Indicators of Financial Stress in Agriculture Reported by Agricultural Banks, 1982-99

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The American Bankers Association (ABA) has conducted annual farm credit situation surveys for many years. Survey results provide a picture of changing farm credit conditions as viewed by agricultural banks through time. Results show the levels of farm financial stress by most indicators were high during the 1982-86 period with a peak in 1985-86. A period of strengthening farm sector fundamentals in 1987-89 was followed by a period of relative financial stability in 1990-95 and very favorable economic times in 1996-97. Since 1987 all stress indicators have been much lower than during 1982-86. Exceptions exist for the loaned-up-to-the-limit and bankruptcy rates indicators that took some more time to subside through the late 1980's and into the 1990's. More recently in 1998-99, according to the agricultural bankers, there is some increase in the agricultural sector's stress levels based on recent low agricultural commodity prices beginning in 1997. Data are presented for both the United States and five ABA regions.

Introduction

This article analyzes the results of a unique source of information regarding farm sector and agricultural lender performance, namely the American Bankers Association's (ABA's) annual midyear agricultural credit situation survey. Midyear surveys of agricultural banks conducted by the ABA are unique in that the focus is not strictly on the farm sector or agricultural banks. Beginning in 1982, questions on farm financial stress were added to the ABA survey and ERS began purchasing the results. There have been numerous changes to the survey through time as different issues are addressed annually. This article focuses on the farm financial stress questions that were maintained throughout the period of analysis.

Agricultural lenders have faced a rapidly evolving farm sector lending environment during the past 25 years (*9*, *10*, *11*).[2] In a nutshell, the 1975-79 period was one of escalating farm sector costs following the boom period of the early 1970's. A farm recession followed during the early to mid-1980's 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 1990's were characterized by a more conservative farm lending mode. Agricultural lending did not return to the way it was prior to the event-filled 1980's. Producers were careful in acquiring new debt and lenders were more careful in scrutinizing the creditworthiness of borrowers. An emphasis on cash-flow lending displaced the 1970's and early 1980's stress on collateral-based lending. Credit standards were tightened but farmers who were good credit risks were able to acquire credit.

The Setting: Farm Financial Stress in the 1980's and 1990's

The farm financial stress questions in the 1982-99 surveys cover almost two decades in which farmers experienced substantial financial ups and downs. The 1982-86 farm debt crisis period was followed by the 1987-89 period of recovering economic fundamentals. The 1990-95 span featured relative financial stability that built to generally very favorable economic times for the farm sector in 1996-97. Substantial price declines for key commodities beginning in 1996 led to lower farm commodity receipts and a concern in some quarters during the post-1997 period of another farm financial crisis. It is thus important to compare the farm debt crisis period of the early to mid-1980's with the post-1997 period.

The Farm Debt Crisis: 1982-86. The farm sector's financial problems in the 1980's had their genesis much earlier. The 1970's were generally good times for agriculture, with optimistic expectations of world 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, combined with land price and other cost increases, led to a generally higher cost structure for agriculture.

The early 1980's 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 1980's. Monetary policies designed to reduce inflation prompted interest rates to rise to unprecedented levels in the early 1980's. 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

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[2] Italicized numbers in parentheses identify literature cited in the Reference section at the end of the article.

interest payments on the large debt acquired during the 1970's boom period.

These numerous interrelated economic changes in the 1980's led to the most severe financial stress to hit the farm sector since the Great Depression of the 1930's. The financial problems of the farm sector were increasingly passed to farm lenders in the 1980's. Losses of principal and interest payments on delinquent, uncollectible farm loans increased during the 1980's. One estimate indicates a cumulative farm loan loss (net charge-offs) for all farm lenders during 1984-89 of $19.8 billion (*11*). During the 1980's, agricultural bank failures became a concern as 304 failed during 1984-89, the Farm Credit System (FCS) encountered such major challenges that $1.26 billion in Federal assistance was required, USDA's Farmers Home Administration (FmHA) experienced major loan write-offs, and insurance companies faced their biggest farm loan difficulties in 50 years.

Low Farm Prices: 1997-Present. Since the end of 1997, many farmers have experienced reduced cash receipts from farm marketings due to falling prices for certain key commodities. The deterioration in commodity prices following several years of healthy gains in farmland values and rising debt levels led to the speculation that agriculture could be entering a contraction similar to that of the 1980's. Prices for many key agricultural commodities (especially grains, oilseeds, and hogs) fell dramatically. For example, October 1999 prices reported by USDA were down from earlier highs (month and year given) by 54 percent for all wheat (May 1996), 65 percent for corn (August 1996), 66 percent for soybeans (May 1997), 39 percent for upland cotton (April 1996), and 43 percent for hogs (June 1996).

The reasons for these changes are complex, but the changes were initiated in large part by global financial adversity. On July 2, 1997, the Thai baht declined 15 percent against the U.S. dollar. Thus began a series of crises that started in Asia, but spread to Russia and Latin America. This series of challenges raised questions not only about development strategies in a set of countries that were heretofore referred to as the Asian Tigers, but also about the international policy and response to financial difficulties by the International Monetary Fund and the U.S. Treasury. Although the full story of what caused the crises may never be fully agreed upon, the resultant economic instability significantly threatened the global economy.

