsin	FLCA	AgriBank	8.5	71
Michigan	Michigan's Heartland	PCA	AgriBank	8.1	28
Vermont	Yankee	ACA	CoBank	8.0	72
Arkansas	Western Arkansas	FLCA	AgriBank	7.9	52
Colorado	Monte Vista	PCA	Wichita	7.8	72
Texas	Agricultural	PCA	Texas	7.7	35

Source: Farm Credit Administration, Call Reports for June 30, 1996.

¹ ACA equals Agricultural Credit Association; FLCA equals Federal Land Credit Association; and PCA equals Production Credit Association.

² Percentage of federally guaranteed loan volume to total farm loan volume.

³ Percentage of total loan volume owed by borrowers classified within a single commodity or group of commodities, as reported in the association's annual report.

Table 4. Characteristics of farm borrowers with indebtedness guaranteed by the Farm Service Agency, December 31, 1995.¹

	FCS	Banks
	Dollars	
Balance sheet:		
Total farm assets	601,561	468,177
Total farm debt	149,307	136,774
Equity	452,254	331,403
Income Statement:		
Value of farm production	178,235	110,119
Total farm expenses	135,168	84,594
Net farm income	28,183	12,912
Net household income	56,779	51,740
Percent with equity		
less than \$250,000	22	28
Weighted debt-to-asset ratio	25	29
Operator age (years)	50	46
Acres farmed	639	645
Percent of farms classified² as:		
crop	62	64
dairy	29	11

Source: USDA's Farm Costs and Returns Survey, 1995

¹ Includes only farms incurring debt since 1985.

² More than half of the value of farm production attributed to a commodity or group of commodities.

Table 5. Characteristics of Farm Credit System associations, classified by the percentage of total farm loans federally guaranteed¹, 1996.

Attribute	No use	0 to 1 percent	1 to 5 percent	Over 5 percent	All associations
				Percent	
Share of with at least 50% commodity specialization	23	29	25	42	29
Average permanent capital ratio (weighted)	15.4	14.6	17.3	18.1	16.2
Non-accruals as a percent of total loans	0.8	1.3	1.1	0.9	1.1
Restructured loans as a percent of total loans	0.02	0.2	0.17	0.15	0.17
Allowance for loan loss as a percent of total loans	2.2	3.2	2.7	2.4	2.8
Net interest margin	3.6	3.9	4.0	4.0	3.9
Farm mortgage volume to total loan volume ratio	63	68	50	49	58
Allocated surplus to total capital ratio	6	2	12	7	7
				Dollars (000)	
Average assets	205,110	399,320	204,393	149,337	237,738
Loan volume	197,138	359,499	191,096	125,141	216,955
Voting stockholders (#)	947	3,395	2,089	1,302	2,140
Loan volume per stockholder	208	106	91	96	101

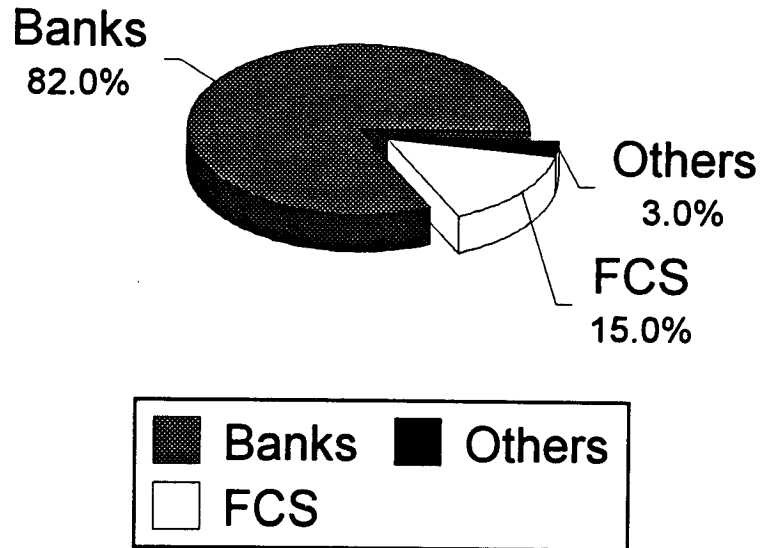
Source: FCA, Call Reports for June 30, 1996; Association and Farm Credit Bank annual reports.

