FARM CREDIT ADMINISTRATION MID-Year Report

1998



FARM CREDIT ADMINISTRATION Mid-Year Report







The Farm Credit Administration will promote a safe and sound, competitive Farm Credit System to finance rural America as authorized by Congress.

Contents

Preface
Executive Summary
John Moore
Financial Performance of the
Farm Credit System for the First Half of 1998
Laurie Hopkins and Andrew Jacob
Federal Income Tax Options
Available to FCSIs and Their Competitors
Linda Sherman and Robert Andros
Risks Associated with the Millennial Date Change
Thomas Glenn and Robert Andros
Effects of a Prolonged Economic Depression in Southeast Asia on the U.S. Farm Economy
Farm Credit Administration
Fiscal Year 1999 Regulatory Performance Plan
Farm Credit Administration's Loan Portfolio Management Symposium
Corporate Restructuring of Farm Credit System Institutions
Elna Luopa
Major Financial Indicators by System, Quarterly Comparison
Major Financial Indicators by District
Glossary

Report Manager John C. Moore, Jr. Chief Economist

Preface

The Farm Credit Administration (FCA) publishes a report on the condition and performance of the Farm Credit System (FCS or System) twice each year, first in the Mid-Year Report that covers the first six months and then in the Report on the Financial Condition and Performance of the Farm Credit System, which covers the calendar year. These reports focus on identifying risks from both within the System and outside it. In addition, the Mid-Year Report provides special articles on risk and other policy-related issues affecting System institutions. These reports also contain updates on the System's corporate restructuring activities, FCA's Regulatory Performance Plan, special programs and conferences, as well as tables summarizing the latest indicators of the System's financial performance. Each quarter FCA also posts System financial indicator tables as well as updates on the System's corporate restructuring efforts on its Internet Website (see address below).

This 1998 Mid-Year Report on the Farm Credit System draws from a variety of sources including quarterly Farm Credit Administration (FCA or Agency) Call Reports, quarterly System reports, U.S. Department of Agriculture (USDA) reports, and other Federal, state, and commercial information sources. The figures and tables detailing the System's financial performance reflect information from reports filed with the Agency by System institutions as of the close of business September 1, 1998. Unless indicated otherwise, all projections and analyses are those of Agency analysts and do not necessarily reflect the opinions of the FCA Board or FCA management.

System institutions are required to make certain disclosures to stockholders, investors, and the general public. The Federal Farm Credit Banks Funding Corporation, for example, makes such disclosures to investors in System-wide securities on behalf of the issuing banks. Other individual System institutions provide similar disclosures in reports to their respective stockholders. The quarterly *Summary Report of Condition and Performance of the Farm Credit System*, published by the Funding Corporation, offers a detailed set of tables showing the financial results of the Farm Credit banks combined with their affiliated organizations.

> Questions regarding the content of this report may be directed to C. Edward Harshbarger, Director, Risk Analysis Division, Office of Policy and Analysis or to John C. Moore, Jr., Chief Economist, 703-883-4455

> Single-copy subscriptions are available to the public free of charge. This report and recent past reports are also available on FCA's Website (http://www.fca.gov). Requests for subscriptions or address changes should be mailed to: Office of Congressional and Public Affairs, Farm Credit Administration, 1501 Farm Credit Drive, McLean, VA 22101-5090; E-mail: info-line@fca.gov.

Executive Summary

Conditions in the agricultural economy for a wide range of commodities declined significantly during the first half of 1998. In fact, prices for wheat and corn have fallen so low that several billion dollars in unanticipated loan deficiency payments will be made to farmers in the second half of 1998. The Farm Credit System's (FCS's) solid financial results for the first half of the year do not yet reflect the stress of these deteriorating financial conditions. Rather, the June 30, 1998, results show that FCS institutions have been able to maintain strong loan volume growth, a high quality loan portfolio, and strong earnings, and they have continued to improve risk-bearing capacity in the form of higher capital levels. The System's financial statements will likely begin to show the effects of the downturn in conditions by the end of 1998 or early 1999, but at the moment, its institutions are in an excellent financial position to withstand the emerging risks.

The System's loan volume continued to grow briskly, with gross outstanding loans at \$65.6 billion on June 30, 1998-an increase of 4.8 percent from the previous year. The largest increases came in short- and intermediateterm loans, which jumped 11.6 percent, while real estate loans increased by 4.6 percent. This growth resulted from continued strong gains in land prices, a trend that may soon reverse if, as expected, farm income declines substantially from 1996 and 1997 levels. The upsurge in short- and intermediate-term loans may be partly attributable to farmers' choosing to store crops and wait for higher prices while borrowing more for current operating expenses. Other factors influencing loan growth include the System's enhanced marketing efforts, more efficient credit-delivery systems, and competitive pricing programs. As of the end of the first quarter of 1998, however, the increase in agricultural loans at commercial banks was greater than that in the System. In fact, as of the end of the first quarter commercial banks' annual growth rates for agricultural loans have outpaced the System's growth (in loans

to farmers) four quarters in a row. Loans to cooperatives, meanwhile, fell slightly over the last 12-month period and loans made in connection with international transactions continued a trend of paydowns of loans to some countries.

The report contains a special section linking conditions in the agricultural economy to commodity concentrations (as of June 30, 1998) in the Farm Credit System's loan portfolios. The largest such concentrations in System-wide farm lending portfolios are corn (10.3 percent), dairy (10.2 percent), beef cattle (8.3 percent), wheat (4.5 percent), hogs (4.3 percent), cotton (3.4 percent), and soybeans (2.7 percent). Except for dairy and cotton, these commodities are experiencing serious price declines. As one would expect, a more detailed, district-by-district review turned up much higher concentrations of these stressed commodities in certain districts.

However, the credit quality of the System's portfolios continued to improve or remain stable as acceptable loans reached 89.2 percent of loan volume. Other loan-quality indicators also showed consistent upward trends: nonperforming assets declined to 1.3 percent of total loans; non-accrual loans fell to one percent of total loans, and delinquencies remained stable and low. The effects of the recent deterioration in economic conditions would not be expected to show up in credit quality indicators until later.

System capital increased by \$1.1 billion to \$12.2 billion or 15.1 percent of assets, up from 14.5 percent a year earlier. Surplus, the type of capital that counts toward two relatively new standards, reached \$8.8 billion, while "restricted capital" (the amount in the Farm Credit System Insurance Fund) increased to \$1.4 billion.

The System's net income for the first six months of 1998 was \$666 million. The \$59 million gain from the year before resulted from the increased loan volume and higher capital levels. In addition, while various economic and financial developments have increased spreads between System securities and those of the U.S. Treasury, funding costs have remained stable. The System's annualized return on average assets thus increased slightly, to 1.68 percent.

This Mid-Year Report also offers several other pertinent analyses. One article looks at the various tax structures available to System institutions and their commercial bank counterparts and compares the tax savings available to each. For example, although cooperatives have the same rights and responsibilities as other businesses, including the responsibility to pay taxes, their unique structure and purpose requires a separate section in the Internal Revenue (IR) Code, Subchapter T, which sets forth the qualifications and criteria for the taxation of cooperatives, including several options for the distribution of surplus or earnings. The IR Code provides the option for taxation on the earnings of cooperatives, at either the corporate or the individual level-whichever is most advantageous to the cooperative and its members. This requirement differs from those for most investor-owned general businesses, which pay taxes at both the corporate level and again when dividends are distributed at the individual level. Half of the System's taxable institutions now file as Subchapter T cooperatives.

Recent legislation gives many commercial banks and thrifts the opportunity to reorganize as Subchapter S corporations, which enjoy tax benefits similar to those accorded Subchapter T cooperatives. Since there are substantial financial benefits associated with single taxation, more than 10 percent of the nation's banks, many located in rural and agricultural sections of the country, have converted to S corporations in the last 18 months. Many more are expected to convert in the near future.

An article on the year 2000 (Y2K) computer problem discusses the serious challenge facing the financial services sector, including Farm Credit System institutions. In sum, it looks as though it will be impossible for any financial services firm to entirely insulate itself from the economic repercussions of the millennial date change. At a minimum, some adverse economic effects are likely to be felt within the financial services sector, including the FCS and its customers. Every financial institution faces a series of risks associated with the millennial date change in its computer systems; embedded systems; supplier, client, and servicer interfaces; customer relations and related ripple effects; infrastructure, and government services. Failure to address each area of risk successfully can increase the potential for legal liability. FCA has provided and will continue to provide timely and comprehensive guidance to System institutions at both the general and individual institution levels. Institutions may be able to mitigate their liability exposure if they follow FCA's Y2K guidance and can document that they did so.

Another article focuses on the importance of agricultural exports and the effects of the decline in Asian economies on American agriculture. Over the last three years Asian markets have absorbed about 48 percent of U.S. export value. A quantitative model shows how alternative scenarios for Asian growth might affect the 1998-2002 forecast for farm income, real estate values, and debt for the Nation and for each Farm Credit district. Significantly, in the Baseline forecast the strong mid-1990s growth in real estate prices is forecast to reverse in 1999. In fact, prices are predicted to decline slightly in 1999 and remain weak through the forecast period-more so in the Asian Depression scenario. Fortunately, unless the Asian Depression scenario comes to full fruition, the worst stresses will be localized and short-lived compared with those of the 1980's.

This report also contains the Agency's Regulatory Performance Plan for Fiscal Year 1999. The plan provides a brief description of each regulatory project intended for development in the upcoming fiscal year.

The FCA will sponsor a symposium in December to highlight some of the more critical and timely aspects of loan portfolio management. The symposium will provide a forum for discussing risk-related management issues associated with agricultural lending. Key topics such as management information systems, portfolio stress testing, and environmental risk evaluation will be discussed. The symposium is structured for System personnel including chief executive officers, chief credit officers, and others involved in the credit function.

This Mid-Year Report provides an overview of trends in the System's corporate restructuring activities. As of October 1, 1998, there were 201 System banks and associations -13 fewer than existed a year earlier. The most significant decline was in the number of Federal Land Bank Associations (FLBAs), which dwindled by nine to 40 as a result of mergers in the Texas District and the formation in the Wichita District of direct lender Federal Land Credit Associations (FLCAs). FLBAs affiliated with the Farm Credit Bank of Texas also are expected to begin the transition to FLCAs by mid-1999, assuming shareholders approve the Bank's proposed plan to transfer direct lending authority. There have been no mergers among the eight Farm Credit banks in the System since April 1995.

On July 14, 1998, the FCA Board adopted a philosophy stating its belief that "unrestricted intra-System competition is beneficial for the customer and the long-term relevancy of the Farm Credit System."

September 25, 1998

Financial Performance of the Farm Credit System for the First Half of 1998

Laurie Hopkins and Andrew Jacob

Overview: Farm Credit System Posts Solid Financial Results, While Stress in the Agricultural Economy Points to Risks on the Horizon

The Farm Credit System's solid financial results for the first half of 1998 do not reflect the stress associated with increasingly difficult agricultural economic conditions. With continued adversity, however, the quality of the Farm Credit System loan portfolio may decline, which in turn may reduce the strong financial performance it has realized during most of the 1990's. However, in anticipation of the downturn in agriculture, the System has built its risk bearing capacity to withstand this adversity.

Agricultural Economy: Increasingly Difficult Conditions in Mid-1998

Despite an overall robust U.S. economy and a period of strong net farm income throughout most of the 1990's, concerns have developed about recently falling commodity prices, declining net farm income, and difficult weather conditions. Corn, wheat, soybeans, hogs, and cattle are the most seriously stressed commodities because of the downturn in current economic conditions. Most producers entered 1998 in a fairly strong financial position that will serve as a crucial cushion for many of them. In 1997, farmers and ranchers experienced a turnaround in the cattle industry and near record crop harvests, which brought widespread profits. Debt loads have not risen to burdensome levels overall partly because many farmers have opted to pay down loans rather than incur increased debt. A recent U.S. Department of Agriculture (USDA) study showed that the number of highly leveraged farms with debt/asset ratios above 70 percent was about 4 percent at the end of 1997. This is consistent with levels observed during the previous 5 years but well below the level observed during the mid-1980's, when 10 percent of the farmers were in this category. However, farmers who ended 1997 without

a financial cushion because of weather or other problems are likely to experience loan repayment problems in 1998. The main issues facing the agricultural economy are discussed below.

Adverse weather conditions will lead to poor crop yields or crop failure in several states.

The Southern drought, extreme heat and drought in Texas, spring floods and crop disease in the Northwestern Plains, and unseasonably wet and cool weather in California have altered expected crop production in these areas significantly. For example, difficult weather conditions in Texas and Oklahoma will cut this year's domestic cotton crop by 25 percent, lowering overall output and raising prices. In the Northern Plains the poor growing conditions (spring flooding) and diminished yields of 1997 have spilled over into 1998 and left producers with mounting financial problems. Conversely, other areas of the United States have experienced favorable weather conditions, and overall harvests of corn, soybeans, and wheat will be at or very near record levels, which is likely to further depress prices.

Commodity prices are falling under the weight of near record harvests and faltering demand.

Increased worldwide supply paired with weaker export demand has depressed commodity prices significantly for U.S. farmers. Prices were quite favorable in 1995, 1996, and much of 1997, and stocks were low. Chart 1 depicts the relationship between favorable commodity prices and low stock levels for corn, which is the same trend seen for wheat and soybeans. The favorable prices were strong signals to increase production. Expansion also was fueled in part by confidence that exports to Asian markets would continue to grow. However, an increase in foreign competition from Argentina, Brazil, and Australia and solid U.S. yields have contribI his article reviews the increasingly difficult conditions in the agricultural economy. In addition, components of the System's financial condition are assessed with emphasis on commodity concentrations in each Farm Credit System district.





Source: Agricultural Outlook, Economic Research Service, U.S. Department of Agriculture

uted to the rapid decline in commodity prices. Although China is also an important foreign competitor, poor weather has recently affected its agricultural production. Depressed prices have reduced the value of U.S. exports even though the volume of commodity and red meat exports was up from October 1997 to June 1998.

For wheat, corn, soybean, cattle, and hog producers, prices are substantially lower than they were during 1997. Unfortunately, USDA expects season average prices for 1998-99 for these commodities to be even lower than for the 1997-98 season. Farmers are preparing to bring in the largest soybean crop, the second largest corn crop, and among the largest wheat crops ever, which portends continued price weakness for these grains. Meat production has also increased so that hog prices have been low all year long and cattle prices have begun to weaken recently. Conversely, strong demand for certain dairy products, such as butter, cheese, and milk fat, has supported milk prices, although the patterns have been uneven due to erratic milk supplies.

Net farm income for 1998 is forecast to decline by 15.8 percent.

As of late September, the USDA had lowered its forecast of net farm income largely because of declining commodity prices. As shown in Chart 2, the USDA reduced the 1998 forecast by \$ 7.9 billion from 1997 and \$11.5 billion from the 1996 record. Yet it is up \$5.9 billion from 1995 and is 7.3 percent below the average for the 1990's. Direct government payments are forecast by USDA to be \$7.4 billion for 1998, slightly lower than 1997 and the average for the 1990's. However, this forecast will be reversed upward because government loan deficiency payments will increase substantially as commodity prices fall. Throughout the 1990's direct government payments have averaged 19.2 percent of net farm income, assisting producers during the particularly difficult years of 1991, 1995, and now 1998.

Chart 2 Total Net Farm Income, 1990-1998 as of September 24, 1998 1998 Forecast: Net Farm Income Down 15.8% from 1997 70 60 53.5 49.9 45.3 47.5 48.3 50 44.7 43.5 36.1 38.7 In Billions 40 30 20 10 13.4 9.2 8.7 8.4 8.2 7.9 7.3 7.3 7.9 n 1990 1991 1992 1993 1997P 1990-1994 1995 1996 1998F

P= Preliminary A=Average of time period F=Forecast Source: Derived from Economic Research Service data, U.S. Department of Agriculture

Amount of Farm Income Derived from Direct Government Payments

Government assistance will help alleviate some financial hardship for troubled farmers.

The Federal government has launched an assistance package to mitigate the weatherrelated stresses affecting many farmers. Immediate initiatives include a lifting of sanctions against foreign grain sales and a \$250 million wheat purchase funded by the Commodity Credit Corporation that aims to raise prices and fulfill a humanitarian need in the form of food relief overseas. Other solutions involve moving \$5.5 billion in crop support payments from 1999 to late fall 1998, and about a half billion dollars in low interest rate loans to alleviate financial pressures of some of the hardest hit farmers. In addition, commodity prices have fallen below the USDA loan price support level, especially for wheat and corn producers. Depending on how long this condition exists, several billion dollars in loan deficiency payments may be made to farmers by the USDA in the coming months.

