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Indicators of Financial Stress in Agriculture

Reported by Agricultural Banks, 1982 to 1993

by Jerome M. Stam and George Wallace

The purpose of this article is to analyze the results of a unique source of information regarding farm sector and agricultural lender performance, namely the American Bankers Association's (ABA) annual midyear agricultural credit survey.

Midyear surveys of agricultural banks have been conducted by ABA for many years. These data are unique in that the focus is not strictly on the farm sector or agricultural banks, but on how farm financial stress is viewed by commercial banks. Beginning in 1982, questions on farm financial stress were added to the ABA survey and ERS began purchasing the results. There have been changes to the survey through time but the focus of this article is on the results of the farm financial stress questions that were maintained throughout the period of analysis.

The early 1980s saw a rapid turnaround in the forces that had caused the rapid economic expansion.

The 1980's Farm Financial Crisis and Its Aftermath

The 1970s were generally good times for agriculture, with optimistic expectations of worldwide demand for U.S. farm products. Agricultural exports expanded as the dollar declined in value. Prices for farm commodities rose early in the decade in response to strong demand for feed grains and wheat. Production and investment expanded in a climate of low, and at times negative, real interest rates. In this economic boom, farm borrowing grew and land values increased rapidly. Lenders, consultants, and others often encouraged additional borrowing to finance expansion. Rising machinery investment levels, combined with land price and other cost increases, resulted in a generally higher cost

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structure for agriculture.

The early 1980s saw a rapid turnaround in the forces that had caused the rapid economic expansion. Back-to-back recessions in 1980 and 1981-82 hit the farm sector hard. A large increase in the value of the dollar reduced the demand for U.S. farm exports. Other countries expanded production in response to generally higher world prices.

In the United States, the cost of producing commodities increased into the early 1980s. Monetary policies designed to reduce inflation prompted interest rates to rise to unprecedented levels in the early 1980s. Farm input costs increased, while net farm income generally fell. Returns to land declined due to a reduction in exports and commodity prices, a high cost structure, and even lower returns expected in the future. The declining farmland values weakened farmers' equity positions. Some farmers were unable to make principal and interest payments on the large amount of debt acquired during the 1970s boom period.

The result of these numerous interrelated economic changes occurring in the 1980s was the most severe financial stress to hit the farm sector since the Great Depression of the 1930s. The financial problems of the farm sector were increasingly passed to farm lenders in the 1980s. Losses of principal and interest payments on delinquent, uncollectible farm loans (net chargeoffs) increased during the 1980s.

One estimate indicates a cumulative farm loan loss (net chargeoffs) for all farm lenders during the 1984-89 period of $19.8 billion (7). During the 1980s, agricultural bank failures became a concern, the FCS encountered such major challenges that $1.26 billion in Federal Assistance was required, FmHA experienced major loan write-offs, and insurance companies faced their biggest farm loan difficulties in 50 years.

Agricultural lenders have faced a rapidly evolving farm sector lending environment during the past 15 years (5, 6, 7). In a nutshell, the 1975-79 period was one of escalating farm sector costs following the boom period of the early 1970s. A farm recession followed during 1980-83 with a cost squeeze, plummeting asset values, and problems with excess debt. The 1984-86 period was one of farm debt restructuring followed by strengthening economic fundamentals during 1987-89.

The 1990s have been characterized by a more conservative farm lending mode. Agricultural lending has not returned to the way it was prior to the event-filled 1980s. Producers have been careful in acquiring new debt and lenders are more carefully scrutinizing the creditworthiness of borrowers. Credit standards have tightened but farmers who are good credit risks can acquire credit.

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Survey Tracked Stress

Throughout this period of fluctuating conditions the American Bankers Association (ABA) has surveyed agricultural banks concerning the condition of their agricultural loans and customers. The purpose of the survey is twofold: to provide information on current and developing credit conditions as well as to focus on key management and policy issues identified by agricultural bankers (1). The ABA agricultural credit survey project was initiated in the 1950s and has been conducted generally in the same manner since the early 1960s. The 1993 survey was the thirtieth annual survey of the current series of ABA's mid-year farm credit survey or what is called in recent years ABA's farm credit situation survey (1).

