2016 *Annual Report*

on the Farm Credit System by the

FARM CREDIT ADMINISTRATION

Regulator of the FCS

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The Farm Credit Administration ensures a safe, sound, and dependable source of credit and related services for all creditworthy and eligible persons in agriculture and rural America.

Statement of the Board Chairman and CEO

July 2017

Dear Reader,

On behalf of the board and the staff of the Farm Credit Administration, I present the 2016 Annual Report on the Farm Credit System. I am pleased to report that the System's overall condition and performance remain sound. Its net income was $4.85 billion in 2016, up from $4.69 billion in 2015, and its capital position is strong.

Overall, the quality of System loans remains very good. As of December 31, 2016, 0.79 percent of the System's gross loans outstanding were nonperforming. Although this represented a slight decline in quality from 2015, it is still well within the System's risk-bearing capacity.

We expected some credit quality decline in 2016 because large inventories have been keeping corn and soybean prices low. Other factors placing downward pressure on farm prices include the strong dollar, which makes U.S. agricultural products less competitive, and a modest increase in interest rates. Also, slower growth in the economies of some of our biggest trading partners, such as China, have suppressed export sales.

Although credit quality is likely to slip further in 2017, it is not expected to be dramatic for several reasons. First, System lenders have exercised prudence in their lending activities. For example, they have monitored changes in the value of farmland, which serves as collateral for many System loans, and they have adjusted their lending standards accordingly.

Second, although interest rates are expected to rise further, they are expected to do so slowly, giving borrowers a chance to adjust to any increases by making operational and spending changes.

The System's strong capital levels also safeguard the System from credit quality declines. As of December 31, 2016, the System's total capital had increased to $52.3 billion, up from $48.8 billion a year earlier.

Because the System obtains its loan funds from the securities it sells to the capital debt markets, investor demand for System securities is also key to the System's ability to withstand these challenges. In 2016, Systemwide debt increased by 5.9 percent, and we expect investor demand for System securities to remain strong in 2017. The Farm Credit Insurance Fund, which held $4.5 billion at year-end 2016, further strengthens the financial position of the System by protecting investors in Systemwide debt, thus strengthening investor confidence in the System.

This report also contains our annual report on the System's service to young, beginning, and small (YBS) farmers and ranchers. In terms of dollar volume, the pace of YBS lending slightly exceeded the pace of overall farm lending by System institutions, but in terms of loan numbers, the pace of YBS lending lagged slightly behind that of overall farm lending.

As the independent, arm's-length regulator of the System, we examine System institutions for their safety and soundness and their compliance with laws and regulations, providing heightened oversight of institutions with higher risk. In addition to the areas normally considered, our examiners are currently emphasizing the following areas:

- The intensifying credit risk that the System is facing
- The implementation of FCA's new capital regulations

The factor driving the increase in credit risk is the prolonged period of low commodity prices. Prices are down significantly from the highs of 2013 and will likely stay low through 2017. This has created, and will continue to create, hardship for many producers, making it difficult to pay their loans, and thereby weakening the credit quality of agricultural lenders.

Fortunately, System institutions currently have the financial capacity and risk-bearing ability to work with borrowers experiencing stress. As we communicated in an informational memorandum to System institutions in January 2016, we expect System institutions to intensify loan servicing efforts for borrowers who encounter increased stress.

Our examiners are also assessing the strategies and internal controls that System institutions are using to ensure that they accurately report their capital and comply with the new capital regulations, which took effect on January 1, 2017. The new capital rules modernize our capital requirements while ensuring that System institutions continue to hold the capital they need to fulfill their mission.

This document also includes a report on the Federal Agricultural Mortgage Corporation, or Farmer Mac. On December 31, 2016, Farmer Mac's net worth was $643.6 million, compared with $553.7 million a year earlier. Net worth went up primarily because of increases in retained earnings and accumulated other comprehensive income. The increase in accumulated other comprehensive income occurred largely because Farmer Mac reclassified $2.0 billion of its USDA-guaranteed securities from available-for-sale to held-to-maturity.

Despite the current challenges in the farm economy, the Farm Credit System continues to meet the credit needs of American farmers, ranchers, and other eligible borrowers. And we, as the regulator of the System, will continue to do our part to ensure a safe, sound, and dependable source of credit and related services for all creditworthy and eligible persons in agriculture and rural America.

Sincerely,

Dallas P. Tonsager

Farm Credit Administration

Overview and mission

The Farm Credit Administration is an independent agency in the executive branch of the U.S. government. We are responsible for regulating and supervising the Farm Credit System (its banks, associations, and related entities) and the Federal Agricultural Mortgage Corporation (Farmer Mac).

The System is a nationwide network of borrower-owned financial institutions that provide credit to farmers, ranchers, residents of rural communities, agricultural and rural utility cooperatives, and other eligible borrowers.