¹ Percentage of federally guaranteed loan volume to total farm loan volume.

Endnotes

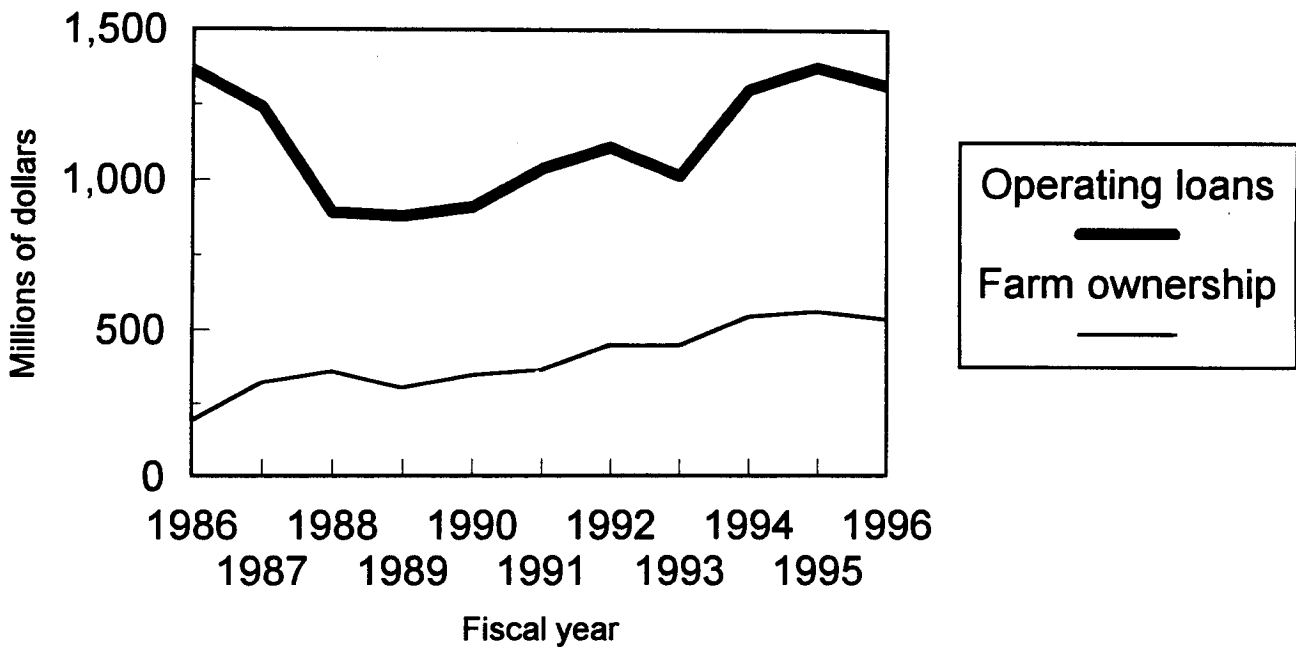
1. Banks having a concentration of agricultural loans in their total loan portfolio that is greater than the average for all banks.
2. Interestingly, a study by Gabriel and Pacheco on commodity concentration management strategies for the System placed little importance on using guarantees as a method to control commodity concentration risks within the System.
3. If a guaranteed loan is swapped for another guaranteed loan or a guaranteed-backed security of equal value, the weighting becomes zero because FSA is required to repay purchasers of FSA loan guarantees in full within 60 days of payment default.
4. The Federal Housing Finance Board proposed regulations in 1997 that would expand agricultural bank access to Federal Home Loan Bank funding. The proposed rule (Federal Register 1997b) would allow member banks to pledge farm loans to obtain advances providing the mortgage contained the principal residence of the farm operator.
5. Dodson cautions that subsidized credit for low-equity beginning farmers is not necessarily the best way to assist these borrowers.