Each year a questionnaire is distributed to a sample of commercial banks that qualify as agricultural banks according to the ABA's criteria. To qualify as a farm bank,

the institution must have either $2.5 million or more in farm production or real estate loans or have more than 50% of its loan portfolio in farm loans. This definition is somewhat broader than the ones used by the bank regulatory agencies to define agricultural banks. For example, the ABA identified 4,920 farm banks in 1993 compared with 3,819 for the Board of Governors of the Federal Reserve (FRB) and 3,020 for the Federal Deposit Insurance Corporation (FDIC). The FRB classifies banks as agricultural if their ratio of farm loans to total loans exceeds the unweighted average of the ratio at all commercial banks on a given date (16.98% on June 30, 1993). The FDIC criterion is a 25-percent or greater ratio of agricultural to total loans.

The ABA surveys from a stratified random sample of agricultural banks grouped by total asset value and region. (ABA regions are discussed below.) Fifty percent of the universe is sampled each year. In 1993, the universe of banks totaled 4,920 banks from which 2,506 banks were surveyed; usable questionnaires were received from 484 banks or 19.7% of the sample. Response rates obtained by the ABA vary considerably. Among the factors influencing response rates are the length and complexity of the questionnaire, survey topic(s), bankers' perception of survey utility, project schedule (time of year), the selection of target groups, and the follow-up efforts conducted by the ABA. ABA reports that each year a majority of returned surveys represent different banks.

Completion rates for all of the various 30 surveys for all purposes (not just the midyear farm credit situation survey) conducted by ABA annually range from 15% to 70%, depending on the criteria mentioned above. The (one-approach-only) response rate of 19.7% achieved by the 1993 farm credit situation survey fell into the normal range for a mail survey of this type and size.

The lowest response rate to the ABA farm credit situation survey in recent years was the 415 banks for 16.6% response reported in 1992. Like 1993 this represented the one-approach-only technique with no follow up because of ABA resource constraints. Historically, the response rate has been much higher because of better follow-up. For example, in 1982 some 960 banks responded for a 36.3% rate. Also, during the 5-year 1986-90 span the respective chronological response rate was as follows:

Year	Responding Banks	Response Rate
1986	939	34.2%
1987	961	42.6
1988	749	33.0
1989	657	26.7
1990	809	33.0

The data for each year are compiled into total, average, or median responses that can only be used to represent the respondent banks.

Agricultural lenders have faced a rapidly evolving farm sector lending environment during the past 15 years.

The ABA farm credit survey has contained a variety of questions that have changed over the years in response to changes in the current issues facing agricultural bankers. During the past decade, questionnaires have requested information on: the quality of the loan portfolio, losses, borrowers' ability to obtain financing, farmers going out-of-business and bankruptcy, business development and competition, interest rates/loan fees, cost of regulatory maintenance, FmHA-guaranteed loans, appraisals, the Financial Standards Task Force Report, the examination process, and crop insurance.

Beginning in 1982, the survey has included questions that address the discontinuance of financing, liquidations, bankruptcies, and other financial stress items. ERS has purchased selected items of the

ABA survey data set from ABA each year since that date. The successive survey results permit the examination of farm credit conditions at agricultural banks through time. A core of financial stress questions have been maintained exactly throughout the 1982-93 period despite many other changes in the questionnaire. Portions of the survey results have been presented earlier in various outlets (1, 2, 4, 8, 9, 10). Results are reported in their entirety in this article.

One caveat regarding the survey is important to note. Bankers' responses to the survey likely focus on commercial-sized farms that are viewed as actual or potential bank customers. They are not concentrating on the smaller part-time, hobby, or subsistence farms that account for the majority of farms and that just meet the U.S. Bureau of the Census definition of a farm ($1,000 or more annual sales). Therefore, the stress numbers should not be multiplied by the total census number of farms but instead be viewed as relative indicators through time.

It is important to note the characteristics of the agricultural bank universe and, hence, farm bank respondents when interpreting the data presented in this article. The universe of ABA agricultural banks is biased toward smaller banks as one would expect given the selection criteria. In 1993, the ABA universe totaled 4,920 agricultural banks or 44.2% of the 11,140 U.S. banks operating that year. Some 59.1% of the 484 respondents were banks having $50 million or less in assets. A total of 32.0% of the respondents were located in the Corn Belt and another 30.0% in the Plains. Thus, the sample population tends to reflect small Midwestern banks. The agricultural banks in the South and West are more concentrated in the larger asset categories.

National Results

The indicators of farm financial stress for the nation as a whole show a picture of stress in 1982 when the series begins. The results reflect the farm recession and cost squeeze phase of the 1980s. The level of stress increased through the 1985-86 period as the farm sector adjusted its cost structure including restructuring its debt loan. Stress indicators generally fell rapidly during the 1987-89 "strengthening fundamentals" phase of the crisis and have reached quite low levels in the 1990s as both lenders and farmers continued their conservative approach toward credit.