FCA derives its powers and authorities from the Farm Credit Act of 1971, as amended (12 U.S.C. 2001 – 2279cc). The U.S. Senate Committee on Agriculture, Nutrition, and Forestry and the U.S. House of Representatives Committee on Agriculture oversee FCA and the Farm Credit System.

FCA is responsible for ensuring that the System remains a dependable source of credit for agriculture and rural America. We do this in two specific ways:

- We ensure that System institutions, including Farmer Mac, operate safely and soundly and comply with applicable laws and regulations. Our examinations and oversight strategies focus on an institution's financial condition and any material existing or potential risk, as well as on the ability of its board of directors and management to direct its operations. We examine each institution's compliance with laws and regulations to serve eligible borrowers, including young, beginning, and small farmers and ranchers. If a System institution violates a law or regulation or operates in an unsafe or unsound manner, we use our supervisory and enforcement authorities to bring about appropriate corrective action.
- We issue policies and regulations governing how System institutions conduct their business and interact with borrowers. These policies and regulations focus on protecting System safety and soundness; implementing the Farm Credit Act; providing minimum requirements for lending, related services, investments, capital, and mission; and ensuring adequate financial disclosure and governance. We also approve corporate charter changes, System debt issuances, and other financial and operational matters.

Our headquarters and one field office are in McLean, Virginia. We also have field offices in Bloomington, Minnesota; Dallas, Texas; Denver, Colorado; and Sacramento, California.

FCA does not receive a federal appropriation. We maintain a revolving fund financed primarily by assessments from the institutions we regulate. Other sources of income for the revolving fund are interest earned on investments with the U.S. Treasury and reimbursements for services we provide to federal agencies and others.

The Board

FCA policy, regulatory agenda, and supervisory and examination activities are established by a full-time, three-person board whose members are appointed by the president of the United States with the advice and consent of the Senate. Board members serve a six-year term and may remain on the board until a successor is appointed. The president designates one member as chairman of the board, who serves in that capacity until the end of his or her own term. The chairman also serves as our chief executive officer.

FCA board members also serve as the board of directors for the Farm Credit System Insurance Corporation.

Dallas P. Tonsager
Board Chairman and CEO

Dallas P. Tonsager is the board chairman and CEO of the Farm Credit Administration. He was appointed to the FCA board by President Barack Obama on March 13, 2015, for a term that expires May 21, 2020. He was designated chairman and CEO by President Obama on November 22, 2016.

Mr. Tonsager brings to his position on the FCA board extensive experience as an agriculture leader and producer, and a commitment to promoting and implementing innovative development strategies to benefit rural residents and their communities.

Mr. Tonsager served as under secretary for rural development at the U.S. Department of Agriculture (USDA) from 2009 to 2013. In this position, he expanded broadband communication in rural America and implemented other key elements of the Recovery Act for rural America. He dramatically expanded USDA's water and wastewater programs, expanded funding for first- and second-generation biofuels, and funded hospitals and other public facilities in rural America.

In his official USDA capacity, Mr. Tonsager worked with the Farm Credit System and others to set up new venture capital investment funds. From 2010 to 2013, he was a member of the Commodity Credit Corporation board of directors.

From 2004 to 2009, Mr. Tonsager served as a member of the FCA board, as well as a member of the FCSIC board of directors.

From 2002 to 2004, he was the executive director of the South Dakota Value-Added Agriculture Development Center. In this position, he coordinated initiatives to better serve producers interested in developing value-added agricultural projects. Services provided by the center include project facilitation, feasibility studies, business planning, market assessment, technical assistance, and education.

In 1993, he was selected by President William J. Clinton to serve as USDA's state director for rural development in South Dakota. Mr. Tonsager oversaw a diversified portfolio of housing, business, and infrastructure loans in South Dakota. His term ended in February 2001.

A long-time member of the South Dakota Farmers Union, Mr. Tonsager served two terms as president of the organization from 1988 to 1993. During that same period, he was a board member of Green Thumb Inc., a nationwide job training program for senior citizens. In addition, he served on the board of National Farmers Union Insurance from 1989 to 1993, and he was a member of the advisory board of the Commodity Futures Trading Commission from 1990 to 1993.

Mr. Tonsager grew up on a dairy farm near Oldham, South Dakota. For many years, he and his older brother owned Plainview Farm in Oldham, a family farm on which they raised corn, soybeans, wheat, and hay. Mr. Tonsager is a graduate of South Dakota State University where he earned a B.S. in agriculture in 1976.

Jeffery S. Hall
Board Member

Jeffery S. Hall was appointed to the FCA board by President Barack Obama on March 17, 2015. Succeeding Leland A. Strom, Mr. Hall will serve a term that expires on October 13, 2018.

Mr. Hall also serves as chairman of the board of directors of the Farm Credit System Insurance Corporation, which is responsible for ensuring the timely payment of principal and interest on obligations issued on behalf of FCS banks.