Figure 1. Commercial banks dominate FSA guaranteed lending
Lender share of 1996 outstanding FSA guaranteed loan volume



Source: Farm Service Agency and Farm Credit Council

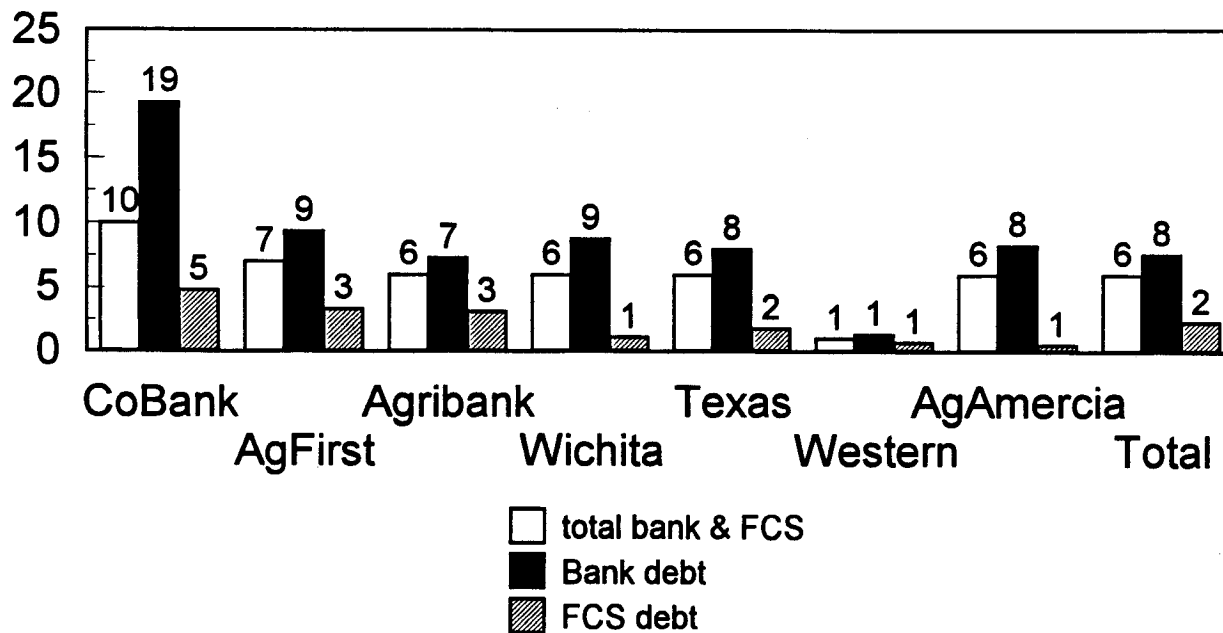
Figure 2. Guaranteed OL volume exceeds FO Volume
Annual guaranteed loan obligation volume, by program