The volume of farm loans delinquent 30 days or more was 3.9% in 1982, peaked at 6.0% in 1986, and fell to 1.1% in 1993. The banks discontinued financing for 3.3% of their farm borrowers during the year ending June 1982, compared with 5.6 in 1986, and 1.7 in 1993. The proportion of farm customers loaned up to their practical limit, another measure of creditworthiness, peaked at 38.8% in mid-1986, a record closely followed by 36.7% a year earlier. This rate declined to 22.6% by 1988 but subsequently rose and stood at 34.6% in 1993.

Stress indicators have reached quite low levels in the 1990s as lenders and farmers continued their conservative approach toward credit.

Agricultural banks estimated that 6.2% of farmers in their lending areas went out of business during the year ending in June 1986, up from 2.2% in 1982. This figure dropped to 2.2% by 1990 as the crisis passed and was 3.1% in 1993. There is some evidence that this is a lagging indicator of the farm sector's economic performance. Some 70.1% of the farmers were thought to have left in 1985 because of financial problems (liquidation or foreclosure). This period high compares with 60.5% in 1982 at the beginning of the data series and the low of 34.5% reported in 1990. Responding bankers estimated that 4.2% of local farm operators filed for bankruptcy during July 1985 to June 1986; this

had increased from 0.8% in 1982. After the 1985-86 peak, the percentage filing for bankruptcy dropped to 1.0% in 1990 and ended the period at 1.9% in 1993.

Regional Results

The ABA divides the nation into four geographic regions for analytical purposes regarding the farm credit situation survey. The ABA configuration is unique following a different pattern than that of the U.S. Bureau of the Census with its four divisions and nine regions or the USDA with its 10 farm production regions. The ABA allocates Michigan, Minnesota and Wisconsin to the 11-State Northeast area to form a unique 14-State Northeast region. This was initiated a number of years ago in order to combine the three dairy-producing Lake States with the other dairy producing areas of the traditional Northeast.

The survey reveals some diversity in farmers' financial experience. Indicators of farm financial stress generally peaked across the nation in 1985-86. The South, which generally led in most peak indicators of financial stress was hit hard by the economic stress. Drought, financial stress of many cotton farms, and contraction of the energy sector may have accentuated southern farmers' difficulties. Their situation improved dramatically in the late 1980s.

For all regions, stress indicators in the 1990s are at low levels except for the share of farm borrowers loaned up to the practical limit and the bankruptcy rate. The former may reflect bankers employing more strict loan rules. Bankruptcy rates continue higher than they were in 1982-83 indicating a lagged response as individual cases are worked out through time.

Type of Farming Results

The ABA asks responding banks to indicate the most important type of farming in which the bank's agricultural borrowers are currently engaged. When responses are grouped by type of farming area, considerable diversity in farmers' financial stress is evident.

Areas dominated by cotton farms showed the peak levels of financial stress which usually occurred in 1985-86, according to the banks' responses. Beef cow-calf areas also showed high levels of peak financial stress, but generally below levels exhibited by the cotton farms. All type-of-farming areas have stress indicators in the 1990s that are at low levels except for the share of borrowers loaned up the practical limit and the bankruptcy rate. This situation parallels that exhibited by the regions and for the same reasons. Loan standards are now more conservative thus making a borrower more likely to be "loaned-up" and bankruptcies are lagged through time after the initial peak financial stress.

Stress indicators in the 1990s are at low levels except for the share of farm borrowers loaned up to the practical limit and the bankruptcy rate.

Conclusions

During the 1980s, farmers went through the worst financial period since the Great Depression. The crisis generated much more detailed analyses of both the farm sector and agricultural lenders regarding their financial performance. Beginning in 1982, questions on farm financial stress were enhanced in ABA's midyear farm credit survey. These questions were maintained in subsequent surveys although other changes were made in the questionnaire.

This unique source of information for the 1982-93 period enables one to see how farm financial stress was viewed by commercial banks through time. Survey results show that by most measures, the levels of farm financial stress peaked in 1985-86. Farm sector economic fundamentals strengthened in 1987-89 with the resultant financial stress levels for most indicators in the 1990s below the 1982 levels.

Stress indicators in the 1990s are at low levels except for the share of farm borrowers loaned up the practical limit and the bankruptcy rate. The former may reflect bankers employing stricter loan rules. The latter probably indicates a lag as financial problems ultimately leading to bankruptcy are worked out through time. ■

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