Farm Credit System Financial Performance: Ability to Withstand Risks on the Horizon

42.0

74

1990-1997 Average Net Farm

1997A

Income

The Farm Credit System's financial performance during the first half of 1998 was solid despite the challenging aspects of the agricultural economy. The Farm Credit System has been able to maintain loan volume growth and a high quality loan portfolio, which has sustained strong earnings. Earnings have helped build the System's capital position to healthy levels, thereby improving risk-bearing ability. However, commodity concentrations represent a continued source of risk.

Loan volume has grown significantly, particularly for both short- and intermediate-term loans.

The Farm Credit System's loan portfolio (including cooperative lending) grew 4.8 percent for the period June 30, 1997, to June 30,





Source: Derived from FCA Report to Investors

1998. During this period, total loans increased from \$62.6 billion to \$65.6 billion. The \$3 billion increase was concentrated in long-term real estate and short- and intermediate-term loans, while domestic loans to cooperatives and export financing fell. Chart 3 indicates that the increase in loan volume was led by short- and intermediate-term loans, which jumped 11.6 percent, growing from \$16 to \$17.8 billion. Long-term real estate loans increased 4.6 percent, from \$30 to \$31.4 billion. The continued upsurge in farmland values contributed to the growth in long-term real estate loans collateralized by farmland, including those used for purposes other than the purchase of land. However, farmland values may be stalling in some regions because net farm income is expected to decline. Diminishing direct government payments under the 1996 Freedom to Farm Act will also limit upward pressure on land values. If farmland values begin to level off or even fall, lenders will likely reduce real estate lending in the near future. The rise in short- and intermediate-term loans is consistent with the significant growth shown in this area during the same periods in 1995 and 1996. The recent upsurge of short-term loans may be partly attributable to farmers choosing to store crops and borrow more for operating expenses. By District, non-realestate loan growth was particularly robust in the AgAmerica District, up 20.4 percent, while long-term real estate lending showed significant growth of 19.3 percent in the Western District.¹

Domestic loans to cooperatives fell from \$14.4 billion to \$14.3 billion for the 12-month period ending June 30, 1998. This area led the Farm Credit System for increases in loan volume during the same periods of 1995 and 1996, but declined in 1997 and in 1998. Cooperatives have required fewer funds because of low commodity prices, weak demand, and increased storage of crops by producers. Loans made in connection with international transactions declined 8.6 percent, from \$2.3 billion to \$2.1 billion, because of on-going loan pay-downs, continuing a trend that began in 1995.

Long-term agricultural real estate loans are the predominant portion of the Farm Credit Banks and associations' loan portfolios (see Chart 4). These loans are collateralized by real estate and are used to finance farmland, farm buildings, and other longer-term capi-

A District is a Farm Credit System bank (i.e., Farm Credit Bank or Agricultural Credit Bank) combined with its affiliated associations with the exception of St. Paul Bank for Cooperatives. Districts are referenced throughout by Farm Credit System bank name as follows: AgAmerica, AgFirst, AgriBank, Texas, Wichita, Western, and CoBank.

tal needs. Non-real-estate loans provide short-term working capital needs for crop production and intermediate-term loans for equipment and other similar capital goods. These two loan types accounted for 93.1 percent of loans made by Farm Credit Banks and associations as of mid-year 1998, little changed from the average of 93.0 percent during 1994–1997.

Commercial bank agricultural loan growth outpaced the Farm Credit System's loan growth.

Over the past decade, commercial banks have competed effectively with the Farm Credit System, capturing an increasing market share of agricultural loans. Recent data show that growth in commercial banks' agricultural loans has outpaced Farm Credit System growth for the last four quarters, as shown in Chart 5. From March 31, 1997, to March 31, 1998, commercial bank farm loans increased 9.8 percent, the highest percentage growth rate of the 1990's.² At March 31, 1998, commercial bank farmland and agricultural production loans outstanding reached \$69.9

Chart 5

billion. Much of the growth has come from traditional commercial agricultural banks, which showed an 11.6 percent increase in combined farmland and agricultural production lending for the past year. As of March 31, 1998, there were 2,327 commercial agricultural banks.³

Loan volume at Farm Credit Banks and associations grew.

Loan growth varied widely by District, with the greatest percentage growth observed in AgriBank and AgAmerica Districts (see Chart 6). From June 30, 1997, to June 30, 1998, loans outstanding in these two Districts increased about 10.0 percent compared to a more moderate 3.5 percent loan growth in the Wichita District. The CoBank District (which includes lending by affiliated associations in the Northeast and to agricultural cooperatives) experienced a slight decline of 0.7 percent due to less borrowing by domestic cooperatives. The St. Paul Bank for Cooperatives (St. Paul BC) had a significant decline of 12.4 percent in loan volume. Many direct lender associations posted solid growth





Source: Loan Account Reporting System (LARS)



Credit System Loan Growth (excluding cooperatives and international)

Commercial Banks Agricultural Loan Growth Recently Surpassed Farm

- Source: Derived from Sheshunoff Bank Search and LARS Data, which excludes rural home, farm related business, processing, and marketing, aquatic, and other.
- First quarter 1998 data is used in this discussion because the commercial bank Call Report data is derived from Sheshunoff Information Services, which does not release its second quarter 1998 data until late September.
- As defined by the Federal Deposit Insurance Corporation (FDIC), a commercial agricultural bank is a bank with total agricultural loans in excess of 25 percent of its total loan portfolio.

Chart 6

n

AgAmerica



Texas

June 1997

Western

June 1998

Chart 7 Farm Credit System: Sampling of Major Commodity Concentrations as of June 30, 1998



Total FCS Loans: \$48.6 billion

4. A loan is assigned to a specific commodity category if 50 percent or more of the borrower's loan value is concentrated in a given commodity. The charts represent commodity concentrations according to three qualifications. First, the top three commodities by total loan concentration were selected for each District. Second, seven major commodity categories (corn, wheat, soybeans, cattle, dairy farms, hogs, and cotton) were selected and highlighted if the category represented 2.5 percent or more of loan volume. Last, the 'other*' category captures all commodities that did not meet the first two requirements, and all concentrations that represent 8 percent or less of loan volume. Concentration data was derived from the Loan Account Reporting System (LARS) and does not include cooperative lending. Underlying loan diversity is greater than the data suggests because each borrower is categorized by only the major commodity produced. Typically, farmers and ranchers are diversified through the production of more than one commodity. Nevertheless, the LARS data is a mechanism for identifying regions with a high degree of concentration in stressed commodities.

Source: Summary Report of Condition and Performance of the Farm Credit System

AgriBank

from June 30, 1997, to June 30, 1998. During this period, total loans outstanding grew by more than 10 percent at 46 associations, and 15 associations experienced a growth rate in excess of 20 percent.

AgFirst

The Farm Credit System has significant concentration in stressed commodities.⁴

As a single industry lender, the Farm Credit System has significant exposure to the stressed U.S. agricultural economy. Loan portfolio concentration in certain stressed commodities, especially wheat, corn, soybeans, hogs, and cattle, is an indication of where difficulties may appear. Evidence of problems may appear in the form of increased delinquencies after the marketing year has passed. As a group, all Farm Credit Banks and associations have the highest commodity concentrations in corn loans at 10.3 percent, dairy loans at 10.2 percent, and beef cattle and cattle feedlot loans at a combined 11.4 percent (see Chart 7). However, individual Districts have different concentration exposures to stressed commodities and related risk.

The Texas District may experience an increase in loan problems because of its concentration in cattle loans, representing 33.8 percent of the loan portfolio (see Chart 8). Despite this concentration, the prevalence of part-time cattle producers in the area may mitigate overall difficulties. Cotton loans, which constitute 14.4 percent of the portfolio, are vulnerable due to the extreme drought that has ravaged the area's production.

Wichita

CoBank

St. Paul BC

Chart 8 **Texas District** as of June 30, 1998



Gross Loans: \$4.1 billion

Loans Outstanding Grew in Most Districts 2nd Quarter 1997 Compared with 2nd Quarter 1998



Chart 9 Western District as of June 30, 1998



Gross Loans: \$5.5 billion



Gross Loans: \$1.9 billion

The Western District's loan portfolio shows concentrations in grape loans at 16.1 percent, dairy farming at 14.9 percent, and tree nuts at 8.1 percent (see Chart 9). Hence, the performance of the Western District's overall portfolio is less likely to be affected significantly by weaknesses in the agricultural economy given its loan diversity and lack of concentration in any of the major stressed commodities. However, reduced export demand for fruits and vegetables and recent adverse weather may cause difficulties for many producers.

In the Wichita District, stressed commodities (cattle, wheat, corn, and soybeans) constitute 59.6 percent of the loan portfolio. The financial health of the producers of these commodities is especially vulnerable and may cause future deterioration in the quality of the loan portfolios in the Wichita District (see Chart 10).

CoBank's loans to producers in the Northeast have a heavy concentration in dairy farms (39.1 percent) along with lesser concentrations in ornamental floriculture at 11.2 percent and berry crops at 5.3 percent (see Chart 11). Dairy producers in this district may be bolstered by the decline in feed prices and continued strong demand for dairy products.

Loan concentrations in the AgFirst District are evenly distributed among producers of broiler/fryers, beef cattle, and dairy at approximately 9 percent each. As a result, the loan portfolio shows substantial diversity and lack of concentration in troubled commodities, which serve to mitigate negative economic impacts on the area (see Chart 12).

The AgriBank District, which straddles the Northern Plains and the Corn Belt, may encounter stress because of its 33.6 percent concentration in corn, wheat, cash grain, and soybean loans, and another 6.8 percent in





Gross Loans: \$3.9 billion

Chart 12 **AgFirst District**



Gross Loans: \$8.8 billion

Chart 13 AgriBank District as of June 30, 1998

Beef Cattle Soybeans

Gross Loans: \$16.9 billion

5. All credit classification ratios include accrued interest receivable. Loans classified OAEM exhibit potential weaknesses and adverse financial and operational trends that have yet to impact repayment. Compared with the acceptable and OAEM classifications, adversely classified loans are loans with greater repayment risk and where collection in full is a concern. Adversely classified loans represent the sum of loans classified Substandard, Doubtful, and Loss. hog loans (see Chart 13). Prices for these commodities are forecast to remain weak. However, dairy loans represent 12 percent of total loan volume, and these loans will likely benefit from a stronger dairy market.

The AgAmerica District has its highest loan portfolio concentration in corn at 14.2 percent, beef cattle at 10.0 percent, and wheat at 8.1 percent, all of which face falling prices (see Chart 14). However, AgAmerica shows loan portfolio diversity and overall low concentrations, which should dampen the effects of declining prices in certain commodities.

Asset quality currently remains at a high level.

The Farm Credit System's loan portfolio remains in solid condition as measured by credit classifications in relation to risk funds and nonperforming loan statistics. The high quality of the loan portfolio has been responsible for the excellent financial performance by Farm Credit System institutions. Furthermore, strong financial performance has built risk-bearing ability through capital growth and strong earnings. As a result, the Farm Credit System is in a good position to withstand the emerging risks from a deteriorating agricultural economy. While these risks are not currently apparent when viewing early warning indicators such as delinquencies, credit classifications, or provision for loan losses, continued poor weather and low commodity prices may lead to some deterioration in loan portfolio quality by the end of 1998.

Credit quality slightly improved.

As shown in Chart 15, credit quality for Farm Credit System banks and associations has improved slightly over the past several years. Acceptable loans have reached 89.2 percent of total loan volume⁵ while the level of Other Assets Especially Mentioned (OAEM) and adversely classified loans have remained relatively steady at approximately 6 and 5 per-





Gross Loans: \$7.5 billion

13

Chart 15 Combined System Banks and Associations Quality Improved Slightly as of June 30, 1998



Source: Summary Report of Condition and Performance of the FCS

cent of the portfolio, respectively. All Districts maintained asset quality at high levels, with most reporting some improvements.6 While still at a high level, AgriBank's asset quality fell slightly as the level of loans classified acceptable dropped to 88.2 percent of total loans at June 30, 1998, compared with 91.9 percent a year earlier. The AgriBank District experienced a corresponding increase in loans classified OAEM, which indicates potential future weaknesses and adverse financial trends for borrowers. These weaknesses are partly attributable to weather and other related problems with crop production experienced over the past few years. Although asset quality was strong overall, the St. Paul BC exhibited weaker asset quality relative to other Farm Credit System banks.

Asset quality of direct lender associations remained relatively stable from June 30, 1997, to June 30, 1998. The number of direct lender associations with adverse assets in excess of 10 percent of total loan volume and other property owned (OPO) dropped from 15 to 10 associations.⁷ However, the number of direct lender associations with adverse assets to total loans ranging from 5 to 10 percent increased by 9, to 50 associations. Most of the increase was with several associations that moved to just above the 5 percent level. At June 30, 1998, the Farm Credit System had 147 direct lender associations.

Capital and allowance for loan losses positions were sufficient compared with portfolio risk.

On a combined basis, Farm Credit System banks and associations have sufficient capital and allowance for loan losses in relation to the level of adverse assets. Adverse assets represented 25.2 percent of capital and allowance for loan losses at June 30, 1998, compared with 26.7 percent at June 30, 1997.

As of June 30, 1998, only 3 associations had adverse assets to risk funds (permanent capital and allowance for loan losses) exceeding 50 percent, a drop from 11 associations a year earlier. None were in excess of 66 percent. Adverse assets to risk funds greater than 50 percent is an indicator of greater risk levels relative to risk-bearing ability. However, 39 associations had a ratio between 30 and 50 percent, compared with 27 associations a year ago.

- 6. Districts were defined in footnote 1. St. Paul BC is not considered a District because it has no affiliated associations.
- 7. Adverse assets are adversely classified loans and OPO.
- 8. Nonperforming assets are nonaccrual loans, accruing restructured loans, accruing loans 90 days or more past due, and OPO.



Chart 16 Trends in Nonperforming Assets

Source: Report to Investors, Quarterly Information Statement

Nonperforming loans have declined as a percentage of total loans.

Along with a high level of asset quality, the Farm Credit System's nonperforming assets position has improved.8 Nonperforming assets were 1.3 percent of total loans at June 30, 1998, compared with 2 percent a year earlier (see Chart 16). The Farm Credit System's level of nonperforming assets is comparable to the level for commercial agricultural banks, which was 1.2 percent at March 31, 1998. The level of nonperforming assets improved significantly because of the resolution of several large loans to domestic cooperatives. Capital and the allowance were sufficient relative to the level of nonperforming assets. At June 30, 1998, nonperforming assets were 6.2 percent of capital and allowance for loan losses, a significant decline from 9.9 percent at June 30, 1997.

The improvement in nonperforming assets came mainly from continued reductions in nonaccrual loans. At June 30, 1998, the Farm Credit System's level of nonaccrual loans represented 1.0 percent of total loans. By District, the level of nonaccrual loans to total loans ranged from a low of 0.8 percent to a high of 2.1 percent compared with a range of 1.0 to 5.4 percent a year earlier. At the association level, 10 associations reported nonaccrual loans in excess of 1.75 percent of gross loans compared with 27 associations at June 30, 1997. Risk funds coverage of nonaccrual loans was sufficient considering the ratio of nonaccrual loans to risk funds of 13 percent at June 30, 1997, and 11 percent at June 30, 1998.

The level of loans 90 or more days delinquent and still accruing interest has been stable and has remained low. The level has remained at around 0.1 percent for the Farm Credit System on a combined basis and for the individual Districts. Similarly, accrual loans 30 or less days delinquent have remained below 1.0 percent for the past several years.

Adequate allowance for loan losses bolsters the System's risk bearing ability.

The level of the allowance is consistent with the Farm Credit System's loan volume growth and expected risks emanating from the loan portfolio. However, if commodity prices remain low and adverse weather conditions continue, asset quality may deteriorate and the Farm Credit System may have to increase the allowance. Allowance for loan losses was

\$90 \$80

\$70

\$60 П \$50 Billions

\$40

\$30 \$20

\$10

\$-



1996

Assets

1997

- Capital as a % of Assets

Chart 17 **Risk Bearing Ability Improved**

1995

14.0%

13.5%

13.0%

12.5%

Source: Report to Investors, Quarterly Information Statement

Capital

\$1.9 billion at the end of the second quarter and represented 2.8 percent of total loans. The allowance has remained around 2.8 percent over the past 4 years, higher than the 2.0 percent for commercial agricultural banks. The Farm Credit System's higher allowance is appropriate because commercial agricultural banks are able to diversify their loan portfolios in economic sectors other than agriculture. Allowance accounts are maintained through the provision for loan losses on the income statement. The provision expense for the first 6 months that ended June 30, 1998, was \$32 million, down significantly from \$67 million for the 6-month period that ended June 30, 1997, and \$57 million for the 6-month period that ended June 30, 1996. The trend in the provision for loan losses indicates that the quality of the loan portfolio does not require any buildup in the allowance.