Mr. Hall was president of The Capstone Group, an association management and consulting firm that he co-founded in 2009. He was the state executive director for the U.S. Department of Agriculture's Farm Service Agency in Kentucky from 2001 to 2009. In that role, he had responsibility for farm program and farm loan program delivery and compliance.

From 1994 to 2001, Mr. Hall served as assistant to the dean of the University of Kentucky, College of Agriculture, advising the dean on state and federal legislative activities and managing a state-wide economic development initiative called Ag-Project 2000.

Mr. Hall also served as a senior staff member in the office of U.S. Senator Mitch McConnell from 1988 until 1994. During that time, he was the legislative assistant for agriculture, accountable for internal and external issue management.

Before joining Senator McConnell's staff, Mr. Hall served on the staff of the Kentucky Farm Bureau Federation. Over his 30-year career in agriculture, he has held leadership positions in the following nonprofits: the Kentucky Agricultural Council, the Agribusiness Industry Network, the Louisville Agricultural Club, the Kentucky Agricultural Water Quality Authority, and the Governor's Commission on Family Farms.

Mr. Hall was raised on a family farm in southern Indiana, which has been in his family for nearly 200 years. He is currently a partner in the farm with his mother and sister. Mr. Hall received a B.S. from Purdue University.

Kenneth A. Spearman
Board Member

Kenneth A. Spearman was appointed to the FCA board by President Barack Obama on October 13, 2009. He was appointed to the balance of Dallas Tonsager's term and reappointed to a full six-year term that expired on May 21, 2016. He served as chairman and CEO from March 13, 2015, until the designation of his successor on November 22, 2016. He served as a member of the board until his death on March 27, 2017.

Since his appointment to the FCA board in 2009, Mr. Spearman served as chairman of the board of directors of the Farm Credit System Insurance Corporation, which is responsible for ensuring the timely payment of principal and interest on obligations issued on behalf of Farm Credit System banks. He continued to serve concurrently as a member of the FCSIC board of directors until his death.

Mr. Spearman brought to his position on the FCA board many years of experience in finance, agriculture, and agricultural cooperatives. He spent 28 years in the citrus industry. From 1980 to 1991, he was controller of Citrus Central, a $100 million cooperative in Orlando, Florida, where he was responsible for financial management and reporting and the supervision of staff accountants.

He later served as director of internal audit for Florida's Natural Growers, where he designed and implemented the annual plan for reviewing and appraising the soundness, adequacy, and application of accounting, financial, and other operating internal controls.

From January 2006 until his appointment to the FCA board, Mr. Spearman served as an independently appointed outside director on the AgFirst Farm Credit Bank board in Columbia, South Carolina. During his tenure, he served on the board compensation committee and the board governance committee.

Before entering agriculture in central Florida, Mr. Spearman served with the U.S. Army and was a Vietnam veteran. He later was employed by the public accounting firm Arthur Andersen & Co. and was involved with the development of a public accounting firm in Chicago, Illinois. He served as chairman of the board of trustees for the Lake Wales Medical Center. He was a member of the Institute of Internal Auditors, as well as the National Society of Accountants for Cooperatives, where he served a term as national president.

He obtained his master's degree in business administration from Governors State University in University Park, Illinois, and his B.S. in accounting from Indiana University. He also attended Harvard Kennedy School Executive Education, where he completed a program with a concentration in government agency strategic planning.

Mr. Spearman is survived by his wife, Maria, and their three children — twin daughters, Michelle Springs and Rochelle Puccia, and a son, Dr. Kenneth Spearman.

Kenneth A. Spearman

August 26, 1944 – March 27, 2017

Farm Credit System — Role, Structure, and Safety and Soundness

FCS role

The Farm Credit System (FCS or System) is a network of borrower-owned cooperative financial institutions and service organizations serving all 50 states and the Commonwealth of Puerto Rico. Created by Congress in 1916 to provide American agriculture with a dependable source of credit, the FCS is the nation's oldest government-sponsored enterprise.

Under the Farm Credit Act of 1971, as amended, the System has the authority, subject to certain conditions, to make the following types of loans:

- Agricultural real estate loans
- Agricultural production and intermediate-term loans (e.g., for farm equipment)
- Loans to producers and harvesters of aquatic products
- Loans to certain farmer-owned agricultural processing facilities and farm-related businesses
- Loans to farmer-owned agricultural cooperatives
- Rural home mortgages
- Loans that finance agricultural exports and imports
- Loans to rural utilities
- Loans to farmers and ranchers for other credit needs

Also, under its similar-entity authority, the System may participate with other lenders to make loans to those who are not eligible to borrow directly from the System but whose activities are functionally similar to those of eligible borrowers. Through these participations, the System diversifies its portfolio, reducing the risks associated with serving a single industry.