Had the crises not undermined the demand for U.S. agricultural exports at a time of already low prices, it would be only a curiosity for U.S. agriculture. However, the economic instability reinforced a set of factors that played more significantly on rural America than in the overall U.S. economy. The depression in commodity prices also has been exacerbated by overproduction in world agriculture. Further, weather-induced reductions in crop yields in certain regions of the United States have lowered incomes of some farmers.

Because agricultural lenders may refuse to extend loans to agricultural borrowers who cannot demonstrate solid repayment capacity, some have characterized the current low-price downturn as a "credit crisis." Despite low commodity prices, there is little reason to believe that the current situation is a repeat of the 1980's farm financial crisis (*6*, *7*). While agricultural conditions in the last decade have in some ways been similar to those contributing to the boom and bust cycle of the 1970's and 1980's, important differences exist. The 1980's farm financial crisis was characterized by events not present in the current situation: high and volatile inflation, a national economic recession, declining farmland prices, and record debt. Consolidation, financial innovations and improved risk management, closer regulatory scrutiny, higher capital ratios, and better quality capital and internal controls have improved lender risk management capabilities. Risk-based capital standards and insurance make lenders more sensitive to loan credit quality.

Lenders appear confident about most farm borrowers. Lenders learned the risk of collateral-based lending and now stress cash flow and credit checks (such as credit card balances) in their loan analysis. Interest rates are lower and less volatile than in the earlier period. Farmers and lenders have better equity positions, and credit analysis and monitoring are better in the agricultural sector than was the case in the 1980's. But the situation is still unfolding. Whether reduced incomes create financial hardship depends on initial farm financial strength, how far income falls and how long it remains low, and the decisions that farmers and lenders make as events unfold. Generally favorable yields for most major crops in most regions and direct Federal payments of $12.2 and $22.7 billion in 1998 and 1999, respectively, also have helped stabilize the farm sector.

Bankers Survey Tracked Stress

The ABA agricultural credit survey project was initiated in the 1950's and has been conducted generally in the same manner since the early 1960's. The 1999 survey was the thirty-sixth of the current series of ABA's midyear farm credit survey, which for the past decade has been called ABA's farm credit situation survey (*1*, *2*, *3*). The purpose of the survey is twofold: to provide information on current and developing credit conditions and to focus on key management and policy issues identified by agricultural bankers (*1*, *2*, *3*). Many of the questions selected vary from year to year depending on the problems and issues of the day. Throughout the 1982-99 period of fluctuating conditions for the farm sector the ABA has surveyed agricultural banks concerning the condition of their agricultural loans and customers.

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 either have $2.5 million or more in farm production or real estate loans or have more than 50 percent 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 4,380 farm banks for its mid-1999 survey (based on bank data at the end of 1998), compared with June 1999 counts of 2,942 for the Federal Reserve and 2,253 for the Federal Deposit Insurance Corporation (FDIC). The FDIC criterion is a 25-percent or greater ratio of agricultural to total loans.

The ABA uses a stratified random sample of agricultural banks grouped by total asset size, region, and the most important type of farming in the bank's market area. (ABA regions are discussed below.) Fifty percent of the universe is sampled most years. During 1982-99, the only deviation from the 50 percent standard was for 1995 to 1998 when the sampling rate varied from 42 to nearly 54 percent (table A-1). (ABA's sampling records are incomplete for 1983-85.) In 1999, 2,190 of the 4,380 banks identified as agricultural banks were surveyed; usable questionnaires were received from 481 banks or 22 percent of the sample. Response rates obtained by the ABA vary depending on 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 of the ABA. ABA reports that each year a majority of returned surveys represent different banks than the prior year.

Completion rates for the various surveys (not just the annual midyear farm credit situation survey) conducted by the ABA generally range from 15 to 70 percent, depending on the criteria mentioned above. For a survey with more than 100 questions, the response rate could fall to 10 percent, but for a short survey the response rate could be over 90 percent. The midyear farm credit situation survey has quite a good response rate considering its length (table A-1). A key factor influencing the response rate is the degree to which follow-up questionnaires were sent to first-round nonrespondents. In the 1990's a lack of funds often limited follow-up activity. Currently, the ABA typically sends one questionnaire and one follow-up. Depending on the response rate, the ABA also sometimes sends reminder cards and conducts telephone follow-ups. The 1999 survey was conducted with two mailings. Historically, the response rate has been higher because of better follow-up. For example, in 1982 some 960 banks responded for a 36 percent rate. Also, during 1986-91, the response rate was 33 percent or higher. The data each year are compiled into total, average, or median responses that can only be used to represent the respondent banks.