Investments increase to meet liquidity and interest rate risk needs

Each Farm Credit System bank maintains an investment portfolio primarily for liquidity purposes. The investment portfolio consists of highly rated, guaranteed, mortgage-backed securities, asset-backed securities, corporate debt, and short-term securities such as commercial paper, negotiable certificates of deposit, and Federal Funds sold. On June 30, 1998, the investment securities totaled \$12.7 billion and represented 16.2 percent of total assets. This compares with investments totaling \$11.8 billion and 15.5 percent of total assets on June 30, 1997. The growth in investments is attributable to increased liquidity needs due to discount note funding and additional use of investments to help manage interest rate risk exposures. By regulation, the size of each Farm Credit System bank investment portfolio is limited to 30 percent of gross loans.

1998

Capital growth builds the Farm Credit System's risk-bearing capacity.

Farm Credit System capital totaled \$12.2 billion on June 30, 1998, compared with \$11.1 billion a year earlier. The Farm Credit System has significant capital levels to assist in guarding against risks emanating from the stressed agricultural economy. For the 12month period ending June 30, 1998, total

Chart 18

Spreads Tighten but Net Margin Stays Strong due to Higher Capital Levels 9 8 7 6 Rates (%) 5 4 3 2 1 0 1995 1996 1997 1998 Earning Assets Rate Int. Bearing Liab. ----- Net Margin Net Spread

Source: Report to Investors, Quarterly Information Statement

capital increased by \$1.1 billion due to continued strong earnings performance. Despite an increase in assets, capital has increased as a percentage of assets to 15.1 percent, up from 14.5 percent at June 30, 1997 (see Chart 17). Excluding restricted capital, the ratio of capital to assets was 13.7 percent at June 30, 1998, compared with 13.1 percent at June 30, 1997.9 At June 30, 1998, total capital included \$8.8 billion in surplus, up from \$7.9 billion a year earlier.¹⁰ Similarly, the level of capital stock and participation certificates was \$1.9 billion, virtually unchanged from a year earlier, while restricted capital increased to \$1.4 billion from \$1.2 billion a year earlier. Accumulated other comprehensive income, associated primarily with unrealized gains and losses on investments, was \$38 million compared with \$15 million a year earlier.

The FCA requires each institution to maintain a minimum of 7 percent permanent capital to risk-adjusted assets; 7 percent total surplus to risk-adjusted assets; and 3.5 percent core surplus to risk-adjusted assets ratio. As of June 30, 1998, two institutions were not in compliance with the Agency's core surplus requirement. However, these institutions are operating under Agency-approved capital restoration plans, which puts them in technical compliance with the capital regulations.

Earnings remain strong despite a tightening in interest spreads.

For the first 6 months of 1998, the Farm Credit System's net income was \$666 million, up \$59 million from the same period last year. The gain was attributable to increased loan volume, higher capital levels, and stable funding costs. Interest-free funds (capital invested in interest earning assets) increased by \$1 billion due to earnings retention (see Chart 18). The increase in interest free funds helped offset the 20-basispoint-reduction in the net interest spread (rate on earning assets minus the rate on interest bearing liabilities) experienced since June 30, 1996.¹¹ As a result, the net interest margin remained close to 3 percent over the past 4 years. The Farm Credit System posted a healthy 2.92 percent net interest margin at June 30, 1998, compared to 2.90 percent 1

- 9. Assets in the Insurance Fund and the capital related thereto are designated as restricted assets and restricted capital, respectively. The classification of the Insurance Fund as restricted capital is based on the statutory requirement for the amounts in the Insurance Fund, which is under the control of the Farm Credit System Insurance Corporation, and is to be used solely for the purposes specified in the Farm Credit Act of 1971, as amended, all of which benefit System institutions directly or indirectly.
- For the Farm Credit System, the major components of capital are surplus, capital and participation certificates, restricted capital, and accumulated other comprehensive income.
- 11. A basis point is 1/100 of 1 percent.

Chart 19 Mid-Year Profitability Remains Strong



Source: Derived from Report to Investors, Quarterly Information Statement

year earlier and 3 percent 2 years earlier. In the future, profitability may come under some pressure as provisions are made to the allowance to reflect agricultural economic weaknesses.

Profits remain strong.

Since 1995, the Farm Credit System has consistently posted an annualized return on average assets (ROAA) in excess of 1.6 percent for the first 6 months of each year. At June 30, 1998, the annualized ROAA was 1.68 percent compared with 1.61 percent for June 30, 1997, and 1.81 percent for June 30, 1996 (see Chart 19). Similarly, the annualized return on average equity (including restricted capital) was 11.25 percent at June 30, 1998, compared with 11.19 percent for June 30, 1997.

Uncertainty exists with regard to interest rate stability given the Asian and Russian economic crisis. Currently the Federal Reserve has chosen to maintain interest rates which has stabilized the Farm Credit System's cost of debt. However, the spreads between Farm Credit System debt securities and U.S. Treasury securities have been widening due to reduced Treasury issuance during a period of strong investor demand. U.S. Treasury issuance is down due to the budget surplus resulting from strong U.S. economic performance. Investor demand has increased from uncertainties associated with the Asian economic crisis and the recent Russian currency devaluation and debt default. This global uncertainty has generated a flight-to-quality to U.S. Treasury securities and pushed rates on such securities to very low levels. Similarly, the swap debt curve has widened compared to U.S. Treasury securities, which has put further pressure on Farm Credit System spreads, particularly for intermediate- and long-term securities. For example, spreads on 10-year, fixed-rate securities had widened to 63 basis points by September 1, 1998, compared with 29 basis points at the end of January 1998.

Federal Income Tax Options Available to FCSIs and Their Competitors

Linda Sherman and Robert Andros

Background

Taxes are an inescapable and necessary cost of doing business in this country. Oliver Wendell Holmes once said, "Taxes are the price we pay for a civilized society." Most of us would agree that the taxes we pay provide a great environment in which to live. Most of us would agree that we are willing to pay our fair share of the cost of maintaining our society. But most of us would also agree that we do not want to pay more than our fair share. Determining our fair share can be difficult and costly process, and the cooperative banking system presents an especially complicated picture.

Organizational structure affects tax obligations. According to the U.S. Department of Commerce, American businesses generally take one of six common organizational forms: sole proprietorships, partnerships, limited liability companies, cooperatives, Subchapter S corporations, and general business (or Chapter C) corporations. Of these, only Chapter C corporations are required to pay income taxes at both the corporate and the individual-owner level. More and more American businesses are discovering ways to avoid double taxation. In 1997, only 1 of 10 businesses in the United States operated as a C corporation.

FCSIs, as cooperatives, fall into three tax filing categories: They may be tax-exempt; file as C corporations under Chapter 1, Subchapter A, of the Internal Revenue Code (IR Code); or file as cooperatives under Subchapter T of the IR Code. Out of 203 FCS associations, approximately 32 percent pay corporate taxes as C corporation filers. The rest are either tax-exempt (38 percent) or take advantage of Subchapter T rules (30 percent) to pass earnings through to shareholders as patronage dividends and forgo paying corporate taxes on that income. Table 1 shows the breakdown of FCSI filing status as of January 1, 1998.

The Farm Credit Act has always granted taxexempt status for income generated by mortgage lending by Farm Credit Banks (FCBs), Federal Land Bank Associations (FLBAs), and Federal Land Credit Associations (FLCAs). In contrast, income generated from production and cooperative lending by Production Credit Associations (PCAs) and Banks for Cooperatives (BCs) is not taxexempt. This distinction was simple when there were only a few types of System institutions and their lending activities were clearly distinguished as either short-term (agricultural operations), long-term (agricultural mortgages), or cooperative (cooperative loans) lending operations. After 1987, the structure of System institutions began to change. Institutions merged in order to achieve operating efficiencies, to provide "one-stop" shopping for their borrowers, or simply to pool scarce capital.

The creation of Agricultural Credit Associations (ACAs) through mergers of PCAs and FLBAs or FLCAs raised the question of whether the tax exemption for income generated from mortgage lending extends to ACA mortgage portfolios. Congress did not address this issue in the 1987 Amendments to the 1971 Act, and a number of institutions chose not to form ACAs because of uncertainty over this issue. In 1996, when the issue was raised to the national office of the Internal Revenue Service (IRS), the IRS issued a memorandum advising that, in the absence of an express statutory exemption from taxation, ACAs should be considered fully taxable.

In 1997, the Farm Credit System made provisions of \$186 million for income taxes on \$1,453 million in income for an effective tax rate of 13 percent, compared with a statutory tax rate of 35 percent for C corporations. The System estimates that it would have paid an effective rate of 21 percent (\$104 million more¹) had not 61 FCSIs elected to file under Subchapter T of the IR Code. This article examines the tax implications of various organizational structures available to Farm Credit System institutions (FCSIs) and their commercial bank counterparts. We look at the rapid increase in use of Subchapter S by commercial banks, the current use of Subchapter T by the FCSIs, and compare the financial implications of each. Finally, we examine the combined tax effects for the bank and the borrower, and analyze the total tax effect of various organizational structures to the ultimate beneficiary, the farmer.

Table 1Tax Filing Status of Farm CreditSystem Institutions

January 1, 1998

	mstitutions		
Tax Filing Status	Number	Percent	
Taxable, Subchapter T	61	30	
Taxable, Subchapter C	65	32	
Tax-exempt	77	38	
Total	203	100	

Institutions

 "Farm Credit System: Annual Information Statement-1997," Federal Farm Credit Banks Funding Corporation. February 25, 1998.
 Page F-28.

> Recently many commercial banks received an opportunity to avoid double taxation, at both the corporate and the shareholder level. The Small Business Job Protection Act of 1996 gave certain financial institutions the option of converting to Subchapter S corporations for the first time. A Subchapter S corporation, like a partnership, is generally not subject to Federal income tax at the corporate level, passing its income and expenses through to its shareholders in proportion to their stock ownership. This option reduces the bank's taxes and increases after-tax earnings, much like the Subchapter T option.

> By September 1997, the Federal Deposit Insurance Corporation (FDIC) reported that 585 commercial banks had converted to Subchapter S, saving themselves an estimated

\$190 million in taxes. As of March 1998, over 400 more banks had converted. Today over 1,000 banks, ranging in assets from \$12 million to \$1.2 billion, or about 10 percent of all commercial banks, claim Subchapter S status. Since, only 58 banks filed Subchapter S tax returns for tax year 1995, this represents a significant increase over the past three years. Many of these commercial banks are small rural banks that will pass their tax savings on to their owners and customers, increasing the competition for FCSIs that compete for some of the same loans. Figure 1 shows the distribution of Subchapter S banks by state as of March 31, 1998; most are located in the central states, with the heaviest concentrations in Minnesota (146) and Texas (144).



Figure 1 Number of Commercial Banks filing under Subchapter S as of March 31, 1998

Source: FDIC

Business Structures and Taxation

The **sole proprietorship** is the most commonly used organizational structure for American businesses. Its advantages are simplicity and single-level taxation. Its primary disadvantage is the potential legal liability to which the proprietor is exposed. Taxes are computed by totaling gross income from all sources and subtracting deductions to arrive at adjusted gross income (AGI). Taxable income is computed by subtracting itemized or standard deductions from AGI. Taxable income is then subjected marginally to income rates ranging from 15 to 39.6 percent, the latter rate being imposed for annual income in excess of \$271,000.

The **partnership** is another common organizational structure employed by U.S. businesses. Like a sole proprietorship, it is simple in form. Its income and expenditures flow through to the partners, who are taxed at the individual level. Its primary disadvantage is the potential legal liability to which the partners are exposed. The partnership files an informational return explaining the allocation of income and deductions among the partners. Income and deductions are then shown on the individual income tax return, where the actual tax due is computed.

The **limited liability company (LLC)**, although a relatively recent innovation, is now a common form of business organization. These state-chartered entities provide their owners with the limited liability of a corporation and the single tax treatment of a partnership. Pass-through tax treatment is provided for under Subchapter K of the IR Code. LLC owners are called members, as in a cooperative structure, but the LLC is a state-approved, unincorporated association.

A general business corporation, or **C corporation**, is the most easily recognized form of business structure in the world. The C corporation is an entity separate from its owners, providing a stable organizational structure that can outlive its owners as well as provide them with legal liability protection. The C corporation is subject to income taxation in its own right. Corporate income tax rates generally range from 15 to 35 percent, with the higher rates being applied to taxable income brackets of over \$100,000. Corporation profits distributed to stockholders as dividends are included in their gross income. Consequently, corporation profits are subject to taxation at the corporate level and again at the shareholder level when distributed as dividends.

Subchapter S corporations, named after the IR Code section that affords them special tax treatment, are closely held corporations with fewer than 75 shareholders. Although they are required to file tax returns like other general business corporations, if they meet certain criteria they can elect to be taxed as a partnership. Unlike C corporations, these S corporations are not taxed at the corporate level. Instead, their income and expense items are passed through to the shareholders to be reported on their individual income tax returns. By electing S status, a corporation may avoid double taxation of income distributed to its shareholders. The Subchapter S rules also dictate specific levels of cash payouts for dividends and set forth criteria for how allocated and unallocated equities must be recorded on the company's books.

The Small Business Job Protection Act of 1996 made the Subchapter S filing option available to commercial banks, offering them roughly the same advantage of single taxation of dividends that Subchapter T filing does for cooperatives.

Subchapter T corporations are cooperatives that, by meeting certain criteria, can exclude from income patronage dividends paid in money, property, or qualified written notices of allocation. The cooperative notifies the IRS of the dividend payment on Form 1099-PATR, and the patron is then taxed on that

22

amount. Distributions are based on the quantity or value of business done, rather than on stockholder equity as is the case with Subchapter S corporations.

Subchapter T applies to any corporation operating as a cooperative, and covers tax treatment of cooperatives and their patrons who receive patronage dividends. Some cooperatives, including farmers' marketing and purchasing cooperatives, are classified exempt and are not taxed. However, most cooperatives, including some FCSIs, are taxed the same as any ordinary business corporation at regular corporate rates, with the significant exception that cooperatives filing under Subchapter T may deduct qualified patronage distributions from income.

The IR Code recognizes that cooperatives provide services at cost; therefore, refunds of net margins to patrons are subjected to federal income taxation only once. Patronage must be allocated based on the quantity of business transacted with the cooperative, a preexisting obligation before the earnings begin, and the net earnings derived from business conducted with or for the cooperative's patrons. Patronage dividends allocated by the cooperative may be deducted in calculating its taxable income if the patron agrees to include the same amount in his or her income tax liability. This agreement may be established in any of three ways:

- 1. Through the cooperative's bylaws.
- 2. By written consent signed and furnished before the end of the taxable year.
- 3. By endorsing and cashing a qualified check. A qualified check bears a notice that endorsing and cashing the check constitutes consent by the patron to include the patronage dividend as part of his or her taxable income.

If all taxable earnings are distributed, the Subchapter T institution pays no taxes and the borrower/shareholder assumes the total tax liability. Alternatively, a cooperative may retain up to 80 percent of its declared patronage dividend tax-free at the corporate level. If a non-cash allocation is declared, a Subchapter T institution must distribute (allocate) a minimum of 20 percent of the earnings in cash to defray its shareholders' anticipated tax expenses. In this case the patron would pay taxes on the total patronage dividend, and the FCSI would retain the allocated portion as a capital investment.²



Figure 2



2. Under Farm Credit Administration (FCA) regulations, this capital must be retained for more than 5 years for it to be counted as core surplus. Even then, it cannot be counted as core surplus when the revolvement cycle declines to 3 years or less. FCSIs may claim a refund for taxes paid on nonqualified patronage dividends in the vear of actual distribution.

Under Subchapter T, retained earnings allocated to patrons on the books of the association becomes borrower capital. Revolving schedules may or may not be required, depending on how much borrower capital the association wants or needs to include in its permanent capital calculation. However, borrowers may expect that these allocations will ultimately be paid out in true cooperative fashion, and association management may therefore view the capital as something that will eventually need to be replaced.

There are approximately equal numbers of FCSIs that are tax-exempt, filing as C corporations, or filing as Subchapter T cooperatives. The 61 institutions filing under Subchapter T—30 percent of all FCS associations—are spread across almost every district as shown in Figure 2.

