The Status of Farm Lenders: An Assessment of Eighth District and National Trends

Michael T. Belongia and Kenneth C. Carraro

Since 1982, sharp declines in real farm income and the asset values supporting over $200 billion in farm debt have created substantial increases in farm loan defaults and farm bank failures. Large and increasing loan losses have generated a great deal of concern that the rapidly deteriorating quality of farm debt may have severe consequences for the long-term structure of American agriculture and adverse short-term effects on the aggregate economy as well.

This article reviews a variety of performance indicators for the three major lenders to the farm sector and assesses both the timing and breadth of portfolio deterioration. The lending institutions examined are agricultural banks, the Farm Credit System (FCS) and the Farmers Home Administration (FmHA). The performance of these lenders in the Eighth Federal Reserve District is compared with their performance in the rest of the United States.

**FARM LENDERS: A BRIEF PROFILE**

An agricultural bank is defined as a commercial bank with a ratio of farm loans to total loans that is above the average farm loan ratio at all banks. At the end of 1984, the average farm loan ratio was approximately 17 percent. Currently, there are 589 banks in the “official” boundaries of the Eighth Federal Reserve District and 1,383 agricultural banks in the region defined more broadly that have a higher farm loan ratio and meet the current definition of an agricultural bank. The broader definition of the Eighth District is used to make comparisons with Farm Credit Bank districts. Figure 1 represents these alternative designations of the District’s borders.

Nationally, 4,970 banks, or 35 percent of all commercial banks are defined to be agricultural banks. Collectively, they hold $30 billion, or 60 percent, of the total farm debt held by commercial banks. Of the farm debt held by agricultural banks, 83 percent ($24.8 billion) is

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Estimates of farm loan defaults under different scenarios are provided by Bullock (1985). Ranges commonly cited for losses on all farm loans are $25–50 billion over the next four years. Losses within the Farm Credit System alone have been estimated to be $350–400 million in 1985 with additional losses in 1986. Also, an estimated 12 percent of the Farm Credit System’s loans are not adequately secured by property and assets and could produce “significant” future losses; see “Farm Agency Estimates” (1985).

Schink and Urbanchuck (1985) describe the channels through which farm loan defaults could affect interest rates, GNP and employment and estimate these effects for different magnitudes of loan losses. An alternative assessment of how farm loan defaults might affect the aggregate economy is provided by Belongia and Gilbert (1985).

Officially, the Eighth Federal Reserve District includes Arkansas, northern Mississippi, southern Illinois and Indiana, western Kentucky and Tennessee and eastern Missouri. Farm Credit districts, however, cover entire states. The Fourth and Sixth Farm Credit districts, headquartered in Louisville and St. Louis, do not include Mississippi but cover all of the remaining states and Ohio. To provide a representative, but unofficial Eighth District, we define it as the states covered by the Fourth and Sixth Farm Credit districts: Arkansas, Illinois, Indiana, Kentucky, Missouri, Ohio and Tennessee. Comparisons with the nation refer to data for all states other than those included in this definition of the Eighth District.
non-real estate debt, or operating debt, associated with the variable costs of farm production. Because farm lending by commercial banks is primarily for short-term operating debt, their chief source of competition is the Production Credit Associations (PCAs) of the Farm Credit System.

The cooperative Farm Credit System (FCS) is a system of federally chartered, but privately owned, banks and associations, which are organized as cooperatives. These banks are supervised and examined by the Farm Credit Administration, an independent agency of the United States government, and are mandated by their charter to make loans only for purposes directly related to agriculture. The FCS consists of 12 districts and 37 banks: 12 Federal Land Banks (FLBs), 12 Federal Intermediate Credit Banks (FICBs), and 13 Banks for Cooperatives (BCs).