Questions in the ABA farm credit situation survey have varied over the years in response to changes in the issues facing agricultural bankers. During 1982-99, 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, Farmers Home Administration/Farm Service Agency guaranteed loans, appraisals, the Financial Standards Task Force Report, the examination process, and crop insurance. The 1999 survey featured questions on bank funding sources, bank business development and competition, bank portfolio quality, Farm Credit System, Farm Service Agency, farmers going out of business and beginning farmers, bank nonfarm business lending, and rural housing.

Beginning in 1982, the survey has included questions about the discontinuance of financing, liquidations, bankruptcies, and other financial stress items. ERS has purchased selected items from the ABA survey data each year since then. The results permit the examination of credit conditions at agricultural banks through time. A core of financial stress questions has remained intact throughout 1982-99, despite many other changes in the questionnaire. Portions of the survey results have been presented earlier in various other outlets, but ABA has no standard annual outlet or format because the survey is proprietary to its operations (*1*, *2*, *3*, *4*, *8*, *12*, *15*, *16*). Results of the financial stress questions for 1982-99 are reported in their entirety in this article.

Some caveats regarding the survey are important to note. Bankers' responses to the survey likely focus on commercial-sized farms that are viewed as actual or potential bank customers. In all likelihood, survey respondents are not concentrating on the smaller part-time, hobby, or limited-resource farms that account for the majority of farm operations but have limited net cash income from farming. Therefore, the stress numbers should not be multiplied by the total census number of farms but instead be viewed as relative indicators through time. In addition, since bankruptcy typically is a complex process that is contemplated for some time before actually being used, bankers may report the same farm bankruptcy action in more than one survey year (*13*, *14*). Chapter 12 farmer bankruptcy provisions allow a 3- to 5-year workout and even Chapter 7 liquidation action may be contemplated for some time with the actual legal action spilling over into a later time frame.

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. The ABA's 1999 universe of 4,380 agricultural banks represented 50 percent of the 8,756 U.S. banks operating at the beginning of the year. Some 34 percent of the 481 respondent banks had $50 million or less in assets (30 percent had assets of $50-99 million). A total of 28 percent of the respondents were located in the Corn Belt and another 31 percent in the Plains. Thus, the sample population tends to reflect small Midwestern and Plains banks. The agricultural banks of the South and West are more concentrated in the larger asset categories.

U.S. Farm Credit Situation Survey Results

The indicators of farm financial stress for the Nation as a whole are given in the first panel of table A-2. The various indicators show a picture of stress in 1982 when the series begins. The results reflect the farm recession and cost squeeze phase of the 1980's. The stress increased through 1985-86 as the farm sector adjusted its cost structure, including restructuring its debt load. Stress indicators generally fell rapidly during the 1987-89 "strengthening fundamentals" phase of the post-crisis and dropped to quite low levels in the 1990's as both lenders and farmers continued a more conservative approach toward credit. The indicators for 1998-99 show some increases in response to the lower farm commodity prices that began to occur in 1996-97.

The national results indicate that *farm loan volume delinquent 30 days or more* peaked at 6 percent in 1986. It

Table A-1—American Bankers Association's annual farm credit situation survey response rate, 1982 and 1986-99

Year 1/	Agricultural banks 2/	Sampled banks 3/	Sampling rate 4/	Responding banks	Response rate 5/
	Number	*Number*	*Percent*	*Number*	*Percent*
1982	*5,290*	*2,645*	*50.0*	*960*	*36.3*
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1986	5,488	2.744	50.0	939	34.2
1987	4,515	2,258	50.0	961	42.6
1988	4,547	2,273	50.0	749	33.0
1989	4,929	2,464	50.0	657	26.7
1990	4,910	2,455	50.0	809	33.0
1991	4,878	2,439	50.0	823	33.7
1992	5,012	2,506	50.0	415	16.6
1993	4,920	2,460	50.0	484	19.7
1994	4,838	2,419	50.0	446	18.4
1995	4,769	2,551	53.5	372	14.6
1996	4,682	2,465	52.7	539	21.9
1997	4,639	1,945	42.0	380	19.5
1998	4,481	2,236	49.9	424	19.0
1999	4,380	2,190	50.0	481	22.0

1/ The American Bankers Association's (ABA's) sampling records for the annual midyear farm credit situation survey are incomplete for the 1983-85 period. 2/ The ABA defines agricultural banks according to established criteria: the institution either had more than $2.5 million in farm production and farm real estate loans, or it had more than 50 percent of its loan portfolio in farm lending. 3/ Banks are stratified by asset size and region. 4/ The number of sampled banks divided by total agricultural banks. In 1995 and 1996, the ABA oversampled banks with $500 million or more in assets in an effort to increase response rates from these banks. In 1997, the ABA did not survey savings banks at all. 5/ Responding banks divided by sampled banks.

Source: (5).