Effects of Different Tax Structures on Farm Credit System Institutions and Their Patrons

FCSIs that are subject to taxation can choose the tax filing status that best suits their longterm goals. This will have an effect not only on taxes paid, but it can also effect the capital position and the interest rates the institu-

tion charges its customers. The actual effect of an institution's converting to Subchapter T status depends on how much of its income the institution pays in dividends and on the combined tax rates of the institution and its various owners. Although it is not a tax exemption, conversion to Subchapter T status generally produces a reduction in the combined taxes paid by the institution and its owners. This article is primarily concerned with analyzing the tax consequences of using the different filing methods. It should be noted that the comparison of tax treatments demonstrated in Table 2 below makes rather simplistic assumptions regarding distribution of income in order to compare the net taxes paid by both the institution and the patron.

In Table 2, a cooperative doing \$10,000 in business on behalf of its patrons has incurred \$9,000 in expenses and has \$1,000 in income after expenses. It has met all of the requirements for Subchapter T tax filers. It may issue a qualified written notice of allocation to its members by sending them \$280 (to cover a 28% personal tax liability) in cash or qualified check and a notice of allocation for \$720. The patrons pay taxes on the allocation and may redeem their equity investment of \$720 at some time in the future. The

Table 2

corporation Structure (C	-)			
			General	Business
	Cooperative	Cooperative Structure		1 Structure
	Cooperative	Patron	Corporation	Stockholder
Gross Income	\$10,000		\$10,000	
Expenses	9,000		9,000	
Taxable income	1,000		1,000	
Corporate income tax ¹	0		350	
Qualified allocation/				
income declared		\$1,000		\$650
Cash dividend		280		650
Individual income tax ²		280		182
After-tax income		720		468
Total taxes paid		\$280		\$532
_				

Tax Treatment of Cooperative Business Structure (T) and General Business Corporation Structure (C)

1. Effective rate of 35% assumed. No allowance made for state income taxes.

2. Effective rate of 28% assumed. No allowance made for state income taxes.

Table 3 Table 3 Tax Treatment under Alternative Organizational Structures

	C Corporation	S Corporation	T Cooperative
Taxable income	\$1,000	\$1,000	\$1,000
Corporate income taxes	350		
Average dividend/			
qualified patronage paid	455	455	400
Retained earnings	195	545	600
Individual income tax due	127	280	280
After-tax cash flow to owner	328	175	120
After-tax income to owner	523	720	720
Total taxes paid	\$ 477	\$ 280	\$ 280

1. Effective rate of 35% assumed. No allowance made for state income taxes.

cooperative retains and continues to utilize the \$720, if it so desires. A C corporation, on the other hand, would pay tax on its \$1,000 income. The comparison in Table 2 shows how Subchapter T election minimizes overall taxes paid. In this example it was assumed that the corporation had no retained earnings, a reflection of investor pressure on management to maximize dividend distributions. In reality the total taxes paid will vary from case to case depending on state and Federal tax rates and earnings retention, but the relative effects will remain the same.

In this example, the tax treatment afforded the cooperative with single taxation at the individual level results in less taxes paid than by a corporation taxed at both the corporate and individual levels. Total tax for the cooperative/patron structure is \$280, and \$720 can be retained at either the cooperative or individual level, while total tax for the corporation/stockholder structure is \$532, and \$468 is retained at the individual level.

If the corporation elected to pay a smaller dividend, the effects of double taxation would have been reduced, with a corresponding increase in capital retained at the corporate level. However, even if the corporation did not pay any dividends in the example cited, the \$350 it paid in taxes is more than the \$280 paid by the cooperative and its patron combined. It is interesting to note that an FCSI that declares no dividend, but retains all its surplus and an FCSI that pays a cash dividend of 35 percent may have similar cash flows. Both have 65 percent of their surplus remaining for whatever needs may arise.

Table 3 compares the tax consequences of three organizational structures currently used by banks or FCSIs. Dividends or patronage paid is based on the amount of income historically distributed (or dividends paid) by each. By projecting the tax consequences of a commercial bank filing under Subchapter S, Table 3 highlights the competitive situation of financial services firms filing under each of these organizational structures.

In this example, a bank filing as a C corporation earns before-tax net income of \$1,000 in a given year and pays corporate income taxes of \$350. That leaves after-tax net income of \$650. The \$455 stockholder dividend used for banks under Chapter C and Subchapter S represents the average bank stockholder dividend paid in 1997, according to the FDIC³. The Subchapter T corporation represents an FCSI that declares a \$1,000 patronage dividend but retains \$600 for growth and expansion. Underlying assumptions are generally consistent with the previous example except that dividends distributed are consistent with current practices.

25

We also assume that taxable income is the same as net income before taxes and that all net income is allocated.

Given the broad assumptions made, it appears that Subchapter S can produce significant tax savings for commercial banks and the tax savings will be essentially the same as those that FCSIs achieve using Subchapter T.

Organizational Options for Farm Credit System Institutions

FCSIs have a variety of options when it comes to choosing a tax strategy. In addition to maximizing their tax advantages, other factors influence this choice, including management philosophy, capital position, market share, and competition issues. The three scenarios in Table 4 illustrate how using different tax structures can minimize the combined taxes paid by the FCSI and the shareholder. We assume that all income is paid to the shareholders in order to maximize the net tax savings to the ultimate beneficiary, the farmer/borrower. In reality, how an institution chooses to manage its earnings will in part depend on the taxes it expects to pay. FCSIs filing as C corporations may not choose to distribute all their earnings to shareholders, but rather may choose to retain more capital or return the savings to their customers in the form of lower pricing strategies. These types of decisions typically involve more than the simple tax analysis discussed here. However, this example is narrowly constructed in order to analyze the tax consequences of the different filing options for FCSIs and to compare with the Subchapter S case for commercial banks.

In order to analyze the tax consequences of possible organizational structures available to FCSIs, we look at three types of institutions that have both long and short-term assets. The first scenario illustrates an FCSI with both long and short-term assets (such as an ACA) filing as a C corporation. The second shows a jointly managed institution (such as a PCA/FLCA) where the short-term assets are taxed as a C corporation and the institution does not pay taxes on its long-term assets. The third shows an FCSI with both long and short-term assets (such as an ACA) filing as a Subchapter T cooperative.

Consistent with our earlier examples, we assume a corporate tax rate of 35 percent and a personal tax rate of 28 percent. For the PCA/FLCA scenario, we assume the real estate portion of the portfolio is 56 percent, and income is allocated proportionately at 56 percent for the FLCA assets and 44 percent for the PCA assets⁴. We assume that all after tax earnings are paid out as dividends to shareholders.

As shown in Table 4, total taxes paid by both the FCSI and its owners are minimized in the Subchapter T example (28 percent) compared to the PCA/FLCA example (39.4 percent) or the C corporation example (53.2 percent).

Alternatively, when an FCSI wants to retain more capital to facilitate growth and implement long-term strategies, it can declare a qualified patronage dividend, paying out a cash dividend of at least 20 percent and a written notice of allocation for the balance. This would be the same as the example above, with the exception that the FCSI would retain the \$720. The patron would get the \$720 in cash in a future year when the qualified notice of allocation is redeemed.

Another option is for the FCSI to declare a nonqualified patronage dividend. In this scenario, the FCSI, not the patron, pays the tax on the retained surplus. However, in subsequent years, when the institution pays out the money represented by the nonqualified notice to the patron, the institution files for a refund of taxes previously paid on the surplus, and the patron pays taxes on the dividend received. Again, this is similar to the example above, except that the income and

. Based on actual System performance in jointly managed associations.

Table 4Tax Treatment of Alternative Organizational Structures Available to FarmCredit System Institutions

C	Cor	poration	PCA/ (C Corp	Managed /FLCA poration/ axable)		chapter T operative
Income before taxes	\$ 1	1,000	\$1	,000	\$ 1	1,000
Pro-rata share of						
income to PCA/FLCA			440	/560		
Corporate income taxes (35%)		350		154		
Taxable net income to owners		650		286]	1,000
Average dividend/						
qualified patronage paid		650		856	1	1,000
Personal taxes on dividends (28%)		182		240		280
After-tax cash flow to owner						
(dividends - personal taxes)		468		616		720
Total taxes paid	\$	532	\$	394	\$	280

tax effect on the individual patron is delayed for a period of years, until the nonqualified notice is redeemed. In this latter strategy, the undistributed retained earnings can be counted as core capital under FCA regulations until the earnings are allocated and distributed.

Effects of Filing Status on Financial Condition

The choice of corporate form will normally effect an institution's behavior. For owners of C corporations, there is an incentive to keep patronage refunds low and either retain after tax earnings to build capital, or to lower interest rates charged borrowers, thereby lowering taxable income. In contrast, highpatronage dividend payouts are relatively more advantageous in the management of T associations' earnings. Thus, one might expect Subchapter T associations to have lower levels of capital on average. However, no significant differences were found in the financial ratios for FCSIs when compared based on their tax filing status as of March 31, 1998. On average, FCSIs had similar core surplus, permanent capital, and total surplus ratios, regardless of tax filing status, as shown in Table 5. This may be due in large part to regulatory capital requirements.

The tax benefits of filing under Subchapter T seem considerable for those institutions with both long- and short-term lending portfolios that want to minimize their taxes. Institutions converting to Subchapter T status can (and apparently do) retain some of the tax savings as higher capital levels. The institution owners reap some of the tax savings directly through patronage taxed at only one level. FCSI owner-borrowers realize lower effective loan rates as equity investments are revolved out to patrons.

Table 5Selected Financial Ratios by Tax Filing Status for Farm Credit SystemInstitutions

	C Corporation	Subchapter T	Tax-Exempt
Core surplus	10.5%	11.5%	12.8%
Permanent capital	18.5%	18.5%	16.6%
Total surplus	14.5%	15.1%	14.2%
Allowance to loans	2.8%	2.8%	1.8%

Other Pros and Cons

Many FCSIs believe Subchapter T filing provides them with a valuable tax management tool, and they enjoy the obvious benefits of single taxation. Because benefits are passed on to patrons through patronage, this means lower effective loan rates for borrowers. Some FCSIs have been able to rebate almost two-thirds of the annual interest due. As a result, these FCSIs have been able to price their loan rates at market rates and cite fewer pricing complaints from competitors. By setting their revolving surplus cycle at greater than 5 years they are able to claim a portion of the surplus as core capital. They also believe that the cooperative structure and related patronage help build owner interest and customer loyalty.

Many FCSIs file as C corporations and are taxed at regular corporate income tax rates. Dividends, if paid, are taxed again at the regular individual income tax rates. However, many FCSIs filing as C corporations do not pay patronage dividends. Because the maximum tax rates for corporate taxpayers and individual taxpayers are similar, they see no relative advantage to shifting the tax burden from the FCSI to the patron. In fact, they see a distinct disadvantage to paying patronage dividends. In their view, it creates the expectation among patrons that allocated equities will always be revolved out, regardless of the need at the cooperative level. Hence, payouts detract from the value of the surplus and an FCSI's ability to expand and grow. They believe that patronage dividends should be paid only if capital is adequate and can be sustained over time or can be viewed as a rebate on interest payments by the borrower.

Implications of Tax Law Changes

Small, investor-owned banks with fewer than 75 shareholders have only recently been given authority to reorganize as Subchapter S corporations. Commercial banks that elect to convert will pass through all of the income and expenses associated with their operations to their stockholders, achieving one-level taxation and a higher level of capital available to retain or reinvest.

The implications for FCSIs are significant. A tax advantage available to all FCSIs but claimed by only half will now be available to many competing rural and community banks. They may choose to pass on all, some, or none of these tax benefits to their customers. If any of these benefits are passed

on to customers, it will result in stiffer competition for agricultural loans for FCSIs, especially if they are unable to take advantage of the Subchapter T benefits currently available to them.

Also on the horizon is legislation proposed in July 1998 that would let a company qualify for S corporation status if it has no more than 150 shareholders. If enacted, this legislation would expand eligibility and, with other proposed changes, make it easier for small banks to convert to S corporations. This added tax relief will make them more competitive with FCSIs. Currently 1,009, approximately 25 percent, of small commercial banks (those with assets less than \$150 million) have converted to S corporations. That leaves another 3,000 potential candidates for conversion.⁵

In Summary

This article demonstrates that

- The Subchapter T can minimize taxes and is used by half of the taxable FCSIs.
- Commercial banks have begun to convert to Subchapter S Corporations allowing those institutions to enjoy tax benefits similar to Subchapter T.
- Other factors such as capital position, dividend distribution, and management philosophy will need to be considered in selecting the most advantageous organizational structure.

 Conversion is gaining in popularity, as is evidenced by inclusion of this topic in the American Bankers Association's fall 1998 annual meeting agenda.

Risks Associated with the Millennial Date Change

Thomas Glenn and Robert Andros

Introduction

The year 2000 problem, or the ability of some automated systems to comprehend dates beyond 1999, poses a serious challenge for the financial services sector, including Farm Credit System institutions. Overall, the Federal Reserve has warned that the Y2K problem may bring about an economic slowdown (or worse, according to some analysts) as firms are required to divert resources to "nonproductive endeavors." On an operational level, each FCSI faces a series of risks associated with the millennial date change: in its computer systems; embedded systems; supplier, client, and servicer interfaces; customer risks and related ripple effects; infrastructure, and government services.

The Farm Credit Administration has provided timely and comprehensive guidance to FCSIs at both the general and individual institution levels. All FCSIs had made progress toward Y2K remediation during the second quarter of 1998. Nevertheless, failure to adequately address each area of risk successfully can increase the potential for legal liability. If Congress does address the issue of a Y2K liability cap for businesses, it will also need to establish what criteria need to be met to qualify for the limitation. These criteria may include that firms demonstrate they employed "best management practices" or that they provide independent certification that all systems were fixed using a wellreasoned and comprehensive methodology.

Operational Risks

The principal areas of operational risk that each institution or organization faces are:

• Computer systems. Almost all databases within financial institutions are computerized. Computer hardware, firmware, and software (application programs) all have the potential to malfunction or refuse to function altogether on January 1, 2000. Moreover, different computer systems, some of which may use different programming languages, often coexist within the same institution, and these systems' interfaces may require compatible, if not consistent remediation methods. Functions served by these computer systems include calculating interest, dividends, maturities, and amortization schedules, electronic data interchange, and automated clearinghouse activities.

- · Embedded systems. These are individual or small assemblies of microprocessors used to control, monitor, or assist the operation of equipment or machinery. They do not necessarily involve a computer and are therefore not obvious to the user. Embedded systems are generally capable of performing only a predetermined single function or set of functions. Some have a timing function while others do not. Frequently, the only way to determine these systems' Y2K compliance is by studying their documentation or contacting the vendor. Common examples of equipment with date-sensitive embedded systems include telephone systems, fax machines, vaults, security and alarm systems, microwave ovens, videocassette recorders, and automatic teller machines (ATMs). While most companies have recognized the problem and begun assessing the Y2K compliance of their computer systems, experts have expressed concern that embedded systems have not been given the same level of scrutiny as computer systems.
- Interfaces. Like other financial institutions, many FCSIs are dependent on third-party servicers for some or all of their computer processing needs. Most financial services institutions are dependent on suppliers, customers, and vendors for data input and processing of their own data. Examples include a customer who banks by computer, a correspondent bank that bills directly through a client bank's computer

E ach Farm Credit System institution faces certain risks associated with the millennial date change. Because of their pervasive nature, these risks may not be self-evident. This article describes these vulnerabilities, explains how they may affect an FCSI, and summarizes FCA guidance issued on the subject. It also describes what actions an FCSI can take to mitigate against these risks, especially that of legal liability, and their possible consequences on an institution.

30

system, and the Federal Reserve's Fedwire system, which handles payment, clearing, and settlement functions for member banks via computer. Many firms have already experienced Y2K problems in their financial services. For example, Produce Palace, a gourmet food outlet in Michigan, found that credit cards listing 2000 as their expiration date caused the store's computer system, installed only two years ago, to crash more than a hundred times, often for several hours at a time. This cost the store lost revenues as it attempted to process its transactions manually. In the end, Produce Palace sued its credit card scanner supplier for damages. Several commercial banks have experienced similar problems with their ATMs. Even though all of a bank's computer systems may be fixed to accept the millennial date change, their interfaces pose a separate risk and require separate testing.