The System raises funds for its business activities by selling securities in the national and international money markets; its Systemwide debt funding is subject to FCA approval. The U.S. government does not guarantee the securities issued by the System.

According to the Farm Credit Act, Congress established the System to improve the income and well-being of American farmers and ranchers. The System is to provide a permanent, reliable source of credit and related services to agriculture and aquatic producers, farmer-owned cooperatives, and farm-related businesses in rural America.

Congress formed the FCS as a system of farmer-owned cooperatives to ensure that farmer- and rancher-borrowers participate in the management, control, and ownership of their institutions. The participation of member-borrowers helps keep the institutions focused on serving their members' needs.

The System helps to meet broad public needs by providing liquidity and competition in rural credit markets in both good and bad economic times. The accomplishment of this public goal benefits all eligible borrowers, including young, beginning, and small farmers, as well as rural homeowners.

FCS structure

The lending institutions

The System is composed of the following four banks:

- CoBank, ACB
- AgriBank, FCB
- AgFirst Farm Credit Bank
- Farm Credit Bank of Texas

These banks provide loans to 73 associations that in turn make loans to farmers, ranchers, and other eligible borrowers. Most of these associations (71 of them) are structured as agricultural credit associations with subsidiaries. Two of the associations are stand-alone federal land bank associations with direct long-term real estate lending authority. We refer to these as federal land credit associations (FLCAs).

CoBank, one of the four Farm Credit System banks, is an agricultural credit bank (ACB), which has a nationwide charter to make loans to agricultural and aquatic cooperatives and rural utilities, as well as to other persons or organizations that have transactions with, or are owned by, these cooperatives. The ACB finances U.S. agricultural exports and imports and provides international banking services for farmer-owned cooperatives. In addition to making loans to cooperatives, the ACB provides loan funds to 22 ACAs and 1 FLCA.

An ACA can make agricultural production and intermediate-term loans as well as real estate mortgage loans, while an FLCA primarily makes real estate mortgage loans. The FLCA is exempt from state and federal income taxes.

Generally, each ACA contains two subsidiaries, a production credit association (PCA), which primarily makes agricultural production and intermediate-term loans, and an FLCA. The ACA's parent-subsidiary structure enables the ACA to preserve the tax-exempt status of the FLCA. This structure offers several other benefits as well. It allows the ACA to build and use capital more efficiently, and it enables members to hold stock in only the ACA but to borrow either from the ACA or from one or both of its subsidiaries. This gives the ACA and its subsidiaries greater flexibility in serving their borrowers, and it allows credit and related services to be delivered to borrowers more efficiently.

Further, the structure allows an association to provide a broader range of specialized services to its member-borrowers. It enables one-stop borrowing, allowing borrowers to obtain agricultural production and intermediate-term loans and real estate mortgage loans from the same institution.

The ACA and its two subsidiaries operate with a common board of directors and staff, and each of the three entities is responsible for the debts of the others. For most regulatory and examination purposes, FCA treats the ACA and its subsidiaries as a single entity; however, when appropriate, we may choose to treat the parent and subsidiaries as separate entities.

Special-purpose entity and service corporations

In addition to the banks and lending associations, the System also contains a special-purpose entity known as the Federal Farm Credit Banks Funding Corporation. Established under the Farm Credit Act, the Funding Corporation issues and markets debt securities on behalf of the System banks to raise loan funds. It also issues quarterly and annual information statements for investors.

The System also contains the following five service corporations. These corporations exist under the authority of section 4.25 of the Farm Credit Act[1]:

- AgVantis, Inc., provides technology-related and other support services to the associations affiliated with CoBank, ACB. AgVantis is owned by the bank and 13 of its affiliated associations.
- Farm Credit Leasing Services Corporation provides equipment leasing services to eligible borrowers, including agricultural producers, cooperatives, and rural utilities. It is wholly owned by CoBank.
- Farm Credit Financial Partners, Inc., provides support services to four associations affiliated with CoBank; one association affiliated with AgriBank, FCB; and the Leasing Corporation. It is owned by four associations to which the corporation provides services.
- The FCS Building Association acquires, manages, and maintains facilities to house FCA headquarters and field office staff. The Building Association is owned by the FCS banks, but the FCA board oversees its activities.
- Farm Credit Foundations provides human resource services to its employer-owners. These services include payroll processing, benefits administration, centralized vendor management, workforce management and operations, corporate tax and financial reporting services, and retirement workshops. Employer-owners consist of 38 FCS associations, 1 service corporation (AgVantis, Inc.), and 1 FCS bank (AgriBank, FCB).

Farmer Mac

The Federal Agricultural Mortgage Corporation (Farmer Mac), which is also recognized by law as an FCS

1. Section 4.25 of the Farm Credit Act provides that one or more FCS banks or associations may organize a service corporation to perform functions and services on their behalf. These federally chartered service corporations are prohibited from extending credit or providing insurance services.

institution, provides a secondary market arrangement for agricultural real estate loans, government-guaranteed portions of certain loans, rural housing mortgage loans, and eligible rural utility cooperative loans. The purpose of Farmer Mac's activities is to provide greater liquidity and lending capacity to all agricultural and rural lenders, including insurance companies, credit unions, commercial banks, and FCS lending institutions.