Figure A-1

American Bankers Association farm credit situation survey regions

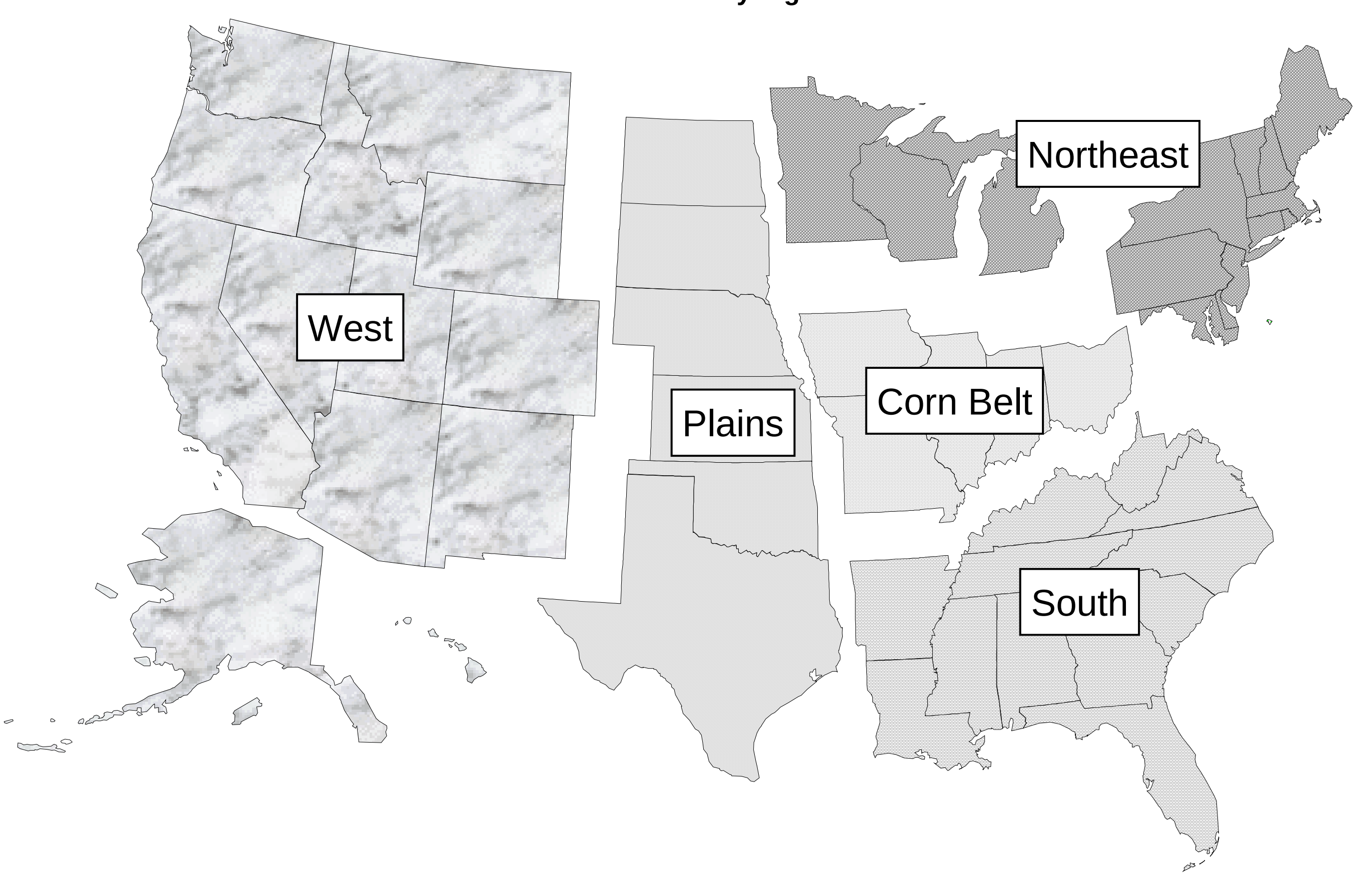

Table A-2 -- Indicators of financial stress in agriculture as reported by agricultural banks, by region, 1982-99 1/