Customers. A financial institution is especially dependent on the success of its borrowers and the composition of its balance between assets on hand and customer needs. Financial regulators are becoming increasingly concerned over the Y2K compliance of bank customers, especially small businesses, and the possible effects of their Y2K noncompliance. Many large businesses are also openly concerned about the Y2K compliance of their suppliers, particularly since "just-in-time" inventory scheduling is a common business practice today. Although this practice reduces costs, it makes no allowance for business outages, the results of which can prove catastrophic. Even the potential ripple effect on a financial institution of a large customer failing to obtain timely supplies from a small business that is not Y2K compliant is significant. A business risk faced by a bank's business customers, as well as the bank itself, is a possible loss of consumer confidence and the resultant loss of customers that can mean failure for a firm.

In addition, foreign countries are reportedly way behind in their Y2K remedial efforts. Because agricultural producers are largely dependent on foreign export markets, this may be another potential ripple that requires monitoring. Finally, a number of FCSIs that needed to improve their Y2K efforts have not adequately assessed the risk of the millennial date change on their customers' operations. Some financial institutions are therefore concerned about a possible liquidity imbalance on January 1, 2000, leading to a potential liquidity crunch.

- Infrastructure. Financial institutions have an internal and an external infrastructure. Internal infrastructure components include elevator, heating, air conditioning, telephone, and security systems. External infrastructure components include transportation networks, telecommunication systems, and local utilities such as electric power, gas, water, and sewer facilities. Each of these components will face its own specific set of Y2K compliance risks when the millennial date changes. Many of these components rely heavily on embedded systems.
- Government services. All financial institutions rely on government services. These range from regulatory approvals and check clearing and settlement systems to agencies that employ electronic fund transfers. Any Y2K noncompliance by these government agencies (whether at the Federal, state, or local level) in their critical systems could adversely affect a financial institution's performance.

Surveys show that most financial institutions have found it necessary to hire outside technical support to assist in their Y2K remediation efforts. These outside resources are limited, however, and some prominent computer consulting firms have announced that they will not take on additional Y2K cli-

31

ents because of the potential legal liability to which their firms might be exposed. To date, Coopers and Lybrand has been the only Big Six accounting firm engaged in Y2K remediation work, and it is reportedly reviewing its position on this issue subsequent to its merger with Price Waterhouse. Hence, reliable resources will be a scarce and costly commodity for firms that needlessly delay launching their remediation activities.

A significant decision facing all financial regulators is if and when to require a merger or takeover of financial institutions that are not Y2K compliant. Unfortunately, authorities and approaches for dealing with troubled institutions vary from one regulator to another. On the international front, the Bank of England has announced it would close down banks found to be Y2K noncompliant. U.S. regulators, on the other hand, have been uncomfortable with setting arbitrary "drop dead" dates, preferring instead to deal with problem institutions on a case-by-case basis. On the other side of the fence, the problem facing the absorbing institution is whether it has enough time to assimilate a noncompliant bank's customers into its own system to avoid potential legal liability for itself. Hence, regulators have to consider these needs when deciding what constitutes timely supervisory action. The bottom line for each regulated financial services institution is that remediation efforts cannot be delayed. Both Congressional staff and GAO are encouraging regulators to take a proactive approach by anticipating any need for mergers prior to January 1, 2000, rather than waiting for financial institutions to fail their customers before taking action.

Liability Risks

Perhaps the thorniest Y2K issue has yet to be addressed, much less resolved. Both witnesses in congressional hearings and Lloyd's of London have estimated that Y2K litigation costs and damages will exceed \$1 trillion in the United States alone. What's more, firms may be vulnerable to court suits and related damages not just for their own actions but for those of their business partners as well. Potential liability for FCSIs may come from a number of different sources, including investors, customers, business partners, and other third parties. These parties rely on the integrity of FCSI data, the stability of System operations, software vendors, and maintenance providers, flawless FCSI merger and acquisition activities, and more. Liability troubles that may surface include:

- · Director and Officer Liability. Bank officers are subject to the stringent criteria of ethics and fiduciary duty. Bank executives and directors may find themselves facing severe personal liabilities unless their Y2K problems are safely contained within their institutions' operations. To avoid personal liability, directors and officers are required to meet applicable legal standards of care in taking action to solve Y2K problems in their institutions. While FCSIs may have director and officer liability insurance, some insurance companies have openly questioned whether their policies will cover known management problems such as Y2K noncompliance.
- Disclosure Issues. The Securities and Exchange Commission (SEC) Staff Legal Bulletin Number 5 requires certain Y2K disclosures by publicly traded firms. To date, the legal bulletin has not induced the types of disclosure the SEC and Congress had anticipated. As of June 30, 1998, only 85 of the 500 largest publicly traded U.S. companies had disclosed their estimated Y2K costs. Legislation (S.1518, the Computer Remediation and Shareholder Protection Act, or CRASH) has been introduced that would mandate full Y2K disclosure by publicly traded firms. While this does not affect Farm Credit System

32

institutions, it will set a standard of performance against which they may be judged. FCSIs have also received guidance on disclosure of Y2K costs from FCA's Chief Examiner. The Federal Financial Institutions Examination Council (FFIEC) has recently cautioned that"A financial institution may reduce its risks of litigation if it discloses to beneficiaries information addressing the Year 2000 date change." Omissions, inaccuracies, or misleading statements regarding an institution's Y2K deficiencies may be cause for legal action by investors or stockholders under Federal and state securities laws. Public auditors are concerned that if they fail to raise the issue they may make themselves legally culpable. Due diligence investigations are generally required before an investment is made. Investors are now being made aware of their fiduciary responsibility to check on the Y2K compliance of firms soliciting funding. These representations, or lack thereof, could increase the cost of funds or expose institutions making them to potential liability.

Client Risk. The financial performance of FCSI clients may expose System institutions to some liability. Many of the System's clients are not subject to the SEC disclosure rules, so the SEC is not a source of reliable information regarding clients. CRASH legislation is not likely to pass soon enough to provide FCSIs reliable and timely information on key suppliers and business partners. A number of firms have resorted to sending letters requesting suppliers' and vendors' assurances that they are capable of meeting supply schedules and are Y2K compliant. Responses to these inquiries have been intermittent. Still other firms, such as General Motors and Texaco, have announced their intentions to make on-site visits to key suppliers. Bankruptcies are a potential threat and among the most troubling problems presented by the

millennial date change. Bankruptcies may easily occur among small, medium, or marginally financed companies if the Y2K problem disrupts power, shipping, financial services, export markets, or telecommunications long enough to harm cash flow. Bankruptcies can also threaten the safety and soundness of financial institutions, which will need to determine how long they can support customers' cash flow problems before requiring settlement and risking customer goodwill. Some financial institutions, including FCSIs, are already reviewing the Y2K compliance programs and contingency plans of their significant customers.

· Contracts, Advertising, and Customer Agreements. Financial institutions' accurate and continuous operations are expected by customers and business partners alike. Some may even seek written confirmation and verification of timely delivery of various goods and services in anticipation of Y2K problems and to protect their own business positions. Advertisements, contracts, and written agreements as well as consumer protection laws may expose FCSIs to liability. Moreover, false claims by vendors of Y2K remediation services may expose a financial or other institution to additional risk. Because the software industry is not regulated, skilled resources are in scarce supply, and "proof of claims" is a rarity among software tool and service vendors, false claims may introduce another potential liability to unsuspecting firms. The GAO has already noted a number of false claims of Y2K compliance among Government vendors, and the General Services Administration (GSA) has been unable to attest to the Y2K compliance of goods and services available through the GSA supply schedule.

33

- Documentation. Even if all necessary plans and steps are undertaken to remediate or otherwise remove Y2K deficiencies, a firm and its officers and directors may ultimately need to prove their actions in court. Failure to develop and maintain documentation of an FCSI's efforts could expose it to needless liability, as such documentation may be necessary for legal defense, insurance claims, and indemnification. Every System institution should review all of its insurance policies, contracts, and product documentation, including warranties, to see who bears the costs of fixing Y2K problems and under what conditions. In licenses and agreements, Y2K compliance should be expressly and explicitly addressed. An inventory and review of licenses and agreements may identify vendors and software manufacturers that have a legal responsibility to help solve the problem or contribute to the cost of correcting it. A review of company insurance policies may determine whether the institution is covered for remediation costs, liability protection for directors and officers, casualty and business loss, fiduciary activity, and accounts receivable or other valuable record loss. Even the ability to expense or capitalize remediation costs for tax purposes may hinge on accurate and adequate documentation.
- Third Party Risks. Aggrieved customers and business partners may sue not only Y2K deficient firms but their key business partners (including auditors and creditors) as well. This could expose FCSIs and other financial services firms to liability beyond their immediate control or sphere of influence. In addition, FCSIs offering automated farm management services that rely on software vendors and maintenance providers may be exposed to legal liability if the computer products they use are not Y2K compliant, interfaces with customers do not function as expected, or

remediation efforts do not prove adequate or compatible with those of suppliers, vendors, customers, and others.

· Other Risks. These include a range of concerns, such as Merger and Acquisition (M&A) and copyright issues associated with Y2K remediation. If a company is engaged in planning an M&A transaction, due diligence requires expert assistance to determine the nature, extent, and potential costs of Y2K problems the company may inherit. Like other regulators, FCA reviews corporate applications to ensure that all conditions concerning the safety and soundness of the FCSI, including Y2K compliance, are met. This is not only a concern for FCSI mergers but for the institution's customers as well. Another area of concern for firms, as mentioned above, is whether they have the legal right to change copyrighted code to make it Y2K compliant without the software manufacturer's consent. In some cases the manufacturer may have gone out of business, merged, or no longer produces the software in question. In other instances, it may not want to grant a copyright exemption to users.

While Congress and the White House have discussed limiting the liability exposure of firms that fall victim to various Y2K deficiencies, they have also expressed reluctance to legislate a safe harbor, thereby creating a moral hazard. On July 14, 1998, President Clinton announced his intention to propose "Good Samaritan" legislation that would immunize businesses from lawsuits if they share information about their common Y2K problems. However, the Chairman of the President's Y2K Conversion Council, has described this legislation as "a narrow, carefully defined bill." To date two narrowlydefined liability limitation bills have been introduced. The Administration's "Good Samaritan Bill" and a bill introduced in the House limiting punitive damages for com-
> puter and software companies. To date no comprehensive Y2K legal liability legislation has been introduced. Congressional leaders have indicated that any liability limitation legislation will need to incorporate some performance criteria, such as certification that a firm used best management practices, in order for that firm to qualify for a liability cap.

FCA Guidance and System Performance

The Farm Credit Administration has adopted the FFIEC's Y2K rating system for System institutions. It also has provided FFIEC guidance to FCSIs in a timely manner and augmented that guidance where appropriate. The FFIEC, following the GAO and Office of Management and Budget (OMB) guidelines for Federal agencies, has outlined five management phases (with target completion dates) necessary for an organization to complete a successful Y2K system conversion program. They are:

- Awareness to be completed by December 1996.
- Assessment to be completed by June 1997. Renovation – to be completed by December 1998.
- Validation to be completed by January 1999.
- Implementation to be completed by November 1999.

The FCA Chairman's May 14, 1998 testimony before the Senate Agriculture Committee highlighted both the FCA's and the System's progress in achieving Y2K compliance. Guidance issued by the FCA's Office of Examination (see list at right) as well as the June 30 survey results indicate that both the FCA and the System are well under way in pursuing a timely resolution of the problems posed by the Y2K technology problem.

Year 2000 Guidance Issued to FCSIs

Year 2000 Awareness. This informational memorandum provides guidance on the critical issues FCSIs need to address to resolve Y2K problems and avoid major service disruptions. It highlights the five phases of remediation and establishes milestone dates for their completion. Issued June 6, 1997.

Disclosure of Year 2000 Costs. This informational memorandum provides guidance on the disclosure of costs associated with Y2K remediation efforts. Issued November 14, 1997.

Year 2000 Business Risk. This informational memorandum outlines director and senior management responsibilities for addressing business risks. It outlines and describes the types of Y2K-related business risks to which FCSIs may be exposed. Issued January 8, 1998.

Expectations for Testing of Mission-Critical Systems. This informational memorandum provides additional guidance and details on relevant milestone dates for testing missioncritical systems. Issued March 17, 1998.

Service Provider and Software Vendor Year 2000 Readiness. This informational memorandum provides guidance on and establishes responsibility for overseeing the Y2K compliance of service providers and software vendors with regard to mission-critical systems. Issued April 13, 1998.

Year 2000 Impact on Customers of Farm Credit System Institutions. This informational memorandum addresses the risks posed by customer vulnerabilities to Y2K problems. It provides guidance for identifying and documenting risks posed by material FCSI customers. Issued April 23, 1998.

35

Testing For Year 2000 Readiness. This informational memorandum provides guidance on the types and nature of tests required to ensure that Y2K remediation efforts are successful. Issued May 20, 1998.

Contingency Planning for Business Continuity. This informational memorandum describes the types of contingencies, both internal and external to the institution, that plans must address to ensure business continuity through the millennial date change. It also establishes relevant milestone dates. Issued June 30, 1998.

As of June 30, 1998, each FCA field office/ division had completed an updated Y2K assessment of each FCSI regarding the five management phases. Using the survey results, each FCSI was assigned a rating of "Satisfactory," "Needs Improvement," or "Unsatisfactory." Because each of the management phases has a time frame within which specific work is to be accomplished, a satisfactory rating for one quarter does not imply a satisfactory rating in subsequent quarters; it simply means that the FCSI is currently on track to complete its remediation work by the deadline. This dilemma was highlighted in February of this year when OMB took the U.S. Department of Labor off the list of Federal agencies making adequate progress and added it to the list of agencies making insufficient progress. Therefore, although the Farm Credit System is making progress, it must continue on a fast track to ensure timely and successful Y2K remediation.

Overall, the survey results from the second quarter of 1998 show marked improvement by FCSIs since the previous quarter. More importantly, each FCSI showed improvement during the most recent quarter. FCSIs rated "Unsatisfactory" declined from 74 in the first quarter to only 2 in the second quarter, or less than 1 percent. Institutions rated "Satisfactory" increased from 71 in the first quarter to 133 in the second quarter. Among the 81 FCSIs that were rated "Needs Improvement," a common weakness was the lack of adequate effort to identify borrowers whose operations may be adversely impacted by the millennial date change. This issue was highlighted and specific guidance provided in an April 29, 1998 letter from the Chief Examiner to each FCSI. Those rated "Needs Improvement" also demonstrated lingering project management weaknesses, the absence of an effective Y2K audit program, or a late start that means they are still "playing catch up" on the project. Each of these institutions received specialized and specific guidance from FCA examiners on how to improve their Y2K compliance.

Because the Farm Credit System is classified as a single Government-sponsored enterprise with jointly managed funding, there is interdependence within the System. FCA therefore undertook to determine which FCSIs were "high-profile" institutions that required special monitoring. High-profile institutions are the primary data centers for the Farm Credit System, and they develop, maintain, and control most of the Systems' missioncritical systems. Low-profile institutions generally contracted with a high-profile counterpart to maintain their mission-critical systems. None of the 20 high-profile institutions is rated "Unsatisfactory," and 80 percent are rated "Satisfactory." This information is important for System investors. Recently, legislation was introduced that emphasizes investors' fiduciary duties and underscores their responsibility to evaluate the Y2K risks of institutions in which they invest.

Owing to the nature of the risks described above, FCA's most recent focus has been on contingency planning. Under guidance issued by the Chief Examiner on June 30, 1998, each FCSI is expected to have a business contingency plan in place by the end of this year. These plans need to address both the possibility of internal system failure and the possibility of external system failure from service providers, software vendors, other institutions, customers, business partners, utilities, etc. These Y2K plans are to be designed to ensure that mission-critical systems can continue to function despite potential Y2K system failures.

Conclusion

It is impossible for any financial services firm to insulate itself entirely from the repercussions of the millennial date change. At a minimum, adverse economic effects are likely to be felt within the Farm Credit System and among its customers. There will be a transfer of business between Y2K compliant and noncompliant firms. The financial services sector will be exposed to the business risks of its customers, some of whom may either fail to perform successfully after the millennial date change or simply lose the confidence of their consumers who seek other business partners and vendors.

The financial services sector is highly dependent on date-dependent automated services. While FCSIs seldom face the complex problems associated with embedded systems, they are highly dependent on interfaces with suppliers, vendors, servicers, and others. For most firms, testing these interfaces is not likely to be possible until the fourth quarter of 1999, leaving little time for last-minute corrections. Contingency planning for FCSIs will become increasingly important.

As an arm's-length regulator, FCA is in a unique position to provide both value-added and important support and assistance to FCSIs in their quest for Y2K compliance. Diligent adherence to the Agency's guidance and direction will assist FCSIs seeking to minimize or otherwise limit their legal liability. Many challenges and obstacles lie ahead for financial service institutions and their respective regulators. The January 1, 2000 deadline is an unyielding time constraint. For institutions unable to meet this deadline and even for some that do there lies the prospect of court suits and other legal liability posed by various Y2K deficiencies.