The FCS obtains loanable funds by the sale of securities through the system's Wall Street funding arm, the Federal Farm Credit Banks Funding Corporation. The FICBs function as intermediaries that package these loanable funds for, as of October 1985, 318 Production Credit Associations (PCAs), who in turn, make loans directly to farmers for annual operating expenses. The FLBs make loans to farmers for the purchase of farmland through a network of 390 Federal Land Bank Associations that function as loan originating offices. Banks for Cooperatives make loans to farmer-owned cooperatives, such as supply stores. As of December 31, 1984, the Farm Credit System, exclusive of the Banks for Cooperatives, held $67.9 billion, or 32 percent, of total farm debt. Of this total, FLBs held $49.1 billion and PCAs held $17.9 billion. FICBs held the remaining $0.9 billion in the form of loans to other financial institutions.

The Farmers Home Administration (FmHA) is the so-called "lender of last resort" to farmers. It extends credit to farmers through direct loans, guarantees of farm loans made and serviced by commercial banks, and various emergency loan programs. FmHA, for the most part, lends to farmers when they have trouble servicing debt acquired from other lenders or if credit is not available at "reasonable" interest rates from their current lenders. As of 1984, FmHA held $25.7 billion, or 12 percent, of total farm debt.

**TRENDS IN THE ALLOCATION OF FARM DEBT**

A convenient place to begin a review of farm debt holdings and problems is an analysis of trends in loans outstanding at the various lenders. Table 1 presents the market shares of non-real estate agricultural debt held by the major lenders since 1970 for both the Eighth District, broadly defined, and for the remainder of the U.S. Non-real estate debt represents financing for annual operating expenses such as feed, fertilizer and seed, as well as for the purchase of farm machinery and livestock. The category of "All Others" includes such lenders as private individuals, dealers and merchants.

The trends in the District and the United States are roughly parallel and indicate that both commercial banks and the FCS gained their highest market shares in the mid-1970s and until recently have been steadily losing market share to the FmHA. By the end of 1984, commercial banks at both the District and national levels reversed the 10-year downtrend, showing significant market share gains over 1983.

Table 2 presents the market shares held by lenders for farm real estate loans. The lender category of "Insurers" has been added to reflect the significant pres-
Table 1
Farm Non-Real-Estate Debt Outstanding at Major Lenders (percent of market held by each lender)

<table>
<thead>
<tr>
<th></th>
<th>Banks U.S.</th>
<th>District</th>
<th>PCAs U.S.</th>
<th>District</th>
<th>FmHA U.S.</th>
<th>District</th>
<th>All Others U.S.</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>43.4%</td>
<td>43.1%</td>
<td>19.1%</td>
<td>22.5%</td>
<td>3.5%</td>
<td>2.6%</td>
<td>34.0%</td>
<td>31.8%</td>
</tr>
<tr>
<td>1971</td>
<td>46.1%</td>
<td>45.7%</td>
<td>22.2%</td>
<td>25.6%</td>
<td>3.5%</td>
<td>2.6%</td>
<td>28.3%</td>
<td>26.1%</td>
</tr>
<tr>
<td>1972</td>
<td>46.2%</td>
<td>43.4%</td>
<td>22.3%</td>
<td>26.2%</td>
<td>3.0%</td>
<td>2.2%</td>
<td>28.5%</td>
<td>28.2%</td>
</tr>
<tr>
<td>1973</td>
<td>48.6%</td>
<td>46.2%</td>
<td>21.9%</td>
<td>28.0%</td>
<td>2.8%</td>
<td>2.1%</td>
<td>26.8%</td>
<td>23.8%</td>
</tr>
<tr>
<td>1974</td>
<td>51.7%</td>
<td>46.8%</td>
<td>23.0%</td>
<td>28.5%</td>
<td>2.7%</td>
<td>2.0%</td>
<td>22.5%</td>
<td>22.6%</td>
</tr>
<tr>
<td>1975</td>
<td>50.0%</td>
<td>46.4%</td>
<td>25.6%</td>
<td>30.8%</td>
<td>2.9%</td>
<td>2.4%</td>
<td>21.5%</td>
<td>20.3%</td>
</tr>
<tr>
<td>1976</td>
<td>49.1%</td>
<td>44.0%</td>
<td>25.1%</td>
<td>31.6%</td>
<td>4.3%</td>
<td>4.0%</td>
<td>21.5%</td>
<td>20.4%</td>
</tr>
<tr>
<td>1977</td>
<td>48.7%</td>
<td>44.1%</td>
<td>24.3%</td>
<td>31.5%</td>
<td>4.0%</td>
<td>3.3%</td>
<td>23.0%</td>
<td>21.1%</td>
</tr>
<tr>
<td>1978</td>
<td>43.8%</td>
<td>41.3%</td>
<td>21.6%</td>
<td>29.6%</td>
<td>5.7%</td>
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<td>28.9%</td>
<td>25.5%</td>
</tr>
<tr>
<td>1979</td>
<td>40.6%</td>
<td>41.3%</td>
<td>20.3%</td>
<td>29.6%</td>
<td>9.2%</td>
<td>4.6%</td>
<td>29.8%</td>
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<tr>
<td>1980</td>
<td>38.5%</td>
<td>39.1%</td>
<td>21.7%</td>
<td>29.8%</td>
<td>12.0%</td>
<td>7.5%</td>
<td>27.8%</td>
<td>23.6%</td>
</tr>
<tr>
<td>1981</td>
<td>36.6%</td>
<td>36.0%</td>
<td>22.5%</td>
<td>28.3%</td>
<td>14.4%</td>
<td>10.3%</td>
<td>26.5%</td>
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</tr>
<tr>
<td>1982</td>
<td>34.4%</td>
<td>33.7%</td>
<td>21.5%</td>
<td>28.1%</td>
<td>15.5%</td>
<td>13.3%</td>
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<td>24.9%</td>
</tr>
<tr>
<td>1983</td>
<td>33.9%</td>
<td>33.7%</td>
<td>19.5%</td>
<td>20.2%</td>
<td>13.9%</td>
<td>13.5%</td>
<td>32.8%</td>
<td>32.6%</td>
</tr>
<tr>
<td>1984</td>
<td>37.5%</td>
<td>39.7%</td>
<td>19.1%</td>
<td>18.4%</td>
<td>14.0%</td>
<td>15.0%</td>
<td>29.3%</td>
<td>27.0%</td>
</tr>
</tbody>
</table>