The Farm Credit Act established Farmer Mac as a federally chartered instrumentality and an institution of the FCS. However, it has no liability for the debt of any other System institution, and the other System institutions have no liability for Farmer Mac debt.

Farmer Mac is owned by its investors — it is not a member-owned cooperative. Investors in voting stock may include commercial banks, insurance companies, other financial organizations, and FCS institutions. Any investor may own nonvoting stock.

FCA regulates and examines Farmer Mac through its Office of Secondary Market Oversight, whose director reports to the FCA board on matters of policy.

Although Farmer Mac is an FCS institution under the Farm Credit Act, we discuss Farmer Mac separately from the other institutions of the FCS. Therefore, throughout this report, unless Farmer Mac is explicitly mentioned, the Farm Credit System refers only to the banks and associations of the System. For more information about Farmer Mac, see "Condition of Farmer Mac" on page 45.

The safety and soundness of the FCS

FCA regulates the FCS — its lending institutions, the Funding Corporation, the service corporations, and Farmer Mac. Our regulatory activities and examinations support the System's mission by ensuring that FCS institutions operate in a safe and sound manner, without undue risk to taxpayers, investors in System securities, or borrower-stockholders. For an overview of our agency, see page 5 or visit our website at www.fca.gov.

The Farm Credit System Insurance Corporation (FCSIC) also helps protect the safety and soundness of the Farm Credit System. It was established by the Agricultural Credit Act of 1987 in the wake of the agricultural credit crisis of the 1980s. The purpose of FCSIC is to protect investors in Systemwide debt securities by ensuring the timely payment of principal and interest on insured notes, bonds, and other obligations issued on behalf of FCS banks.

FCSIC ensures timely payment by maintaining the Farm Credit Insurance Fund, a reserve that represents the equity of FCSIC. The balance in the Insurance Fund at December 31, 2016, was $4.5 billion. For more information about FCSIC, go to www.fcsic.gov. Also see FCSIC's 2016 annual report.

Investors in Systemwide debt securities are further protected by the Farm Credit Act's joint and several liability provision, which applies to all FCS banks. The banks are jointly and severally liable for the principal and interest on all Systemwide debt securities. Therefore, if a bank is unable to pay the principal or interest on a Systemwide debt security and if the Farm Credit Insurance Fund has been exhausted, then FCA must call all nondefaulting banks to satisfy the liability.

FCS Banks and Associations

Financial condition

The FCS continued to be fundamentally safe and sound in 2016. The System's overall condition and performance was strong. It reported higher earnings, increased capital, and favorable portfolio credit quality. Tables 1 and 2 provide a summary of the System's major financial indicators.

While the FCS is financially sound, a small number of individual System institutions displayed some weaknesses in 2016. As the System's regulator, we addressed these weaknesses by increasing our oversight and supervision of these institutions. For more information on FCA's risk-based supervisory and enforcement approach, see "Maintaining a Dependable Source of Credit for Farmers and Ranchers" on pages 41 to 44 of this report. For more information on the condition of the System, see the 2016 Annual Information Statement of the Farm Credit System on the website of the Federal Farm Credit Banks Funding Corporation at www.farmcreditfunding.com.

The operating environment continued to be difficult for agricultural producers in 2016. According to estimates by the U.S. Department of Agriculture's Economic Research Service, 2016 net farm income will decrease 15.6 percent to $68.3 billion, making it the third consecutive year that farm income has declined.

Since prices for certain commodities remained low in 2016, crop producers faced continued pressure on margins and cash flow. For many producers, prices were below the cost of production. Large inventories in the United States and abroad, significant global production, and a strong dollar are expected to keep prices low through 2017. As a result, financial stress will likely continue to intensify for the grain sector, pushing producers to strengthen their balance sheets and change their operating structures to reduce their cost of production.

Cropland markets, especially in the Midwest, showed continued weakness in 2016, pressured by low grain prices and higher interest rates. Farmland values will likely remain weak in 2017 since commodity prices are expected to remain low and U.S. interest rates are expected to rise.

Livestock producers saw declining margins, especially in the first half of the year, as production levels pressured pricing. Lower feed costs and stronger demand in the latter part of 2016 resulted in improved profitability for most protein sectors. In general, margins are expected to remain favorable in 2017.

For a detailed discussion of potential risks facing the System in 2017 and beyond, see "Challenges Facing the Agricultural Economy and the Farm Credit System" on pages 50 to 57.