Source: Farm Service Agency

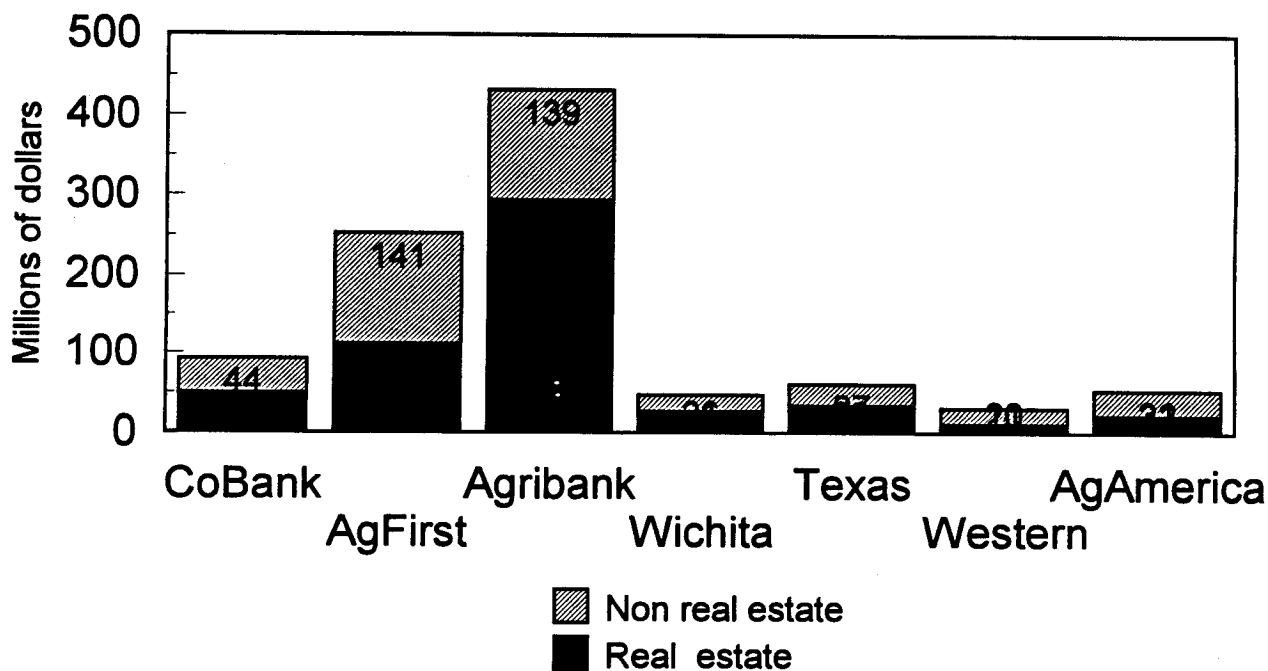
Figure 3. A much greater share of commercial bank debt is guaranteed by FSA