While there has been discussion concerning legislating a liability caps for firms that follow best management practices to remediate their Y2K problems, there is also opposition to legislating a liability cap. If no legislation is passed, it will fall to each FCSI to develop sufficient documentation of its remediation efforts to defend itself against potential lawsuits. Whether in response to legislative criteria for liability limitations or in response to a court suit, FCSIs may benefit from independent certification that their remediation plans were consistent with regulatory guidance, comprehensive and thorough, and carried out in their entirety. System institutions may mitigate their liability exposure if they follow FCA's Y2K guidance and document that they did so.

Effects of a Prolonged Economic Depression in Southeast Asia on the U.S. Farm Economy

Dr. Paul T. Prentice¹ Farm Sector Economics, Inc.

Introduction

Recent prosperity in the U.S. farm sector has been driven primarily by booming exports to Asian markets, particularly to those emerging in Southeast Asia. In 1997, Farm Sector Economics was forecasting continued prosperity for U.S. agriculture, and presented that optimistic forecast in a series of regional briefings for the Farm Credit System. The scenario was based on the assumption of continued strong economic growth in the Asian markets.

Now that those markets have collapsed, the forecast has changed from optimistic to pessimistic. Farm commodity prices continue to fall. In mid-August, the USDA was predicting that farm income would decline by \$7.4 billion in 1998 from the 1997 figure of \$49.9 billion. From the 1996 level net farm income is forecast to decline by \$11 billion, representing a two-year income loss of 20 percent. Unless new or revived export markets can be found, farm income now looks to remain weak for at least two to three more years.

As a result of this expected weakness, the Farm Credit Administration requested Farm Sector Economics, Inc. to provide the Agency with an assessment of the degree of risk associated with the Asian events and to provide a model to show the effects of these risks under different key economic variables in individual Farm Credit Districts. FCA was provided with two updated forecasts: the 1998 Baseline Scenario and a Continued Asian Depression Scenario.²

The 1998 Baseline Scenario forecast assumes that the Asian economic problems, bad as they are, will be resolved in 1999. We assume the region will resume positive economic growth, although at a rate only about half as fast as before. However, the Asian economic depression could be deeper, more widespread, and longer than assumed in the Baseline. To better understand this risk, the Continued Asian Depression scenario was developed.

Overview of Results

The model's 1998 Baseline Scenario is now forecasting the first decline in U.S. farm real estate values sector-wide and in farm sector equity since recovery began from the depressed 1980s. The latest forecast (as of August 1998) shows extremely weak real estate markets through the year 2002. As a result, the farm debt market is also forecast to be weak, with increasing financial stress occurring in the form of increased bankruptcies, deteriorating balance sheets, and, for lenders, more problem loans and loan losses. Although not predicted to be remotely as severe as the stress of the 1980s, the decline marks the first serious long-run challenge to farm financial performance since that time.

A prolonged depression in the economies of Southeast Asia would have a profoundly negative impact on the U.S. farm sector and on agriculture in each of the seven Farm Credit Districts. Using the model under the Continued Asian Depression scenario, U.S. net farm income would be reduced by an average of \$2 billion per year, or 5 percent below the already-reduced Baseline forecast.

The model also shows the effects of each scenario on farm income, farm real estate values, and farm debt for the states in each of the Farm Credit System's seven districts. As an example, the model shows that the consequences of the Continued Asian Depression scenario would be more severe in the AgriBank Farm Credit District, where farmers would receive an annual average of \$529 million less (4.1 percent) in annual net farm income over the next five years. Most hard-hit on a percentage basis would be the

This article shows how recent events in Asia have significantly altered the forecast for farm income and farm real estate values over the next five years. Forecasted results are provided on a regional basis so that the effects on each Farm Credit district can be revealed. In addition, the article reviews price forecasts for each major farm commodity and shows how these commodity prices might be further reduced if

conditions in Asia continue to be depressed.

 The FCA has commissioned Dr. Prentice's firm, Farm Sector Economics, Inc., to provide an outlook for the U.S. agricultural economy and for the districts of the FCS. While the Agency does not necessarily endorse this specific outlook, we believe the information presented will be useful in helping System institutions and other readers understand the effects of the recent events in Asia and make plans for their portfolios.

2. Farm Sector Economics, Inc., calls the model it uses for these forecasts the AGSEC Model Wichita District, where net farm income would be reduced an average of \$173 million, or 6.1 percent, annually. The effect would be least severe in the northeastern states served by CoBank, with an annual income loss of \$10 million or 0.7 percent.

The model does not account for the effect on fruits, vegetables, and specialty crops, thereby understating the loss in certain regions. In reality, the effect on these districts would be much more severe, as Asia is a major export market for these commodities. In addition, the model does not account for the decline in foreign exchange rates versus the dollar, which could also make conditions worse than forecast.

Fortunately, today's external inflation and interest rate environment is much more favorable than in the mid-1980s when the farm financial collapse occurred. What's more, farmers and their lenders are for the most part better positioned, both in their financial strength and in their more conservative lending practices, to weather the storm. Unless the Continued Asian Depression Scenario gets worse, any extreme stress will be localized and short-lived compared with that of the 1980s.

The Importance of the Asian

Market for Agricultural Exports

The Asian markets averaged 48 percent of the value of all U.S. farm exports over the 1995 to 1997. (See Figures 1 and 2.) Emerging countries in the region had been averaging 6 to 8 percent real economic growth during the 1990s. (See Figure 3.) This astounding economic growth led to a rapid upgrading of diets that, when combined with a large and growing population base, created a boom in demand for U.S. farm exports. This phenomenon, in turn, created new prosperity for U.S. farmers and their lenders.

Beginning in the summer of 1997 and continuing today, several Asian countries have experienced a collapse in their currencies that has resulted in economic depression. The situation is worst in Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam, but is also severe in Hong Kong, South Korea, and Taiwan. (For convenience, we define this entire set of countries as "Southeast Asia.") Even more disturbing, the effect has spread to the most developed economic powerhouse in the region—Japan which has fallen into recession in 1998 with weak prospects for recovery. The Interna-



Figure 1 Major Commodities: Percent of U.S. Production Exported Average of 1995-1997

Source: USDA data.

Figure 2 U.S. Agricultural Production: Percent Exported by World Region Average of 1995-1997



tional Monetary Fund (IMF) bailouts for the emerging economies may be too little, too late. Moreover, the regional problems in Southeast Asia could spread to the remaining bright spot for long-term farm export expansion — China. Hong Kong is already officially in recession. The collapse of the Russian currency and stock markets in late August will only make matters worse. We expect that the Asian recovery will be slow and varied, unlike the relatively rapid Mexican recovery in 1995.

Baseline Scenario Assumptions

The Baseline Scenario used in this study made the following assumptions:

The most important change in the Farm Sector Economics macroeconomic forecast since the 1997 update is the collapse of the Southeast Asian economies last fall. This will lead to a slowing of U.S. economic growth and rising unemployment, which will take pressure off what would otherwise be rising inflation and interest rates.

The 1998 Baseline forecast assumes that the Asian economic problems, bad as they are, will be resolved in 1999. We assume the region will resume positive economic growth after 1999, although at a rate only about half as fast as before (see Figure 3). Currency values will gradually strengthen back to pre-collapse levels over the five-year forecast horizon—1998 to 2002.

 The slow and uncertain Asian recovery will be unlike the relatively rapid one in Mexico. Japan, the most powerful economy in Asia, has already slipped from sluggish growth in 1997 to outright recession in 1998, and prospects for recovery are weak at best. Hong Kong has also officially slipped into recession.

 The weakening of the U.S. and world economies will drive down domestic demand for food and fiber. Low inflation will prevent general cost-push inflation pressure on the U.S. farm sector, and stable-to-declining interest rates will also prevent a sharp rise in the debtservice burden.

 U.S. and global supplies of major farm commodities will grow consistent with historical trends.

China remains a wild card in the outlook for farm exports. With a population base of 1.2 billion (growing at 1.2 percent annually) and with sustained real per capita economic growth of 6 to 8 percent, the potential for increased food demand is indeed huge — in the range of 4 to 5 percent annual real growth. We expect China's domestic food production to lag behind growth in demand and cause China to keep importing vast amounts from the world market.

Should the Asian economic flu spread to China, however, the nation would be forced into a round of competitive currency devaluations. China's economic growth would slow dramatically and the U.S. would lose another strong growth market for farm exports. This is an important downside risk to the forecast.

With high crop production expected again in 1998, stocks will continue the rebuilding begun in 1997, which combined with weak global demand will put more downward pressure on prices. Due to the high percentage exported, wheat is the commodity most at risk of facing chronic surpluses and low prices. A glut of hogs has prevented cattle prices from gaining as much as expected during this rebuilding phase of the cattle cycle.

Continued Asia Depression Scenario Assumptions

There is a downside risk that the Asian economic depression will be deeper, more widespread, and longer than assumed in the Baseline Scenario. In the Continued Asian Depression Scenario, independent variables except for lower economic growth in Southeast Asia were held at the levels of the Baseline Scenario. The result is a forecast with "all other things being equal." We make the following assumptions about economic conditions in Asia:

The Continued Asian Depression Scenario would reduce annual Gross Domestic Product (GDP) growth in that region by 5 full percentage points below the 1998 Baseline Scenario (which itself was already well below the assumptions in the 1997 Baseline). The hardest-hit economies of Southeast Asia will remain at depressed levels of economic activity, experiencing –10 percent growth in real GDP in 1998, –5 percent in 1999, and an average of -2 percent from 2000 to 2002.

• Japan enters recession in 1998, then resumes a sluggish growth path in 1999, averaging only 2 percent annual growth in real GDP.

- Economic growth in China slows to 6 percent in 1998 and averages only 3 percent from 1999 to 2002.
- Asian currencies hold at current levels against the U.S. dollar from 1999 to 2002.

Declining Rates of Foreign Exchange

The model does not account for the additional negative effect of the collapsing currencies in Southeast Asia. Thus, the actual impact on export demand will be more severe than in either of the scenarios depicted here, as the collapse of currencies in Southeast Asian countries has been nothing short of spectacular. Between December 1996 and December 1997 the currency of Indonesia was down 51.6 percent against the U.S. dollar, doubling the price of U.S. farm imports into Indonesia. The currency situation was nearly as bad elsewhere against the U.S. dollar: Korea was down 43.5 percent; Thailand 43.6 percent; Malaysia 33.0 percent; the Philippines 29.3 percent; Taiwan 15.3 percent, and Singapore was down 15 percent. In spite of the best efforts of the IMF, these currencies continued to depreciate during the first half of 1998.

The U.S. dollar also has risen appreciably against the currencies of our major competitors among exporting nations. Over the past year (July 1997 to July 1998), the U.S. dollar is up 20 percent against Australia and 8 percent against Canada, the United States' two most important competitors in the world wheat market. Similarly, the dollar is up 37 percent against South Africa, a major competitor in the world corn market; 19 percent against India, a major competitor in the world cotton market, and 11 percent against Brazil, a major competitor in the world soybean market.

A movement in foreign exchange rates is equivalent to a change in domestic prices. For example, if the value of the dollar rises

50 percent against a foreign currency, the price of U.S. farm products measured in units of that currency rises 50 percent, which depresses the quantity demanded even if U.S. domestic prices remain constant. Empirical research shows that farm exports are less sensitive to changes in exchange rates than are general merchandise exports, but they do react, and with about the same two- to threeyear time lag. This suggests that the current levels of exchange rates will depress U.S. farm exports below what they would otherwise have been for the next two to three years, considering what already has happened, even if foreign currencies recover some of their previous value against the U.S. dollar.

Among exports of bulk agricultural commodities, soybeans are the most sensitive to changes in exchange rates and wheat is the least sensitive. Economic theory predicts that the closer a market is to free competition, the more responsive demand will be to changes in prices and exchange rates. International trade in soybeans is much closer to the free market model, while the wheat trade is highly subsidized and regulated by governments.

In addition to the foreign exchange rate effect, a spillover of the Asian economic crisis may reduce world GDP by perhaps 0.5 to 1 percent from what it otherwise would have been. We did not simulate this effect; the results reported here would likely be much worse if the effects of both currency devaluations and diminished world GDP growth were considered.

Finally, research shows that on average farm real estate assets take six years to fully adjust to changes in capitalized farm income. Sometimes it has taken longer, sometimes shorter. In this model, we forced the adjustment to occur over a three-year period for the purposes of simulating a worst-case scenario for land values.

Forecast Results Under the Two Alternative Scenarios

Economic conditions in the U.S. farm sector in 1998 are considerably weaker than in 1997, when net farm income fell to \$49.9 billion from \$53.5 billion in 1996. Net farm income is expected to fall again to \$42.5 billion in 1998-a 20 percent decline from the 1996 peak. Under the Baseline Scenario, 1999 net farm income is forecast to rise a bit to \$45.6 billion, but will remain below \$50 billion through the year 2002 (see Figure 4). Over the next five years (1998-2002) net farm income will average about \$1 billion less than over the last five years. However, net income under the Continued Asian Depression Scenario would average about \$2 billion lower than under the Baseline Scenario during the next five years.

The farm sector balance sheet continued to strengthen in 1997, but gains will be limited from 1998 to 2002. Farm asset values have risen for 11 years in a row, driven largely by gains in farm real estate, which averaged 6 percent annually from 1993 through 1997. The Baseline forecast shows gains in real estate assets slowing to 2.6 percent in 1998 after 5.8 percent growth in 1997. Real estate values are forecast to fall in 1999 by 0.6 percent and remain weak through the year 2002 (see Figure 5). The annual average gain in farmland values over the next five years will be less than 1 percent, down from 6 percent during the previous five years. In the Depression Scenario, real estate values will slowly decline by about 3 percent over the forecast period.

Total farm debt increased 3.4 percent in 1996 and 3.8 percent in 1997. We expect total debt to rise just 1.9 percent in 1998 and 1.8 percent in 1999 (Baseline Scenario). Then, farm debt is forecast to be nearly stagnant through the year 2002 (see Figure 6). While farmers' debt-carrying capacity will still be large and not entirely used, weak financial conditions will make farmers even more debt-averse. Average annual gains in farm debt over the next five years will be around 1 percent (and will be zero under the Depression Scenario), down from 3 percent during the previous five years. Even in the Baseline Scenario we would expect that, given the weak financial conditions, the quality of farm debt would deteriorate-but more so in the Depression Scenario.



Figure 4 Impact of S.E. Asian Crisis on Net Farm Income

43









Note: Farm Debt of \$162 billion for 1997 is reported in USDA's August 1998 Agricultural Outlook. However, new data suggest that farm debt in 1997 and 1998 will be about \$3-\$4 billion higher than reported here.

Impact on the Farm Economy by Farm Credit District

Due to the different commodity concentrations in each of the seven Farm Credit System Districts, the effect of the Continued Asian Depression Scenario (as compared with the 1998 Baseline) is different for each district. Figures 7 and 8 illustrate the average percentage effect on annual net farm income and farm real estate assets for each district over the 1998 to 2002 period. Recall that the 1998 Baseline Scenario already accounts for the current collapse of the Southeast Asian economies. The effect of the collapse itself compared with the old 1997 Baseline, which showed continued strong economic growth in Asia, cannot be measured directly because the current version of the model was not available on a districtlevel basis in 1997.

Figure 7 Net Farm Income: Depression Scenario Compared with 1998 Baseline, by District



Percentages represent annual averages for 1998-2002 period.

Because commodity concentrations vary by district, the impact of the S.E. Asian crisis will be different according to the major exports of the region. Result is understated in heavy areas of fruit, vegetable, or nut production - Western, CoBank, and Ag First.

4

Figure 8 Farm Real Estate Assets: Depression Scenario Compared with 1998 Baseline, by District



Percentages represent annual averages for 1998-2002 period.

Commodity concentrations vary by district, the impact of the S.E. Asian crisis will be different according to the major exports of the region.

How Will Commodity Prices Be Affected?