NOTE: Due to rounding, percentages may not add to 100.
SOURCE: U.S. Department of Agriculture.

Table 2
Farm Real Estate Debt Outstanding at Major Lenders (percent of market held by each lender)

<table>
<thead>
<tr>
<th></th>
<th>Banks U.S.</th>
<th>FLBs U.S.</th>
<th>FmHA U.S.</th>
<th>Insurers U.S.</th>
<th>All Others U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>10.3%</td>
<td>18.9%</td>
<td>23.1%</td>
<td>7.9%</td>
<td>19.7%</td>
</tr>
<tr>
<td>1971</td>
<td>10.5%</td>
<td>19.5%</td>
<td>23.9%</td>
<td>8.1%</td>
<td>18.6%</td>
</tr>
<tr>
<td>1972</td>
<td>11.1%</td>
<td>20.6%</td>
<td>25.0%</td>
<td>8.2%</td>
<td>17.5%</td>
</tr>
<tr>
<td>1973</td>
<td>11.5%</td>
<td>21.6%</td>
<td>26.5%</td>
<td>8.2%</td>
<td>16.3%</td>
</tr>
<tr>
<td>1974</td>
<td>11.6%</td>
<td>22.4%</td>
<td>28.4%</td>
<td>7.8%</td>
<td>15.5%</td>
</tr>
<tr>
<td>1975</td>
<td>11.0%</td>
<td>22.0%</td>
<td>30.7%</td>
<td>7.3%</td>
<td>14.7%</td>
</tr>
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<td>1976</td>
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<td>21.1%</td>
<td>32.7%</td>
<td>6.9%</td>
<td>14.3%</td>
</tr>
<tr>
<td>1977</td>
<td>9.9%</td>
<td>20.9%</td>
<td>34.0%</td>
<td>6.8%</td>
<td>14.1%</td>
</tr>
<tr>
<td>1978</td>
<td>9.8%</td>
<td>20.8%</td>
<td>34.2%</td>
<td>6.5%</td>
<td>14.6%</td>
</tr>
<tr>
<td>1979</td>
<td>9.6%</td>
<td>19.9%</td>
<td>34.6%</td>
<td>6.0%</td>
<td>15.2%</td>
</tr>
<tr>
<td>1980</td>
<td>8.2%</td>
<td>16.7%</td>
<td>34.9%</td>
<td>8.5%</td>
<td>14.6%</td>
</tr>
<tr>
<td>1981</td>
<td>7.5%</td>
<td>14.9%</td>
<td>37.9%</td>
<td>8.2%</td>
<td>13.7%</td>
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<td>1983</td>
<td>6.3%</td>
<td>12.6%</td>
<td>43.7%</td>
<td>8.3%</td>
<td>11.8%</td>
</tr>
<tr>
<td>1984</td>
<td>7.0%</td>
<td>13.3%</td>
<td>43.7%</td>
<td>8.2%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