	United States																	
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	Percent																	
Farm loan volume delinquent 30 days or more (June) 2/	3.9	3.7	4.5	5.3	6.0	2.7	1.6	1.5	1.3	1.8	1.2	1.1	1.2	1.1	1.5	1.3	4.8	2.4
Banks' farm borrowers who had bank financing discontinued (during year ending in June) 3/	3.3	2.9	3.4	4.5	5.6	3.2	1.7	1.3	1.4	1.3	1.5	1.7	1.4	1.6	1.7	1.7	2.6	2.2
Farm borrowers banks expect to discontinue (during year ending next June) 4/	4.4	2.0	3.1	5.7	6.7	2.1	1.5	1.7	1.5	1.6	NA	NA	1.8	2.2	1.8	2.1	4.6	4.3
Banks' farm borrowers loaned-up to practical limit in June 3/	31.9	28.1	32.8	36.7	38.8	28.8	22.6	24.6	31.0	32.7	32.5	34.6	32.1	33.4	34.4	34.6	38.8	39.2
Farmers in bank lending area who went out of business (year ending June) 3/	2.2	2.3	3.6	4.8	6.2	4.6	2.8	2.4	2.2	2.4	2.4	3.1	2.0	2.2	2.4	2.2	3.0	3.2
Liquidation categories (sum equals 100%)																		
Normal attrition	NA	37.7	31.3	27.7	28.9	38.4	50.2	58.5	63.8	54.3	60.5	62.0	56.1	60.6	61.2	62.4	56.4	43.9
Voluntary liquidation	NA	42.4	44.0	44.3	41.7	35.8	30.6	27.6	25.6	30.4	28.0	28.0	34.3	29.2	27.4	28.9	34.2	44.9
Legal foreclosure	NA	18.1	22.3	25.8	26.3	23.6	17.7	12.7	8.9	12.4	9.2	7.2	8.1	7.3	9.1	7.6	8.1	9.5
Other	NA	1.8	2.4	2.2	3.1	2.3	1.6	1.2	1.7	3.0	1.3	2.9	1.6	2.9	2.3	1.1	1.3	1.7
Banks' farm borrowers who filed for bankruptcy (year ending in June) 3/	NA	NA	NA	1.5	2.2	1.4	0.7	0.4	0.3	0.3	0.4	0.5	0.3	0.5	0.4	0.3	0.8	0.6
Farmers in bank lending area who filed for bankruptcy (year ending in June) 3/	0.8	1.1	2.6	3.8	4.2	3.3	2.2	1.7	1.0	1.4	1.4	1.9	1.0	1.2	1.2	1.1	1.7	1.6

1/ See footnotes at end of table.

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Table A-2 -- Indicators of financial stress in agriculture as reported by agricultural banks, by region, 1982-99 1/--continued

	Northeast 5/																	
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	Percent																	
Farm loan volume delinquent 30 days or more (June) 2/	3.4	3.5	5.3	6.9	6.9	2.9	1.4	1.9	1.6	2.5	1.5	1.8	1.7	1.7	1.5	1.8	6.3	1.8
Banks' farm borrowers who had bank financing discontinued (during year ending in June) 3/	2.8	2.7	3.5	4.7	6.2	3.3	1.8	1.4	1.5	1.4	1.7	3.1	1.9	2.3	1.6	2.3	2.5	1.8
Farm borrowers banks expect to discontinue (during year ending next June) 4/	3.5	1.8	3.2	6.0	6.8	2.3	1.6	1.9	1.5	1.7	NA	NA	2.1	2.7	2.0	2.8	4.9	4.3
Banks' farm borrowers loaned-up to practical limit in June 3/	26.1	26.7	30.1	34.4	37.1	38.3	20.1	22.2	28.1	26.3	26.1	30.5	29.2	31.6	33.7	29.3	35.1	30.5
Farmers in bank lending area who went out of business (year ending June) 3/	1.8	2.0	3.4	4.9	7.1	5.5	3.3	3.1	2.4	2.7	3.0	4.7	2.6	3.0	2.6	3.0	4.9	3.5
Liquidation categories (sum equals 100%)																		
Normal attrition	NA	43.3	32.1	30.5	28.2	37.7	48.6	54.8	65.0	58.6	57.7	58.3	49.9	55.4	57.5	58.7	53.4	43.6
Voluntary liquidation	NA	38.9	45.3	46.0	41.7	36.9	35.0	30.3	24.8	29.7	31.3	31.7	40.9	32.4	28.8	34.6	38.7	45.3
Legal foreclosure	NA	15.9	20.7	21.9	26.3	23.4	15.4	13.1	8.9	10.8	10.5	6.8	8.3	8.4	10.2	6.3	6.1	9.3
Other	NA	2.4	1.0	1.5	3.8	2.1	1.0	1.8	1.4	1.0	0.5	3.1	0.8	3.8	3.5	0.3	1.8	1.8
Banks' farm borrowers who filed for bankruptcy (year ending in June) 3/	NA	NA	NA	2.0	1.7	1.4	0.7	0.4	0.3	0.3	0.4	0.7	0.5	0.7	0.4	0.4	0.5	0.3
Farmers in bank lending area who filed for bankruptcy (year ending in June) 3/	0.4	1.0	2.6	4.0	3.9	3.3	2.4	1.5	1.2	1.4	1.5	2.5	1.1	1.5	1.0	1.6	2.1	1.4

1/ See footnotes at end of table.

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Table A-2 -- Indicators of financial stress in agriculture as reported by agricultural banks, by region, 1982-99 1/--continued