Under the 1998 Baseline, most commodity prices (prices for steers, broilers, and milk are exceptions) will average much lower for the next five years than for the previous five years, as follows:

Commodity	Avg. Price last 5 yrs	Avg. Price next 5 yrs	Avg. Change
Corn	\$2.63/bu	\$2.22/bu	Decline \$0.41/bu
Wheat	3.79/bu	3.33/bu	Decline .46/bu
Soybeans	6.48/bu	5.43/bu	Decline 1.05/bu
Cotton	67.98/lb	66.00/lb	Decline 1.98/lb
Steers	68.59/cwt	73.9/cwt	Rise 5.31/cwt
Hogs	46.65/cwt	42.6/cwt	Decline 4.05/cwt
Broilers	57.46/lb	57.8/lb	Rise .34/lb
Milk	13.32/cwt	13.66/cwt	Rise .34/cwt

> Growth in real GDP in Southeast Asia creates growth in demand for U.S. farm exports, which in turn creates growth in farm prices. Similarly, declines in GDP create declining export demand and declining prices. A useful tool for measuring the degree of change is "elasticity," which measures the percent change in a variable that results from a percent change in another variable.

> For example, in the model we estimate that for corn, a 1 percent change in Southeast Asian GDP creates a 2 percent change in U.S. farm prices. Thus, if a scenario indicated a 5 percent difference in Southeast Asian GDP, there would be a 10 percent difference in U.S. corn prices.

> The following summary table lists the effect on prices of a 1 and a 5 percent decline in Southeast Asian GDP growth. Recall that the difference between the 1998 Baseline Scenario and the Continued Asian Depression Scenario represents a difference of 5 percentage points of growth, so that for the Continued Asian Depression effect the elas

ticities are multiplied by a factor of 5. We then calculate the dollar value of the per-unit price change for each commodity under the Continued Asian Depression Scenario. We have listed the commodities in declining order of change in the table so that analysts can easily see which commodities are most at risk and can use the relationship to calculate their own price changes, given differing assumptions about changes in gross domestic products in Southeast Asia while other variables remain equal.

The table shows that when comparing the Baseline Scenario with the Continued Depression Scenario, cotton and broiler prices would be affected the most in percentage terms — that is, their elasticities are higher. Specifically, cotton prices would average 11.9 cents per pound below the already-reduced 1998 Baseline levels. Wheat prices would be affected the least and would average 15 cents per bushel below the already-reduced 1998 Baseline levels.

Vulnerability of Commodity Prices to Changes in Southeast Asian Growth Rates

(Change in prices in final column can be viewed as the effect of the Depression compared with the Baseline Scenario)

	Unit	Price Change Resulting	from
	1 Percent change in	5 Percent change in	Asian Depression—
	SE Asia GDP	SE Asia GDP	change from Baseline
Cotton Price	3.6%	18.0%	-11.88 cents per pound
Broiler Price	3.4%	17.0%	-9.83 cents per pound
Soybean Price	2.2%	11.0%	-\$0.60 per bushel
Corn Price	2.0%	10.0%	-\$0.22 per bushel
Rice Price	2.0%	10.0%	-\$0.88 per hundredweight
Cattle Price	1.4%	7.0%	-\$5.17 per hundredweight
Hog Price	1.3%	6.5%	-\$2.77 per hundredweight
Wheat Price	0.9%	4.5%	-\$0.15 per bushel



Conclusions

Challenges for the Farm Credit System include managing lending risk to farmers facing greater price and income risk from the marketplace, without Government price protection. A new risk—weak commodity markets—could coincide with the elimination of farm program payments after 2002. Without renewed Government income supports, farmland values will experience a further decline. Even with the current level of guaranteed payments the updated Farm Sector Economics forecast shows a slight decline in real estate markets in 1999, with relatively stagnant asset and debt markets through the year 2002. The national totals forecast in this article mask the more serious income declines that will be experienced by some. Those producers heavily dependent on the commodities most affected by the declines in export demand will experience serious financial stress if market supplies do not adjust to the reality of lower worldwide demand. Clearly, lenders will have to be very cautious in making assumptions about price projections when reviewing debt repayment capacity.

Opportunities for the Farm Credit System are less apparent with this update, as most of the risks are now on the downside. However, the Asian economies could recover faster than projected, which would lead to stronger-than-forecast export markets for major grains, oil-seeds, and livestock. This recovery would capitalize into higher real estate values and strengthen the demand for farm debt—particularly real estate debt. Under this scenario, demand for non-real estate debt would also expand significantly.

Farm Credit Administration Fiscal Year 1999 Regulatory Performance Plan

Approved by the Board September 23, 1998

The Farm Credit Administration adopts and issues policy statements and regulations to help ensure that the Farm Credit System complies with the law and operates in a safe and sound manner. As the independent regulator of the System, the FCA is responsible for protecting the public's interest. Accordingly, the FCA Board strives to adopt sound and constructive policies and regulations, take a proactive and preventive approach, and reflect the changing needs of agriculture.

The FCA anticipates another active regulatory period during fiscal year 1999. The attached Fiscal Year 1999 Regulatory Performance Plan (Plan) includes the regulatory projects proposed for completion in fiscal year 1999. The Agency also plans to conduct a complete review of all current regulations to identify any areas where more flexibility can allow System institutions to adjust their structures and lending authorities within the Farm Credit Act of 1971, as amended. This review may provide new priorities for the Plan and may require the Agency to reassess its current projects for fiscal year 1999. In addition, the Regulatory Burden notice may generate comments and create the need for new regulation projects not currently listed in the Plan.

As is customary, the Plan details two types of regulatory actions for fiscal year 1999: proposed rules and final rules. The purpose of a proposed rule is to notify the public of an agency's intent to revise existing regulations or create new ones. The proposed rule describes the changes being considered and tells the public how they may participate in the rulemaking process. A final rule establishes the basis and purpose for the regulatory revisions or additions that are being adopted by an agency. The final rule will advise interested parties how the rule will be applied, respond to questions and issues raised during the rulemaking, and serve as a reference for the future.

Since 1997 we have provided the public with easy access to FCA regulations through our interactive Website. The Agency's goal is to foster a more interactive relationship and encourage public participation in the rulemaking process. The public is invited to submit comments on individual rulemaking projects via electronic mail to reg-comm@fca.gov or through the Pending Regulations section of the FCA's interactive Website at www.fca.gov.

49

Regulation Project

Action Date October – December 1998	Type of Action	Brief Project Description
Customer Choice	Proposed Rule	Provide additional flexibility for borrowers to obtain financing and other financial services from System institutions of their choice and reduce regulatory burden
Balloting and Stockholder Reconsideration Issues	Final Rule	Address regulatory burden issues concerning balloting and voter reconsideration when System institutions engage in corporate restructuring
January – March 1999		
Farm Credit Bank Assistance to Associations	Proposed Rule	Clarify when Agency consent is needed for approval of finan- cial assistance provided to associations by Farm Credit banks
FAMC Risk-Based Capital	Proposed Rule	Office of Secondary Market Oversight will make a rule to es- tablish a risk-based capital requirement for Farmer Mac
Release of Information	Proposed Rule	Conform FCA regulations to Department of Justice guidance and clarify procedures for processing requests for exempt infor- mation
FCS Board Compensation Limits	Final Rule	Remove Agency prior approval for certain instances in which bank director compensation can exceed the adjusted maximum
April – June 1999		
Investment Management	Final Rule	Clarify current investment management regulations with respect to safety and soundness and in response to petitions received to amend the regulations. Provide guidance consistent with other financial institution regulators
Regulatory Burden	Phase I Action	Address comments received from the Regulatory Burden No- tice published in August 1998
Leasing Authorities	Final Rule	Issue comprehensive leasing regulations for all System institu- tions
July – September 1999		
Comprehensive Borrower Rights	Proposed Rule	Revise the borrower rights regulations to provide clarification and remove unnecessary burdens
Termination Regulations	Proposed Rule	Establish regulations under which a bank or large association within the System can terminate its charter as provided for in the Farm Credit Act of 1971, as amended
Farm Credit Bank Assistance to Associations	Final Rule	Clarify when Agency consent is needed for approval of finan- cial assistance provided to associations by Farm Credit banks
Potential Competition Philosophy Projects		
Competition Philosophy Projects	TBD	Projects resulting from the FCA Board Philosophy Statement on Competition to provide a regulatory environment that will afford System institutions greater flexibility to adjust their struc- tures and lending authorities within the Farm Credit Act of 1971, as amended

If there are questions on the Fiscal Year 1999 Regulatory Performance Plan, please contact Patricia W. DiMuzio, Director, Regulation and Policy Division, Office of Policy and Analysis, at (703) 883-4498.

Farm Credit Administration's Loan Portfolio Management Symposium

Major changes in the marketplace and in government policies are bringing more risk to the agricultural lending environment. Increasingly, the agricultural industry relies on uncertain foreign markets to maintain its economic vitality. At the same time, the Federal Agriculture Improvement and Reform Act of 1996 (FAIR), by reducing the safety net that many farmers relied on for decades, has shifted the risk management burden to producers and farm lenders.

These risks have become reality in 1998, a year of low market prices for many commodities. Supplies have been abundant, and export demand has been reduced because of the financial crisis in Asia. Before this crisis, Asia was regarded as an important source of growth in agricultural export demand. Now that source of demand growth is in serious doubt. And although farmers are receiving fixed transition payments as provided by the FAIR Act, those payments are lower than they would have been under previous farm legislation.

Farm Credit System (FCS) institutions were created to provide loans to agriculture in good times and bad. The inherent risk of agricultural lending and the statutory limitations on lending authority, which result in additional risk from credit concentrations in the FCS, make effective management of loan portfolios essential. Furthermore, a rapidly changing and competitive lending environment dictates that FCS institutions manage their loan portfolios proactively and strategically. Consequently, loan portfolio management has become more important than ever for Farm Credit institutions.

Indeed, competition is characteristic of the farm lending market. FCS institutions are competing for the very best credit customers with commercial banks and insurance companies, as well as nonbank lenders like John Deere Credit, Pioneer HiBred, G.E. Capital Mortgage Services, and a host of others. If this were not enough, cyber banking over the Internet may also develop into a real competitive force over time. This is not a time for successful farm lenders to rest on their laurels.

The FCA is pleased to sponsor a symposium that will highlight some of the more critical and timely issues related to loan portfolio management. The symposium will provide a forum for discussing these issues with Farm Credit colleagues and an impressive group of expert speakers from around the country. Discussions of state-of-the-art issues in management information systems, portfolio stress testing, environmental risk evaluation, and other key topics make this symposium a must for proactive Farm Credit leaders.

The symposium is structured for System personnel, primarily System CEOs, chief credit officers, and others involved in the credit function. The Symposium will be held December 6-8, 1998 at the Fairview Park Marriott Hotel in Falls Church, Va.

For registration materials for the Loan Portfolio Management Symposium, call the Office of Congressional and Public Affairs at (703) 883-4056.

Symposium Program

Sunday, December 6

5:00- 9:00 p.m. Check-in and reception

Monday, December 7

7:45 a.m. Continental Breakfast/Registration

Master of Ceremonies David Kohl, Professor of Agricultural Finance, Virginia Tech

8:30 a.m. Welcome Marsha Martin, Chairman and CEO, FCA Thomas McKenzie

Thomas McKenzie, Director, Office of Policy and Analysis, FCA

Future of Agricultural Lending, Emerging Trends

Michael Boehlje, Professor of Agribusiness, Purdue University

Loan Portfolio Management in Commercial Banking

John Barrickman, President, New Horizons Financial Group

Management Information Systems for the FCS

Victor Dupuy, Senior Manager, KPMG Peat Marwick

12:30 p.m. Lunch

(Monday, December 7 cont.)

1:45 p.m. Breakout Sessions 1

Stress Testing Your Farm Loan Portfolio Joe Davis, President, AgriLogic, Inc.

Credit Rating Systems John Barrickman, President, New Horizons Financial Group

Risk Diversification Robert Bonnet, Chief, Guaranteed Loan Making, Farm Service Agency and Tom Clark, Vice President, Corporate Relations, Farmer Mac

Lender Liability and Environmental Risk Randy Muller, Vice President, Environmental Services, Bank of America

3:00 p.m. Breakout Sessions 2

Stress Testing Your Farm Loan Portfolio

Credit Rating Systems

Risk Diversification

Lender Liability and Environmental Risk

5:00 p.m. Social Hour

6:15 p.m. Dinner Speaker to be announced

Tuesday, December 8

8:00 a.m. Continental Breakfast

Panel on FCS Portfolio Management Systems Paul DeBriyn, President and CEO, AgStar ACA Andy Lowrey, President and CEO, AgFirst FCB Jay Penick, President and CEO, Northwest ACA

Collateral Risk – Have You Factored It Into Your Portfolio?

Art Clapp, President-Elect, American Society of Farm Managers and Rural Appraisers

The Role of Marketing in Portfolio Management

Jim McComb, Senior Consultant, Farm Credit Council Services, Inc.

12:00 p.m. Lunch "The Future of U.S. Farm Policy"

Kika de la Garza, former Chairman of the House Agriculture Committee

Internal Controls and Loan Underwriting Carl Premschak,

Senior Examiner, FCA

Wrap-up and Summary Roland Smith,

Chief Examiner, FCA

2:00 p.m. Adjourn

Kika de la Garza, former Chairma

Corporate Restructuring of Farm Credit System Institutions

Elna Luopa

Overview

The number of Farm Credit System institutions, including service corporations, declined from 222 on October 1, 1997, to 208 by October 1, 1998. The most significant decline was in the number of Federal Land Bank Associations (FLBAs), from 51 to 40 in one year, as a result of mergers in the Texas District and formations of direct lender Federal Land Credit Associations (FLCAs), in the Wichita District. FLBAs affiliated with the Farm Credit Bank of Texas are also expected to begin the transition to FLCAs by mid-1999 provided the bank's stockholders approve a proposed plan to transfer direct lending authority. In April 1998, voting stockholders of the Farm Credit Bank of Wichita approved a plan to transfer direct lending authority to FLBAs in that district and, as of October 1, two FLCAs are now operating within the district. Mergers between Agricultural Credit Associations (ACAs) are also continuing, and over the past year the number of ACAs has declined by 3 to 57.

Through October 1, 1998, the Farm Credit Administration (FCA) Board approved 16 corporate applications that have become effective since January 1. These approvals include a plan from a Farm Credit Bank to transfer direct lending authority to eligible FLBAs ; approvals to form two FLCAs; eight association mergers; one change to an association's chartered territory; the voluntary liquidation of a service corporation; amendments that modified the Articles of Incorporation of a service corporation; one association headquarters relocation; and one association name change. Of the eight mergers, three occurred in the AgriBank, FCB District, four in the Farm Credit Bank of Texas District, and one in the AgFirst Farm Credit Bank District. This corporate activity is detailed in Table 1. (See the Report on the Financial Condition and Performance of the Farm Credit System 1997 for corporate activity in 1997 through January 1, 1998).

Wichita Restructuring

On March 10, 1998, the FCA Board approved the plan submitted by the Farm Credit Bank of Wichita to transfer direct lending authority to all eligible FLBAs within the District (Colorado, Kansas, New Mexico, Oklahoma) provided that the FLBAs obtain approval from the FCA to operate as FLCAs within a two-year window beginning July 1, 1998. The Farm Credit Services of Central Kansas, FLBA, and Farm Credit Services of Northeast Kansas, FLBA, obtained charters to operate as FLCAs effective July 1, 1998, and October 1, 1998, respectively.

Texas Restructuring

A similar plan to transfer direct lending authority from the Farm Credit Bank of Texas (FCBT) to its eligible FLBAs was given preliminary approval by the FCA Board on September 21, 1998. The plan must also be approved by a majority of the voting stockholders of the FCBT before it can be implemented. The district would then have a twoyear window during which individual FLBA stockholders must approve the plan for their respective FLBA before the Agency issues an FLCA charter. Twenty FLBAs originate mortgage loans for the FCBT in Texas, Alabama, Louisiana and Mississippi.

Liquidation of AgCo Services Corporation

The Board also approved a plan of voluntary liquidation of AgCo Services Corporation (AgCo), a wholly owned subsidiary of CoBank, ACB. Under the plan, CoBank agreed to assume all remaining liabilities of AgCo. The FCA Board cancelled AgCo's charter effective at the close of business on July 22, 1998. Notice of the FCA Board's actions with respect to AgCo were published in the July 27, 1998, Federal Register at 63 FR 40123.

53

Other FCA Board Actions

Since January 1, 1998, the FCA Board has granted preliminary approval to a merger of two ACAs affiliated with AgriBank, FCB, and the formation of a third FLCA in territory chartered to the Farm Credit Bank of Wichita. Agency final approval of these actions is subject to approval by the voting stockholders of the associations involved.

Pending Applications

As of October 1, 1998, the following applications are pending FCA Board consideration: (1) a merger of two Production Credit Associations (PCAs) in the Texas District; (2) two consolidations involving five ACAs in the AgFirst District; and (3) expansion of territory requests filed by two groups of jointly managed PCAs and FLCAs; and (4) a name change request. Action by the FCA Board on an earlier request—to establish a service corporation—filed by a PCA affiliated with the FCB of Texas—continues to be deferred until further information is provided to the Agency.