NOTE: Due to rounding, percentages may not add to 100.
SOURCE: U.S. Department of Agriculture.
ence of a number of insurance companies in farmland lending. The "All Others" category for real estate lending mainly represents debt held by individuals. The trends are again consistent across the District and the United States. Although commercial banks in the District hold a larger share of the farm real estate debt than banks in the remainder of the U.S., banks in both areas have seen steady declines in market share after initial gains in the early 1970s. Insurance companies and the category of "All Others" also have exhibited secular declines in market share in both areas. The share losses of these three lender groups have accrued almost entirely to the Federal Land Banks of the FCS. At both the District and U.S. levels, the FCS has nearly doubled its market share with steady growth over the period since 1970. The FmHA share, however, has remained largely unchanged over the same period, although minor gains are evident in the District.

In summary, the market share data indicate that, for farm operating debt, the FmHA has posted sharp gains since the mid-1970s at the expense of commercial banks and the PCAs. The farm real estate market, however, has been dominated by the sharp gains made by the Federal Land Banks relative to the share losses of most other major farm lenders.

**MEASURES OF PORTFOLIO QUALITY**

The major causes of the recent farm debt defaults are erroneous forecasts — both by farmers and their creditors — of continued high and accelerating inflation and increased real returns to assets employed in agriculture.¹ So long as land prices continued to rise with inflation, the collateral base against which farmers could borrow increased, and the value of dollars used to repay the debt decreased. In conjunction with tax advantages for land ownership and the availability of subsidized credit for land purchases, it made sense to buy farmland at prices of $3,000—$4,000 per acre — if the purchaser believed the land could be resold at a higher price. Similarly, under the expectation of world food shortages and increases in real commodity prices, the price of land in agricultural production would be expected to rise.² Under these conditions, both farmers and their lenders agreed that extending more credit on a rising nominal asset base was a prudent business decision. Unfortunately for both parties, however, their forecasts of inflation and commodity prices were seriously in error.

This description of events suggests that institutions who increased their lending to agriculture sharply between 1974-81 — when inflation, foreign demand for U.S. farm products and real commodity prices were increasing or were expected to increase sharply — should be experiencing the greatest deterioration in portfolio quality.³

On the basis of this criterion, the Farm Credit System and FmHA should be experiencing relatively more trouble with portfolio performance than other farm lenders. To assess this thesis, we now turn to a discussion of measures of loan quality and portfolio performance.

**Portfolio Quality at FLBs and PCAs**

A common measure of loan quality is the percentage of loans on which payments are delinquent. This percentage tends to be a leading indicator of ultimate loan losses because borrowers who eventually default on debt first experience problems with making their scheduled payments. If efforts to reschedule the loan and to service only its interest obligation fail, the delinquent loan becomes, after some lag, a loan loss. The data required for this analysis are difficult to obtain and are not entirely comparable across different lenders and even across different geographical areas for the same lender group. The shaded insert discusses the data used in this article and some caveats that should be exercised when making comparisons or drawing inferences from these series.

Chart 1 plots loan delinquency rates for FLBs in the U.S. and the Eighth District, broadly defined; chart 2 plots the loan loss series for FLBs. In each case, these series are defined to be the dollar value of loans on which payments are delinquent or the dollar value of loan losses as a percent of total loans outstanding.