Percent of total 1995 farm business debt that is guaranteed, by FCS district



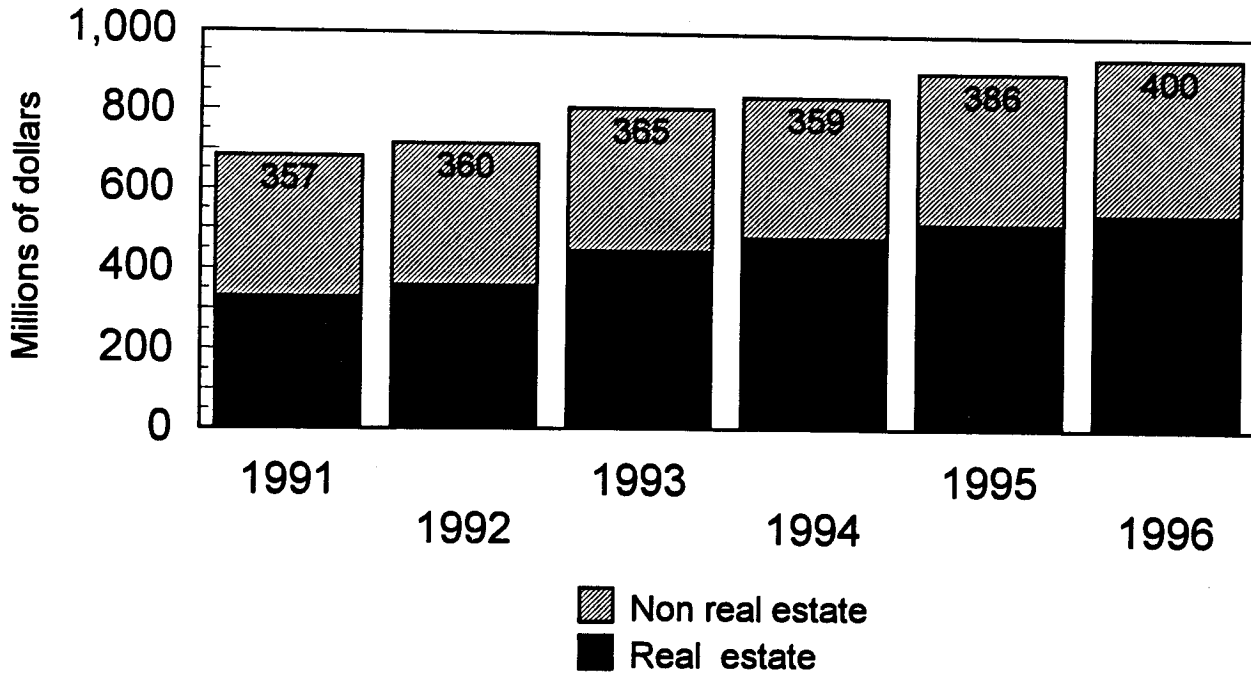
Source: USDA/ERS, Farm Credit Council

Figure 4. Two FCS districts account for most of System guaranteed loan volume
Amount of outstanding FCS farm loan volume that is FSA guaranteed, yearend 1996



Source: Farm Credit Council, Farm Credit Banks Annual Reports

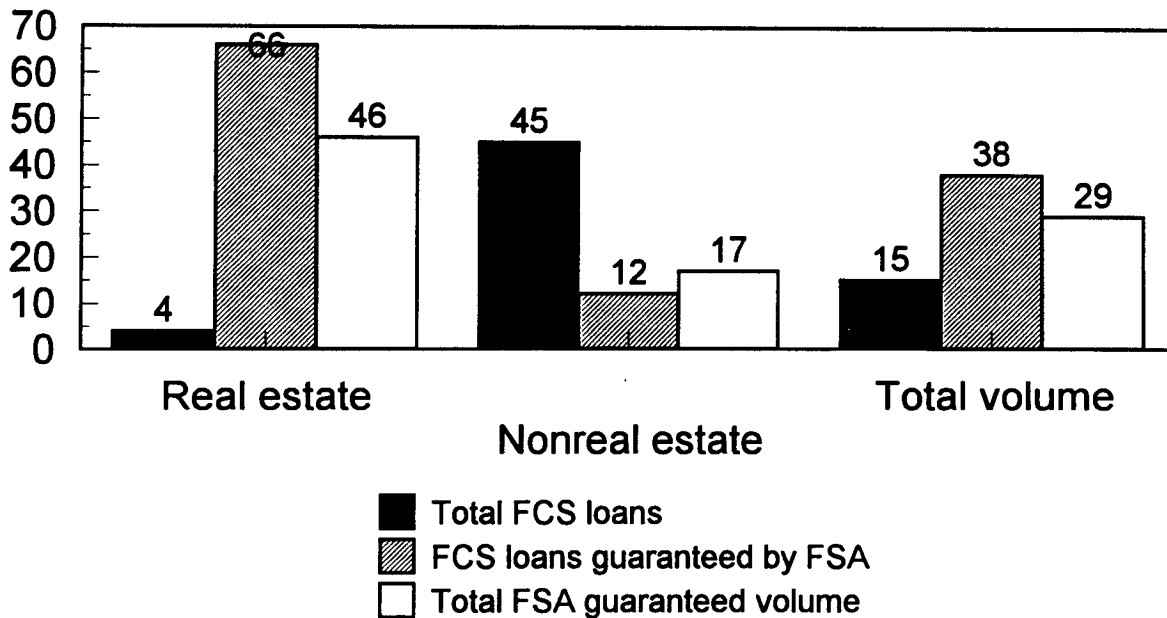
Figure 5. FCS use of FSA guarantees is increasing
 Outstanding yearend FCS farm loan volume that is guaranteed by FSA, 1991-96



Source: Farm Credit Council

Figure 6. Rise in FCS loan volume guaranteed by FSA comes from real etstate

Percentage change in outstanding farm loan volume, by type of debt, 1991-96



Source: Farm Service Agency, Farm Credit Council