FCA Board Philosophy Statement on Intra-System Competition

Since its 1916 inception, the Farm Credit System has evolved with economic and political changes. It underwent many structural changes during the 1980's and early 1990's, a period of financial crisis and major restructuring within American agriculture. The System has recovered from its financial crisis and is, once again, a fully viable lender to agriculture. Nevertheless, the FCA Board believes that if the System is to remain relevant as a financial service provider in the coming century, the System must adapt to new challenges. As the regulatory environment and markets change and as other financial service providers reach to reinvent the future, System institutions face the need to change strategically to retain and better serve their customers.

On July 14, 1998, the FCA Board adopted a statement outlining its philosophy that "... unrestricted intra-System competition is beneficial for the customer and the long-term relevancy of the Farm Credit System." In this regard, the FCA Board supports these practices:

- flexibility for associations to choose their source of funding
- System initiatives to allow institutions to become more efficient and relevant in the marketplace
- removal of geographic boundaries of System entities
- movement toward structures that have broad-based lending authorities encompassing Titles I, II and III of the Act
- broad interpretation of existing statutes to enable System institutions to become more competitive and, in the absence of statutory authority, consideration of legislative solutions.

Table 2 illustrates the bank and association structure in each Farm Credit district. Table 3 shows 5-year changes in the numbers of banks and associations Systemwide. Figure 1 depicts the chartered territories of Farm Credit System banks.



Table 1Farm Credit Administration Corporate Activity January 2, 1998 through October 1, 1998

Effective Date	Corporate Activity	Affiliated Bank and Institution	Chartered Name of Resulting Institution	Headquarters Location
10/1/98	Merger	FCB of Texas ·FLBA of Tyler ·FLBA of McKinney (continuing FLBA)	Heritage Land Bank, FLBA	Tyler, Smith County, TX
10/1/98	FLCA Charter	FCB of Wichita •Farm Credit Services of Northeast Kansas, FLBA	Farm Credit Services of Northeast Kansas, FLCA	Manhattan, Riley County, KS
9/15/98	Headquarters Relocation	FCB of Texas ·Lone Star FLBA	No change	Weatherford, Parker County, TX
9/1/98	Merger	FCB of Texas ·FLBA of Hillsboro ·FLBA of Waco (continuing FL	FLBA of Waco BA)	Waco, McLennan County, TX
8/1/98	Merger	FCB of Texas •FLBA of Dayton •FLBA of Edna •LaGrange-Bellville FLBA of Be •FLBA of Bryan (continuing FL		Bryan, Brazos County, TX
7/22/98	Voluntary Liquidation	CoBank, ACB ·AgCo Services Corporation	Charter cancelled at the close of business on 7/22/98 upon completion of voluntary liquidat	
7/1/98 (cob 6/30)	Merger	AgriBank, FCB ·Harvestland Farm Credit Services, FLCA ·Badgerland Farm Credit Services, FLCA (continuing FLCA)	Badgerland Farm Credit Services, FLCA	Baraboo, Sauk County, WI
7/1/98 (cob 6/30)	Merger	AgriBank, FCB ·Harvestland Farm Credit Services, ACA ·Badgerland Farm Credit Services, ACA (continuing ACA)	Badgerland Farm Credit Services, ACA	Baraboo, Sauk County, WI

55

Table 1Farm Credit Administration Corporate Activity January 2, 1998 through October 1, 1998

Effective Date	Corporate Activity	Affiliated Bank and Institution	Chartered Name of Resulting Institution	Headquarters Location
7/1/98	Merger	AgFirst FCB ·Warrenton Farm Credit, ACA ·Staunton Farm Credit, ACA (continuing ACA)	Blue Ridge Farm Credit, ACA	Staunton, Augusta County, VA
7/1/98 (cob 6/30)	Merger	AgriBank, FCB •Farm Credit Services of St. Cloud, ACA •Farm Credit Services of Sout Minnesota, ACA (continuing)		Mankato, Blue Earth County, MN
7/1/98	FLCA Charter	FCB of Wichita ·Farm Credit Services of Central Kansas, FLBA	Farm Credit Services of Central Kansas, FLCA	Wichita, Sedgwick County, KS
7/1/98	Transfer of Direct Lending Authority to Eligible District FLBAs	FCB of Wichita	No change in name. Two-year window in effect for transfers, 7/1/98-7/1/2000	Wichita, KS
5/18/98	Amendment to Articles of Incorporation	All Farm Credit banks Farm Credit Leasing Services Corporation	No change in name. Amendments to FCLSC's Articles eliminate requirement for election of directors to board Each bank shareholder will designate a director to serve on the board.	St. Paul, MN 1.
5/1/98	Charter Amendment (expansion of territory to add 6 counties)	AgriBank, FCB ·Badgerland Farm Credit Services, FLCA	Badgerland Farm Credit Services, FLCA	Fond du Lac, Fond du Lac County, WI
5/1/98	Merger	FCB of Texas ·FLBA of Sonora ·FLBA of Southwest Texas (co	FLBA of Southwest Texas	Devine, Medina County, TX
4/1/98	Name Change	FCB of Texas ·Albuquerque PCA	PCA of New Mexico	Albuquerque, Bernalillo County, NM

Source: FCA, Office of Policy and Analysis, Risk Analysis Division, records.

Table 2 Farm Credit System Banks and Associations¹ (As of Orthers 1, 1000)

(As of October 1, 1998)

Bank Affiliation	PCAs	FLBAs	ACAs	FLCAs	ACB	FCBs	BC	Total
CoBank, ACB ²	0	0	4	0	1	0	0	5
AgFirst FCB	1	0	38	0	0	1	0	40
AgriBank, FCB	18	0	9	18	0	1	0	46
FCB of Wichita	18	20	0	2	0	1	0	41
FCB of Texas	16	20	0	0	0	1	0	37
Western FCB	10	0	5	11	0	1	0	27
AgAmerica, FCB	1	0	1	1	0	1	0	4
St. Paul BC ³	0	0	0	0	0	0	1	1
10/1/98 Total	64	40	57	32	1	6	1	201
10/1/97 Total	64	51	60	31	1	6	1	214
Increase/(Decrease)	0	(11)	(3)	1	0	0	0	(13)

 PCA = Production Credit Association; FLBA = Federal Land Bank Association; ACA = Agricultural Credit Association; FLCA = Federal Land Credit Association; ACB = Agricultural Credit Bank; FCB = Farm Credit Bank; BC = Bank for Cooperatives.

2. CoBank, ACB has authority to serve cooperatives nationwide and ACAs in CoBank's Northeast Region.

3. The St. Paul BC serves cooperatives nationwide.

Source: FCA, Office of Policy and Analysis, Risk Analysis Division, records.

Table 3

Numbers of Farm Credit Banks and Associations by Type¹, 1994–1998 (As of October 1, 1998)

Year	PCAs	FLBAs	ACAs	FLCAs	ACB	FCBs	BCs	Total
1998	64	40	57	32	1	6	1	201
1997	64	51	60	31	1	6	1	214
1996	66	69	60	32	1	6	1	235
1995	66	70	60	32	1	7	1	237
1994	69	72	66	31	0	9	3	250

1. PCA = Production Credit Association; FLBA = Federal Land Bank Association; ACA = Agricultural Credit Association; FLCA = Federal Land Credit Association; ACB = Agricultural Credit Bank; FCB = Farm Credit Bank; BC = Bank for Cooperatives.

Figure 1 Farm Credit System Banks Chartered Territories (As of October 1, 1998)



Source: FCA, Office of Policy and Analysis, Risk Analysis Division, records.

58

Major Financial Indicators by System, Quarterly Comparison¹

At and For the 3 Months ended (Dollars in Thousands)

Farm Credit System Banks ^{2,9}	Jun 30 '98	Mar 31 '98	Dec 31 '97	Sep 30 '97	Jun 30 '97
Gross Loan Volume	60,446,778	58,368,049	58,396,451	58,281,477	57,782,928
Formally Restructured Loans ³	280,551	259,935	277,963	316,486	296,403
Accrual Loans 90 or More Days Past Due	27,423	27,877	6,311	7,803	11,529
Nonaccrual Loans	250,826	246,135	224,793	263,050	567,088
Nonperforming Loans ⁴	0.92%	0.91%	0.87%	1.01%	1.51%
Cash and Marketable Investments	12,074,904	11,986,065	12,021,111	11,428,955	11,221,146
Total Capital/Total Assets ⁵	8.47%	8.62%	8.53%	8.60%	8.56%
Total URE/Total Assets	4.07%	4.09%	4.03%	4.05%	3.98%
Total Net Income	171,353	169,323	188,721	182,601	165,058
ROA ⁶	0.96%	0.98%	1.07%	1.05%	0.96%
ROE ⁶	11.09%	11.22%	12.27%	12.07%	11.15%
Net Interest Margin	1.49%	1.51%	1.55%	1.63%	1.55%
Operating Expense Rate ⁷	0.47%	0.48%	0.59%	0.53%	0.52%
Associations (excluding FLBAs) ⁹					
Gross Loan Volume	38,784,222	36,866,183	36,820,170	36,330,432	35,546,444
Formally Restructured Loans ³	68,286	77,017	89,137	76,932	77,216
Accrual Loans 90 or More Days Past Due	44,978	37,917	23,086	20,355	31,134
Nonaccrual Loans	353,709	366,449	367,066	383,250	398,212
Nonperforming Loans ⁴	1.20%	1.31%	1.30%	1.32%	1.43%
Total Capital/Total Assets ⁵	16.11%	16.57%	16.24%	16.22%	16.36%
Total URE/Total Assets	12.47%	12.84%	12.34%	12.49%	12.41%
Total Net Income	170,659	200,655	173,054	156,194	151,526
ROA ⁶	1.72%	2.11%	1.77%	1.61%	1.65%
ROE ⁶	10.25%	12.43%	10.57%	9.70%	9.70%
Net Interest Margin	3.34%	3.47%	3.37%	3.26%	3.45%
Operating Expense Rate ⁷	1.69%	1.77%	1.97%	1.76%	1.83%
Total Farm Credit System ^{8,10}					
Gross Loan Volume	65,642,000	63,719,000	63,439,000	63,001,000	62,639,000
Formally Restructured Loans ³	161,000	176,000	200,000	216,000	220,000
Accrual Loans 90 or More Days Past Due	70,000	65,000	36,000	28,000	41,000
Nonaccrual Loans	604,000	613,000	592,000	646,000	965,000
Nonperforming Loans ⁴	1.27%	1.34%	1.31%	1.41%	1.96%
Total Bonds and Notes	64,415,000	64,415,000	64,479,000	63,964,000	63,362,000
Total Capital/Total Assets ⁵	15.14%	15.10%	14.83%	14.73%	14.54%
Total Surplus/Total Assets	10.96%	10.64%	10.56%	10.36%	10.19%
Total Net Income	329,000	337,000	332,000	328,000	304,000
ROAA ⁶	1.68%	1.72%	1.66%	1.64%	1.61%
ROAE ⁶	11.25%	11.53%	11.42%	11.36%	11.19%
Net Interest Margin	2.92%	2.93%	2.98%	2.99%	2.90%

1. Some of the previously published quarterly data have been restated to include subsequent adjustments.

2. Includes Farm Credit Banks, the Bank for Cooperatives, and the Agricultural Credit Bank.

3. Excludes loans past due 90 days or more.

Nonperforming Loans are defined as Nonaccural Loans, Formally Restructured Loans, and Accrual Loans 90 or More Days Past Due.
Total capital includes protected borrower capital.

6. Income ratios are annualized.

8. Cannot be derived through summation of above categories due to intradistrict and intra-System eliminations.

9. Source: FCA Call Reports - Farm Credit Banks and Association Data

10. Source: Farm Credit System Reports to Investors

^{7.} Defined as operating expenses divided by average gross loans, annualized.

59

Major Financial Indicators, By District^{1, 4} At and For the 3 Months Ended 6-30-98

(Dollars in Thousands)

Farm Credit System Banks	Total Assets	Gross Loan Volume	Nonaccrual Loans	Allowance for Loan Losses	Cash and Marketable Investments	Capital Stock ²	Earned Net Worth ³	Total Net Worth
Wichita	5,176,655	4,197,975	51,668	132,941	959,154	344,741	330,269	674,554
Texas	4,486,037	3,987,477	35,361	51,847	424,341	99,334	258,075	357,408
Western	5,555,701	4,664,498	0	5,000	774,059	204,895	197,021	403,393
Agribank	18,606,787	15,179,289	70,743	217,527	3,335,811	567,242	863,465	1,433,077
AgAmerica	7,873,833	6,774,787	13,708	35,012	1,005,152	550,038	382,688	932,758
AgFirst	10,361,478	8,487,635	0	11,267	1,727,770	308,630	348,880	656,720
CoBank	18,701,284	15,152,780	38,084	238,272	3,509,907	858,251	557,925	1,422,178
St. Paul BC	2,407,853	2,002,337	41,262	54,071	338,710	281,883	36,951	318,754
Total	73,169,628	60,446,778	250,826	745,937	12,074,904	3,215,014	2,975,274	6,198,842
Associations (excluding FLBAs	5)							
Wichita	964,649	883,294	4,978	27,846	15,890	46,692	160,891	207,818
Texas	906,465	842,248	9,375	25,385	4,035	64,130	158,247	222,377
Western	5,578,449	5,249,715	39,251	115,929	51,445	132,970	727,820	860,790
Agribank	15,239,505	14,337,635	115,497	270,037	55	300,964	1,939,827	2,246,078
AgAmerica	7,354,421	6,805,004	79,397	295,506	16,255	67,769	999,630	1,111,241
AgFirst	9,214,760	8,821,818	82,710	251,277	4,109	215,913	1,468,359	1,721,426
CoBank	1,962,024	1,844,508	22,501	50,140	7,892	50,264	306,487	356,751
Total	41,220,273	38,784,222	353,709	1,036,120	99,681	878,702	5,761,261	6,726,481
FCS Totals	78,164,000	63,719,000	613,000	1,848,000	12,807,000	1,872,000	8,564,000	11,907,000

Aggregations of district data may not equal totals due to eliminations.
Includes protected borrower capital.

3. Excludes accumulated other comprehensive income

4. Source: FCA Call Reports - Farm Credit Banks and Association Data

Glossary

Terms have the following meanings as used herein:

Α

ACA—Agricultural Credit Association, the successor association resulting from a Federal Land Bank Association/Production Credit Association merger

ACB—Agricultural Credit Bank, the successor resulting from a Bank for Cooperatives/ Farm Credit Bank merger

Agency—Farm Credit Administration Associations—Federal Land Bank Associations, Federal Land Credit Associations, Production Credit Associations, and Agricultural Credit Associations

В

Banks—The Farm Credit Banks

banks—The Farm Credit Banks, the Agricultural Credit Bank, and (sometimes) the Bank for Cooperatives

BC—Bank for Cooperatives

Consolidated Bank Debt Securities—debt securities issued by a combined Bank group pursuant to Section 4.2(c) of the Farm Credit Act

D

DL-direct lender

F

Farm Credit Act—Farm Credit Act of 1971, as amended FCA or Agency—Farm Credit Administration FCB—Farm Credit Bank FCS or System—Farm Credit System FLBA—Federal Land Bank Association FLCA—Federal Land Credit Association, a Federal Land Bank Association that has been granted direct lending authority Funding Corporation—Federal Farm Credit Banks Funding Corporation

G

GSE—government-sponsored enterprise Insurance Corporation—Farm Credit System Insurance Corporation Insurance Fund—Farm Credit Insurance Fund, maintained by the Insurance Corporation pursuant to the Farm Credit Act

0

OPA-Office of Policy and Analysis

Ρ

PCA—Production Credit Association

R

RCD—Risk Control Division ROAA—return on average assets ROAE—return on average equity

S

System—the Farm Credit System Systemwide Debt Securities—Federal Farm Credit Banks Consolidated Systemwide Bonds, Federal Farm Credit Banks Consolidated Systemwide Medium-Term Notes, Federal Farm Credit Banks Consolidated Systemwide Discount Notes, and any other debt securities that may be issued by the Banks pursuant to Section 4.2 (d) of the Farm Credit Act

U

URE—unallocated retained earnings USDA—U.S. Department of Agriculture Copies are Available From: Office of Congressional and Public Affairs Farm Credit Administration 1501 Farm Credit Drive McLean, VA 22102-5090 703.883.4056 http://www.fca.gov