The FLB series indicate that these institutions have experienced similar patterns and rates of loan delinquencies and losses both in the District and in the remainder of the U.S. Loan losses at District FLBs,

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¹Market share data as a proxy for loan quality should be applied with some caution. Moreover, it should be noted that this measure is better suited to long-term land mortgages than to short-term operating loans. The reasoning is as follows: If market share for mortgage lending declined in the 1970s, subsequent portfolio quality might be improved because fewer new loans (that turned out to be poor loans) were extended and the old loans carried forward were of higher quality if, for no other reason, because a larger share of the principal had been repaid. For annual operating loans, however, market share in a given year may be unrelated to loan quality. In fact, the lower interest rates offered by PCAs in much of the 1970s may have attracted the more creditworthy farmers.

²See Belongia (1985).

³See, for example, Will There Be Enough Food? (1981).
The Data

**Agricultural Banks**

All FDIC-insured commercial banks are required to file a quarterly report of income and condition. These reports are commonly referred to as "call reports" and are roughly equivalent to a bank's balance sheet and income statement. Two loan item categories identify the volume of agricultural production loans and farm real estate loans outstanding on the reporting date.

Banks have been required to report loan delinquency data only since 1982. Bank loans are considered past due when interest or principal payments are more than 30 days delinquent. These data are generally verified in the course of normal inspections by bank regulatory agencies such as the FDIC, Federal Reserve or Comptroller of the Currency.

**Farm Credit System**

Most data used in this article are derived from statistics published in the Farm Credit Administration's annual reports. In many cases, the Farm Credit Banks of St. Louis and Louisville cooperated to provide data not available elsewhere. Until 1984, no guidelines were available to assure that reporting standards for loan delinquency information were consistently applied across the 12 Farm Credit Districts. This fact introduces an inconsistency in the data because 1984 data were collected using definitions that were possibly different from those used in earlier periods.

**Farmers Home Administration**

Data on the FmHA were derived from the FmHA report 616 and include only loans made under the following farm programs: Farm Ownership, Farm Operating, Economic Emergency and Disaster Emergency. FmHA judges a loan as delinquent when principal or interest payments are 15 days or more past due.
however, have risen slightly more sharply than at FLBs in the remainder of the U.S.\(^1\) Moreover, there appears to be a lag of about two years in each case between the time delinquencies rise sharply (1982) and later reveal themselves in higher loan losses (1984). Note, however, that while the patterns of delinquency and loan loss rates have been similar, loan losses have been about one-tenth of prior years' delinquencies. Chart 1 also shows that delinquency rates were nearly constant between 1970–81. Prior to 1981, losses at FLBs were less than two-tenths of one percent of all loans outstanding.

PCA loan delinquency data are not available on a consistent basis for both the District and the remainder of the U.S. For this reason, only the District delinquency data are shown in chart 3. They also reveal a dramatic increase in delinquency rates beginning in 1982. It must be pointed out that the absolute levels of delinquency rates for PCAs are not comparable with the FLB rates portrayed in chart 1.

Loan loss data for PCAs, however, are available for both the District and the U.S. and are presented in chart 4. Write-offs in 1984 as a percent of total loans were eight times higher than the percentage in 1981. In contrast to FLB loans, however, there appears to be almost no lag between the time these delinquencies are reported and the time they result in loan losses. The likely reason for this difference is that PCAs make

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\(^1\)U.S. and District FLB delinquency rates are derived from Farm Credit Administration annual reports and include the items of "non-accural loans" and "delinquent principal and advances."
loans for an individual year’s operating expenses and usually schedule repayment shortly after the year’s harvest. For this reason, unlike the FLBs’ multi-year loans for land purchases, PCAs tend to exhibit a closer short-run relationship between delinquencies and losses. As in the case of FLBs, it is necessary to note that, while the patterns of delinquency and loan loss rates are similar, losses have been one-fifth of delinquencies.

With rising rates of delinquencies and loan losses one also would expect the returns to equity and assets held by these lenders to decline. Charts 5 and 6 plot the returns to equity for FLBs and PCAs, respectively, in the U.S. and the District. In chart 5, similar patterns for returns in the U.S. and the District are revealed with the District showing lower average returns since 1979 and a sharper decline since the 1982 peak of 10.4 percent. Returns to equity for PCAs (chart 6) peaked in 1980 for the U.S. and 1981 for the District and have fallen sharply in just two years. Returns to assets have followed similar patterns for these lenders at both District and national levels.