	Corn Belt 6/																	
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	Percent																	
Farm loan volume delinquent 30 days or more (June) 2/	4.0	3.5	4.3	5.2	5.4	2.3	1.5	1.1	1.1	1.5	1.1	1.0	1.2	1.0	1.0	0.8	3.1	1.4
Banks' farm borrowers who had bank financing discontinued (during year ending in June) 3/	2.8	2.5	3.0	3.8	4.8	2.9	1.5	1.1	1.1	1.1	1.1	1.4	1.4	1.4	1.5	1.3	1.9	1.9
Farm borrowers banks expect to discontinue (during year ending next June) 4/	4.2	1.5	3.0	5.3	5.5	1.6	1.6	1.1	1.0	1.4	NA	NA	2.0	1.7	1.6	1.4	3.6	4.1
Banks' farm borrowers loaned-up to practical limit in June 3/	27.3	26.0	31.2	34.7	34.3	24.9	21.9	23.6	29.5	28.1	27.9	30.0	29.1	24.0	27.7	33.1	31.5	35.0
Farmers in bank lending area who went out of business (year ending June) 3/	1.9	2.2	3.6	4.6	5.5	4.1	2.7	2.2	2.1	2.3	2.1	2.8	1.8	1.5	2.3	1.6	1.8	2.5
Liquidation categories (sum equals 100%)																		
Normal attrition	NA	39.5	35.8	29.9	33.8	43.0	58.7	65.6	70.5	59.5	66.3	60.7	62.2	74.1	74.8	68.8	71.7	54.8
Voluntary liquidation	NA	38.6	40.1	42.3	36.9	33.6	26.3	25.1	20.7	28.1	26.2	28.4	31.0	21.5	19.2	21.9	24.1	37.9
Legal foreclosure	NA	20.0	20.4	26.3	25.6	20.7	14.7	8.5	7.6	9.6	6.7	8.0	5.8	3.2	5.6	8.3	3.6	5.3
Other	NA	1.7	3.1	1.5	3.7	2.6	0.4	0.7	1.2	2.7	0.8	3.0	1.0	1.2	0.4	1.0	0.6	1.9
Banks' farm borrowers who filed for bankruptcy (year ending in June) 3/	NA	NA	NA	1.4	2.1	1.5	0.7	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.1	0.2	0.2	0.2
Farmers in bank lending area who filed for bankruptcy (year ending in June) 3/	0.7	1.0	2.3	3.3	4.0	3.4	2.0	1.5	1.1	1.3	1.1	1.7	0.9	0.9	0.9	0.9	0.9	1.2

1/ See footnotes at end of table.

Continued --

Table A-2 -- Indicators of financial stress in agriculture as reported by agricultural banks, by region, 1982-99 1/--continued

	South 7/																	
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	Percent																	
Farm loan volume delinquent 30 days or more (June) 2/	4.6	4.3	4.0	4.2	5.2	3.0	1.3	1.3	0.8	2.1	1.2	0.7	0.7	0.4	0.9	0.9	4.8	3.2
Banks' farm borrowers who had bank financing discontinued (during year ending in June) 3/	6.4	4.4	4.5	6.9	8.6	5.3	1.6	0.9	1.5	1.7	1.8	1.4	1.7	1.6	2.9	2.1	4.5	3.7
Farm borrowers banks expect to discontinue (during year ending next June) 4/	7.7	2.7	2.4	6.9	12.4	3.6	1.5	1.4	2.3	1.8	NA	NA	1.9	1.7	2.6	2.7	5.6	6.7
Banks' farm borrowers loaned-up to practical limit in June 3/	49.0	40.5	45.9	47.4	49.7	38.4	28.7	27.6	43.4	42.1	40.0	40.4	41.2	44.9	44.5	42.9	44.7	57.5
Farmers in bank lending area who went out of business (year ending June) 3/	3.9	3.1	4.4	5.6	8.9	6.5	2.7	2.6	3.3	3.0	3.0	2.5	2.1	1.8	2.9	2.2	3.5	5.4
Liquidation categories (sum equals 100%)																		
Normal attrition	NA	22.8	22.3	19.1	17.9	23.4	32.5	53.3	37.0	28.4	50.5	60.3	46.4	35.8	39.8	62.5	46.2	24.3
Voluntary liquidation	NA	48.3	41.3	44.5	50.7	41.8	34.9	31.3	44.5	38.8	27.4	27.6	38.7	41.5	40.6	31.7	39.6	59.2
Legal foreclosure	NA	25.8	31.4	34.2	28.3	31.6	29.9	14.2	16.1	24.7	13.6	12.1	13.7	20.2	17.5	5.2	11.0	14.9
Other	NA	3.1	5.3	2.2	3.1	2.6	2.7	1.2	2.4	8.0	8.4	0.0	1.2	2.5	2.1	0.6	3.2	1.6
Banks' farm borrowers who filed for bankruptcy (year ending in June) 3/	NA	NA	NA	2.0	2.5	2.0	1.1	0.5	0.2	0.8	0.5	0.4	0.2	0.3	1.0	0.5	1.1	3.0
Farmers in bank lending area who filed for bankruptcy (year ending in June) 3/	0.1	1.9	4.9	5.7	6.5	5.9	3.3	2.0	1.2	2.3	1.8	1.6	1.2	0.8	2.2	1.8	2.2	4.4

1/ See footnotes at end of table.