Table 1

Farmer Credit System major financial indicators, annual comparison

As of December 31, Dollars in thousands

At and for the 12 months ended	31-Dec-16	31-Dec-15	31-Dec-14	31-Dec-13	31-Dec-12
Farm Credit System Banks[1]					
Total assets	281,973,917	267,587,575	249,370,568	230,427,442	219,043,177
Gross loan volume	220,160,768	208,766,996	192,083,080	179,260,572	173,227,170
Nonaccrual loans	292,938	231,520	227,872	275,228	365,478
Cash and marketable investments	60,131,933	57,123,019	55,472,944	49,241,806	43,618,788
Net income	2,016,110	1,945,693	2,042,527	2,057,199	2,011,314
Nonperforming loans/total loans[2]	0.16%	0.13%	0.15%	0.18%	0.23%
Capital/assets[3]	6.35%	6.28%	6.41%	6.58%	6.51%
Unallocated retained earnings/assets	3.48%	3.45%	3.42%	3.39%	3.23%
Return on assets	0.73%	0.74%	0.84%	0.91%	0.94%
Return on equity	11.13%	11.47%	12.76%	13.31%	13.86%
Net interest margin[4]	0.98%	0.98%	1.05%	1.15%	1.25%
Operating expense ratio[5]	0.34%	0.33%	0.33%	0.32%	0.31%
Efficiency ratio[6]	25.37%	25.30%	24.20%	22.20%	20.00%
Payout ratio[7]	64.84%	59.44%	58.19%	54.61%	47.79%
Associations					
Total assets	189,932,933	180,005,335	167,312,405	157,085,461	148,778,120
Gross loan volume	179,322,967	169,995,422	157,543,635	146,873,767	138,314,966
Nonaccrual loans	1,303,673	1,095,206	1,146,358	1,465,651	1,932,706
Net income	3,383,152	3,126,729	3,383,894	3,304,680	2,989,912
Nonperforming loans/gross loans[2]	0.90%	0.80%	0.92%	1.17%	1.59%
Capital/assets[3]	18.84%	18.68%	18.78%	18.48%	17.80%
Unallocated retained earnings/assets	17.50%	17.33%	17.40%	17.24%	16.65%
Return on assets	1.81%	1.84%	2.07%	2.14%	2.06%
Return on equity	9.36%	9.57%	10.69%	11.34%	11.23%
Net interest margin[4]	2.66%	2.68%	2.75%	2.80%	2.83%
Operating expense ratio[5]	1.47%	1.50%	1.51%	1.48%	1.45%
Efficiency ratio[6]	40.47%	41.38%	39.52%	37.14%	39.13%
Payout ratio[7]	31.28%	28.31%	25.22%	25.45%	25.82%
Total Farm Credit System[8]					
Total assets	319,915,000	303,503,000	282,733,000	260,662,000	246,528,000
Gross loan volume	248,768,000	235,890,000	217,054,000	201,060,000	191,904,000
Bonds and notes	260,213,000	246,214,000	229,064,000	210,704,000	200,365,000
Nonperforming loans	1,962,000	1,629,000	1,737,000	2,040,000	2,608,000
Nonaccrual loans	1,591,000	1,324,000	1,375,000	1,736,000	2,300,000
Net income	4,848,000	4,688,000	4,724,000	4,640,000	4,118,000
Nonperforming loans/gross loans[2]	0.79%	0.69%	0.80%	1.01%	1.36%
Capital/assets[3]	16.35%	16.09%	16.17%	16.34%	15.66%
Surplus/assets	13.50%	13.33%	13.36%	13.45%	12.95%
Return on assets	1.56%	1.64%	1.77%	1.86%	1.74%
Return on equity	9.44%	9.87%	10.62%	11.43%	10.96%
Net interest margin[4]	2.49%	2.55%	2.64%	2.78%	2.87%

Sources: FCA's Consolidated Reporting System as of December 31, 2016, and the Farm Credit System Quarterly Information Statement provided by the Federal Farm Credit Banks Funding Corporation.

Note: Changes to previous periods occasionally occur for accounting reasons.

1. Includes Farm Credit Banks and the Agricultural Credit Bank.
2. Nonperforming loans are defined as nonaccrual loans, accruing restructured loans, and accrual loans 90 or more days past due.
3. Capital includes restricted capital (amount in Farm Credit Insurance Fund) and excludes mandatorily redeemable preferred stock and protected borrower capital.
4. Net interest margin ratio measures net income produced by interest-earning assets, including the effect of loanable funds, and is a key indicator of loan pricing effectiveness.
5. Operating expenses divided by average gross loans.
6. The efficiency ratio measures total noninterest expenses for the preceding 12 months divided by net interest income plus noninterest income for the preceding 12 months.
7. The percentage of earnings paid out in patronage dividends to borrower-owners and in dividends to holders of preferred stock. (Patronage dividends constitute the majority of earnings paid out.) This ratio is only valid at year-end (December 31).
8. Cannot be derived by adding the categories above because of intradistrict and intra-System eliminations used in Reports to Investors.