Agricultural Banks

The conjecture was that agricultural banks, which did not increase market share or dollar volume of farm loans as aggressively in the 1970s, would show somewhat lower measures of loan delinquencies and losses and better returns to assets and equity than members of the Farm Credit System. Another important factor supporting this expectation is the fact that the loan portfolios of agricultural banks are diversified outside of agricultural lending. This loan diversity could help protect bank earnings from the wide swings of returns on equity experienced by the FCS lenders who extend credit only for purposes directly related to agriculture.

Retail loans for an individual year’s operating expenses and usually schedule repayment shortly after the year’s harvest. For this reason, unlike the FLBs’ multi-year loans for land purchases, PCAs tend to exhibit a closer short-run relationship between delinquencies and losses. As in the case of FLBs, it is necessary to note that, while the patterns of delinquency and loan loss rates are similar, losses have been one-fifth of delinquencies.

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Returns to assets for FLBs peaked in 1982 at 1.12 percent nationally and .99 percent in the District. By 1984, these values had declined to .42 and -.03 percent, respectively. Between 1981 and 1984, returns to assets at District PCAs fell from 1.07 to 0.05 percent.
Agricultural loan delinquency data have been collected from commercial banks since 1982. Only banks with total assets greater than $100 million, however, are required to report the volumes of agricultural loans considered in nonaccrual or renegotiated status. These two categories include loans on which interest payments are not being paid or are being paid more slowly than originally established. Since a large majority of agricultural banks are smaller than $100 million and therefore do not report nonaccrual and renegotiated agricultural loans, chart 7 plots only the percentage of agricultural production loans that are considered past due by 30 days or more at agricultural banks. These data, therefore, are not directly comparable with the PCA data summarized earlier in chart 3. Nonetheless, these limited data suggest that agricultural banks also have experienced rapid increases in delinquent farm debt both in the District and in the remainder of the U.S.

Loan loss data for agricultural banks provide additional information to supplement that provided by past due rates. Because loan loss data are not available specifically for agricultural loans, chart 8 is a plot of all loan losses at agricultural banks and at small nonagricultural banks in the nation (less than $100 million in total assets) expressed as a percentage of all loans at these banks since 1976. It indicates that loan losses at agricultural banks have been increasing steadily since 1979. The rate of increase has been such that the percent of loan losses has risen by a factor of nearly seven since 1979. Losses at comparably sized nonagricultural banks were larger than losses at agricultural banks until 1981. Now the rate of losses at nonagricultural banks has been increasing faster than that at agricultural banks. Given the small number of agricultural banks reporting these data, caution in the interpretation must be used.

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*The set of banks defined as agricultural banks will change over time as the shares of agricultural loans in some banks’ portfolios become less than or greater than the cutoff point. Over time, however, the number of agricultural banks has remained fairly constant, ranging between 5,668 in 1974 and 4,970 in 1984.*

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11For the small number of agricultural banks reporting all agricultural loan delinquency items (29 banks in the District for 1984 and 75 in the remainder of the U.S.), the delinquency rate rose from 4.4 percent in 1982 to 9.0 percent in 1984 for the District. In the remainder of the U.S., however, the overall delinquency rate rose only from 6.1 percent in 1982 to 6.3 percent in 1984. Given the small number of agricultural banks reporting these data, caution in the interpretation must be used.
Agricultural and Nonagricultural Banks

The Federal Reserve Board of Governors' Return on Equity data for agricultural and nonagricultural banks shows that during the 1980s, profitability declined at agricultural banks compared to nonagricultural banks. Agricultural banks experienced higher delinquency rates and loan losses, which affected their profitability more significantly than nonagricultural banks. The FDIC compiles the official list of “problem banks” by rating all insured banks on the basis of five categories: capital, assets, management, earnings, and liquidity. Banks receiving a rating of four or five on a scale from one to five are placed on the problem bank list. Our definition, which focuses on capital and asset quality, is likely to provide a parallel indicator of banks threatened by bankruptcy should a large share of delinquent loans become loan losses.