Continued --

Table A-2 -- Indicators of financial stress in agriculture as reported by agricultural banks, by region, 1982-99 1/--continued

	Plains 8/																	
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	Percent																	
Farm loan volume delinquent 30 days or more (June) 2/	3.7	3.5	4.1	4.4	6.6	2.9	1.9	1.7	1.4	1.4	1.0	1.0	1.2	1.3	2.3	1.8	5.9	3.7
Banks' farm borrowers who had bank financing discontinued (during year ending in June) 3/	3.3	3.0	3.7	4.4	5.1	3.2	1.8	1.6	1.7	1.1	1.1	1.4	0.9	1.3	1.5	1.6	2.2	2.5
Farm borrowers banks expect to discontinue (during year ending next June) 4/	4.5	2.6	3.4	5.8	6.5	2.0	1.4	2.4	1.7	1.5	NA	NA	1.5	2.4	1.5	2.2	4.4	4.3
Banks' farm borrowers loaned-up to practical limit in June 3/	31.9	27.0	30.1	35.1	39.8	29.5	22.6	26.3	29.8	39.3	36.5	38.7	34.1	38.3	36.0	36.3	41.4	40.5
Farmers in bank lending area who went out of business (year ending June) 3/	2.1	2.4	3.8	4.9	5.6	4.2	2.7	2.2	1.9	2.2	1.9	2.6	1.9	2.5	2.4	2.3	2.5	3.2
Liquidation categories (sum equals 100%)																		
Normal attrition	NA	38.3	30.0	28.3	30.5	38.8	51.1	58.9	65.1	52.8	62.2	64.5	58.1	57.3	56.0	59.0	54.4	42.1
Voluntary liquidation	NA	45.5	45.5	45.2	42.5	35.2	29.5	26.1	25.8	32.9	28.7	27.1	31.5	30.9	30.5	30.1	33.5	46.4
Legal foreclosure	NA	15.1	23.2	23.9	24.7	23.9	16.5	13.8	7.6	11.4	8.8	4.8	7.5	8.3	9.6	8.9	11.2	9.8
Other	NA	1.1	1.7	2.6	2.3	2.1	3.0	1.2	1.5	3.0	0.4	3.5	2.9	3.6	3.9	2.0	1.0	1.7
Banks' farm borrowers who filed for bankruptcy (year ending in June) 3/	NA	NA	NA	1.0	2.5	1.2	0.7	0.5	0.2	0.2	0.3	0.5	0.2	0.7	0.6	0.3	1.6	0.4
Farmers in bank lending area who filed for bankruptcy (year ending in June) 3/	0.8	0.9	2.3	3.7	3.9	2.6	2.0	1.9	0.8	1.3	1.1	1.6	0.9	1.6	1.4	0.9	2.1	1.5

1/ See footnotes at end of table.

Continued --

Table A-2 -- Indicators of financial stress in agriculture as reported by agricultural banks, by region, 1982-99 1/--continued

	West 9/																	
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	Percent																	
Farm loan volume delinquent 30 days or more (June) 2/	5.0	4.5	5.0	8.0	5.2	3.2	2.3	1.6	1.4	3.0	2.0	1.4	0.3	0.9	1.5	1.2	2.0	1.9
Banks' farm borrowers who had bank financing discontinued (during year ending in June) 3/	3.3	3.3	2.8	3.8	5.7	2.3	1.7	1.9	1.3	1.7	3.8	1.1	2.0	1.9	1.6	2.0	3.9	1.6
Farm borrowers banks expect to discontinue (during year ending next June) 4/	2.5	2.1	3.1	4.7	5.9	2.5	2.0	1.0	1.9	2.3	NA	NA	1.8	3.0	2.8	2.1	6.9	2.6
Banks' farm borrowers loaned-up to practical limit in June 3/	40.9	32.1	39.5	43.8	44.4	34.8	25.0	26.3	35.7	31.7	42.0	40.4	35.6	38.1	58.1	38.5	54.5	46.8
Farmers in bank lending area who went out of business (year ending June) 3/	2.2	2.3	3.0	4.3	6.3	4.6	2.7	2.1	2.2	2.0	3.3	3.3	1.7	1.7	2.3	2.1	3.3	2.9
Liquidation categories (sum equals 100%)																		
Normal attrition	NA	30.2	26.7	19.1	17.7	31.5	26.8	43.4	53.5	50.5	47.1	72.8	46.5	32.2	37.3	59.8	27.7	35.4
Voluntary liquidation	NA	48.7	50.4	45.3	46.7	39.4	41.3	30.8	29.2	23.2	39.0	15.6	39.8	51.2	45.5	32.3	56.0	47.6
Legal foreclosure	NA	19.4	19.6	20.3	33.2	28.0	29.7	24.0	12.3	22.0	13.5	11.6	13.7	7.8	14.4	7.2	15.0	16.0
Other	NA	1.7	1.7	5.3	2.4	1.1	2.2	1.7	5.0	4.3	0.5	0.0	0.0	8.8	2.8	0.8	1.3	1.0
Banks' farm borrowers who filed for bankruptcy (year ending in June) 3/	NA	NA	NA	1.8	1.9	1.3	0.5	0.7	0.3	0.4	1.0	1.0	0.1	0.1	0.6	0.4	0.4	1.0
Farmers in bank lending area who filed for bankruptcy (year ending in June) 3/	0.5	1.2	2.3	3.5	3.5	3.0	2.0	2.1	1.3	1.2	2.9	2.8	1.5	0.4	1.5	1.5	1.7	1.7