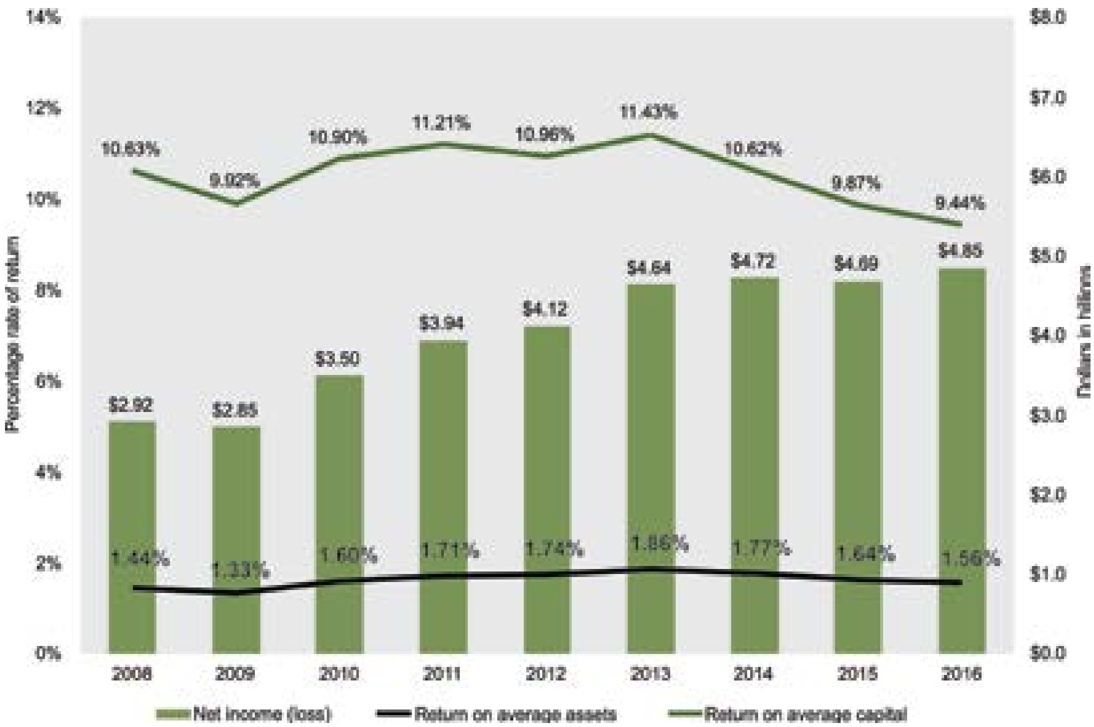
Table 2
Farm Credit System major financial indicators, by district
December 31, 2016
Dollars in thousands

	Total Assets	Gross Loan Volume	Nonaccrual Loans	Allowance for Loan Losses	Cash and Marketable Investments[1]	Capital Stock[2]	Surplus[3]	Total Capital[4]	Operating Expense Ratio[5]
Farm Credit System Banks									
AgFirst	32,057,597	22,914,682	28,978	14,783	8,853,741	410,038	1,817,563	2,225,248	0.57%
AgriBank	102,563,296	86,078,402	53,851	21,282	15,978,971	2,433,701	3,132,432	5,486,103	0.15%
CoBank	126,130,626	95,258,281	207,247	558,974	30,242,765	4,572,232	4,121,409	8,573,758	0.41%
Texas	21,222,398	15,909,403	2,862	7,650	5,056,456	884,038	770,793	1,622,252	0.59%
Total	**281,973,917**	**220,160,768**	**292,938**	**602,689**	**60,131,933**	**8,300,009**	**9,842,197**	**17,907,361**	0.34%
Associations									
AgFirst	20,992,378	20,059,953	221,606	167,818	122,479	223,143	4,074,529	4,264,702	2.05%
AgriBank	97,500,750	91,372,083	624,356	365,472	2,042,642	344,141	17,615,378	17,959,519	1.35%
CoBank	53,756,421	50,791,698	314,853	296,342	351,051	1,668,961	9,103,251	10,668,131	1.46%
Texas	17,683,384	17,099,233	142,858	74,087	37,885	287,904	2,610,408	2,893,854	1.49%
Total	**189,932,933**	**179,322,967**	**1,303,673**	**903,719**	**2,554,057**	**2,524,149**	**33,403,566**	**35,786,206**	1.47%
Total Farm Credit System[6]	**319,915,000**	**248,768,000**	**1,591,000**	**1,506,000**	**62,575,000**	**1,800,000**	**43,183,000**	**52,311,000**	

Sources: Farm Credit System Call Report as of December 31, 2016, and the Farm Credit System Quarterly Information Statement provided by the Federal Farm Credit Banks Funding Corporation.