In summary, agricultural banks have suffered rising rates of delinquency and loan losses and declining profitability. When compared with PCAs, which represent their most significant competitors in the agricultural lending arena, however, banks appear to have survived recent downturns in the agricultural economy in much better fashion. Although loan loss rates for PCAs and agricultural banks are comparable, delinquency rates have increased, and profitability decreased more quickly at PCAs than at agricultural banks.

The Farmers Home Administration

The FmHA's role as “lender of last resort” dictates that its borrowers are from a high-risk category. Loan delinquency data for both real estate and non-real estate farm loans bear this out. Charts 10 and 11 document the steady rise in delinquency rates for both loan categories. Comparisons of delinquency rates at FCS lenders (charts 1 and 3) with those of the FmHA are instructive. The FmHA appears to have experienced rising delinquency rates earlier than 1981 when the FCS lenders began to show marked increases in delinquencies. This finding is to be expected given the character of the FmHA’s borrower clientele. FmHA borrowers would be more likely to exhibit repayment problems when a downturn in the agricultural economy occurs than would the more creditworthy borrowers of the FCS or of agricultural banks. This also highlights an important aspect of the

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1The FDIC compiles the official list of “problem banks” by rating all insured banks on the basis of five categories: capital, assets, management, earnings and liquidity. Banks receiving a rating of four or five on a scale from one to five are placed on the problem bank list. Our definition, which focuses on capital and asset quality, is likely to provide a parallel indicator of banks threatened by bankruptcy should a large share of delinquent loans become loan losses.

2Melichar and Irwin have reported that one-half of potentially vulnerable agricultural banks are located in five states: Iowa, Nebraska, Kansas, Minnesota and Missouri; only Missouri is in the Eighth District.
FmHA — as a lender of last resort, the FmHA provides an informal subsidy to the FCS and agricultural banks through its direct lending programs. By lending in some cases to farmers who had received FCS or bank financing but who are no longer considered credit-worthy, the FmHA allows these lenders to delay foreclosure and to continue to receive loan payments from such borrowers. Moreover, under the Economic Emergency Credit Act, FmHA refinanced loans originally made by the FCS and commercial banks and repaid the original lenders from proceeds of the FmHA loan.

Given the extremely high and rapidly growing delinquency rates on FmHA loans, one would expect, other things equal, to find commensurately higher levels of loan losses. Loan loss data for FmHA farm loan programs are available only on a consolidated basis (i.e., farm ownership and operating loan losses are not segregated). Chart 12, however, shows low, although rising, rates of loan write-offs. For example, the 1984 delinquency rate on FmHA farm ownership loans was near 25 percent, but only 0.22 percent of all FmHA loans were charged off. This contrasts with the FLB: 1984 delinquency rate of 3 percent and loan charge offs of 1.5 percent. This discrepancy between institutions can be explained by the greater degree of forbearance that the FmHA has exhibited with respect to its delinquent borrowers. As evidence of this forbearance, data on the length of time that loans are carried in the delinquent status can be examined. While no available on a District scale, national FmHA data indicate that, as of June 30, 1985, more than 45 percent of the volume of delinquent FmHA farm loans has been in that status for more than four years. Only 9 percent of the delinquencies nationwide were less than one year past due.

**CONCLUSIONS**

The Farm Credit System and agricultural banks did not show substantial deterioration of loan portfolio quality until 1982. The FmHA, however, began to exhibit rising delinquency rates in 1979. The deterioration has been more pronounced among those lender...
who aggressively expanded their lending to agriculture in the 1970s. In particular, the Federal Land Banks of the Farm Credit System expanded their market share during the 1970s and experienced some of the sharpest declines in portfolio quality in recent years. The mandate of the FCS to lend mainly to agricultural interests inhibits its ability to diversify its portfolio and raises the risks associated with concentrated lending to one sector. Hence, sharper declines in overall portfolio quality for branches of the FCS, relative to agricultural banks, took place. Finally, the data revealed little difference in the measures of portfolio quality or institutional earnings at the Eighth District and national levels.

REFERENCES