NA=Not available. 1/ Data are unweighted averages of responses to the American Bankers Associations annual Farm Credit Situation Survey, which uses a stratified random sample based on bank asset size and region. 2/ Data for 1988 and 1989 are as of September 30 and data for 1991 and 1992 are as of December 31. 3/ Data for 1991, 1992, 1993, 1994, and 1995 are as of December 31. 4/ Data for 1991, 1994, and 1995 are as of December 31. 5/ CT, DE, DC, MA, MD, ME, MI, MN, NH, NJ, NY, PA, RI, VT, WI. 6/ IL, IN, IA, MO, OH. 7/ AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV. 8/ KS, NE, ND, OK, SD, TX. 9/ AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

Source: (5).

declined to a low of 1 percent in 1993 and 1995, but increased to nearly 5 percent in 1998. The *banks' farm borrowers who had their bank financing discontinued during the current year* peaked at nearly 6 percent in 1986, fell to 1 percent in 1989 and 1991, and climbed to nearly 3 percent in 1998. *Farm borrowers that banks expect to discontinue during the next year* demonstrated a similar pattern with nearly 7 percent in 1986, down to less than 2 percent in 1988, and up to 4 to 5 percent in 1998 and 1999. The nearly 5 percent in 1998 is the third highest for this series during the 1982-99 span. The *proportion of the banks' farm customers loaned up to their practical limit*, another measure of creditworthiness, peaked at 39 percent in 1986, a level nearly matched by 37 percent a year earlier. The rate declined to under 23 percent in 1988, but climbed to a new high of 39 percent in 1999.

Agricultural banks estimated that 6 percent of *farmers in their lending areas went out of business during the year* ending in June 1986, up from 2 percent in 1982. This figure remained low during the relatively stable 1990-96 period, but increased to 3 percent in 1999. There is some evidence that this is a lagging indicator of the farm sector's economic performance. The banks break out their responses for farmers going out of business during the year into four categories based on reasons for leaving: *normal attrition, voluntary liquidation, legal foreclosure, and other*. The combination of the *voluntary liquidation* and *legal foreclosure* categories gives a proxy for farmers leaving the sector because of economic and related difficulties. Some 70 percent of exiting farmers were thought to have left in 1985 because of these two reasons. This compares with roughly 60 percent in 1983 at the beginning of this data series and the low of roughly 34 percent reported in 1990. The measure jumped to over 54 percent in 1999, its highest since 1988.

Responding bankers estimated that 4 percent of *local trade area farm operators filed for bankruptcy during* July 1985-June 1986, up from under 1 percent in 1982. After the 1985-86 peak, the percentage filing for bankruptcy dropped to 1 percent in 1990 and 1994. It jumped to nearly 2 percent in 1998 and 1999. The pattern over time of the *banks' own farm borrowers who filed for bankruptcy* paralleled the bankruptcy rates for all farmers in the trade area, although at lower percentages (table A-2, last two lines of data).

Regional Farm Credit Results

The ABA divides the Nation into five geographic regions--Northeast, Corn Belt, South, Plains, and West--for analytical purposes regarding the farm credit situation survey (fig. A-1). The ABA configuration is unique, following a different breakout than the U.S. Bureau of the Census with its 4 divisions and 9 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 (fig. A-1). 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 (table A-2). 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 hard hit by the economic adversity. 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 1980's. For all regions, stress indicators in the early to mid-1990's were low except for the share of farm borrowers loaned up to the practical limit and the bankruptcy rate, both of which took a long time to subside. Bankruptcy rates continued higher than they were in 1982-83 for a period, indicating a lagged response as individual cases were worked out over time. Farm stress indicators rose in all regions during 1998-99 in response to the sharp drop in many key commodity prices. The Northeast had the highest measures of delinquent loans and farmers going out of business, while the South led the discontinued financing and bankruptcy categories.

Conclusions

The ABA's midyear farm credit situation survey is a unique source of information for 1982-99 that enables one to see how farm financial stress was viewed by commercial banks through time. Survey results show that by most measures, farm financial stress peaked in 1985-86. Farm sector economic fundamentals strengthened in 1987-89, so that financial stress levels for most indicators in the 1990's dropped below 1982 levels. Stress indicators for 1990-97 were low except for the share of farm borrowers loaned up to the practical limit and the bankruptcy rate, both of which were slow to recede completely to 1982 levels. 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. Agricultural bankers' perceptions of farm financial stress have increased in 1998-99 as part of an ongoing concern about lower farm prices beginning in 1996-97 and related matters. It appears that farmers were more reluctant to take bankruptcy in 1996-97 than was the case in the early 1980's. But bankruptcy is a lagging variable and future rates are dependent on how long depressed commodity prices persist.

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