1. Includes accrued interest receivable on marketable investments.
2. Includes capital stock and participation certificates, excludes mandatorily redeemable preferred stock and protected borrower capital.
3. Includes allocated and unallocated surplus.
4. Includes capital stock, participation certificates, perpetual preferred stock, surplus, accumulated other comprehensive income. For the total Farm Credit System amount, total capital also includes $4.453 billion of restricted capital, which is the amount in the Farm Credit Insurance Fund. Excludes mandatorily redeemable preferred stock and protected borrower capital.
5. Operating expense per $100 of gross loans.
6. Cannot be derived by adding the categories above because of intradistrict and intra-System eliminations used in Reports to Investors.

Figure 1
FCS net income, 2008 – 2016
As of December 31



Source: Annual Information Statements of the Federal Farm Credit Banks Funding Corporation.

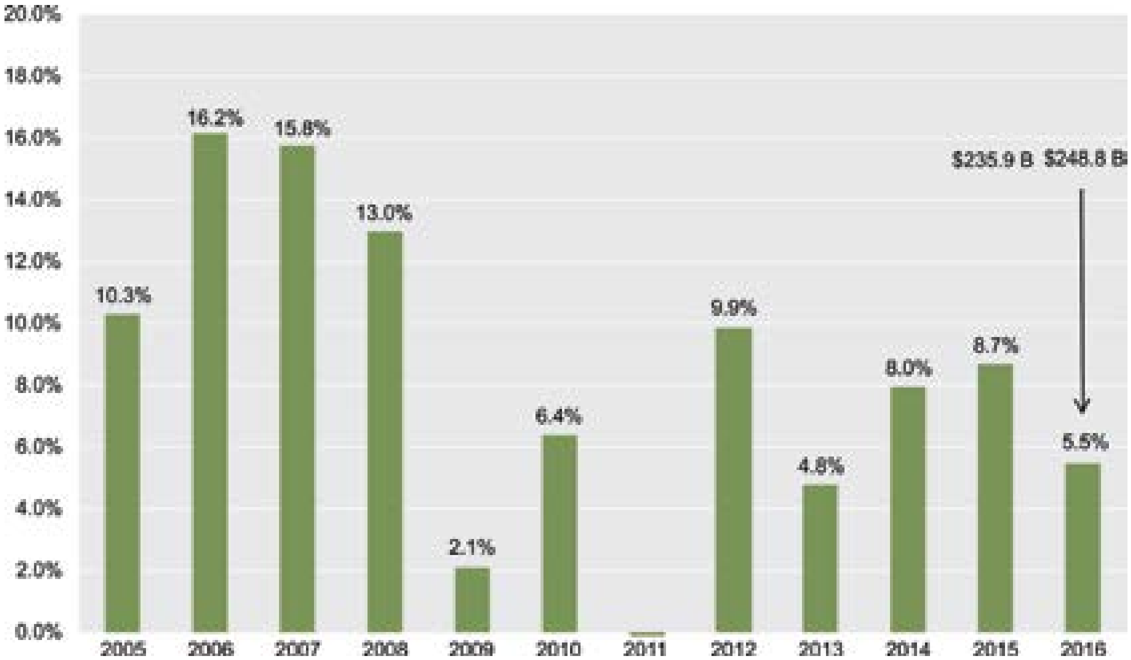
Earnings

The System reported higher earnings in 2016 despite the difficult economic conditions faced by U.S. agricultural producers. For the year, System net income equaled $4.85 billion, up $160 million or 3.4 percent from 2015 (See figure 1). The change was largely due to an increase in net interest income partially offset by higher provisions for loan losses and noninterest expenses.

Net interest income increased $432 million to $7.4 billion in 2016. This increase was due to a higher level of average earning assets, partially offset by a lower net interest margin. Driven largely by growth in loan volume, average earning assets increased $24.7 billion, or 9.0 percent, to $299.6 billion. The System's net interest margin continued to compress in 2016, decreasing 6 basis points to 2.49 percent. Lower lending spreads, caused by competitive pressures and higher debt costs, negatively affected margins. Return on average assets declined to 1.56 percent in 2016 from 1.64 percent in 2015, and the return on average capital decreased to 9.44 percent from 9.87 percent.

As cooperative institutions, FCS banks and associations typically pass on a portion of their earnings as patronage distributions to their farmer/rancher borrower-owners. For 2016, System institutions declared a total of $1.7 billion in patronage distributions — $1.27 billion in cash, $369 million in allocated retained earnings, and $85 million in stock. This represents 35.6 percent of the System's net income for 2016 as compared with 32.0 percent in 2015. Also in 2016, the System distributed $130 million in cash from allocated retained earnings related to patronage distributions from previous years.

Figure 2
Annual growth rate of FCS loans outstanding, 2005 – 2016



Source: Annual Information Statements of the Federal Farm Credit Banks Funding Corporation.

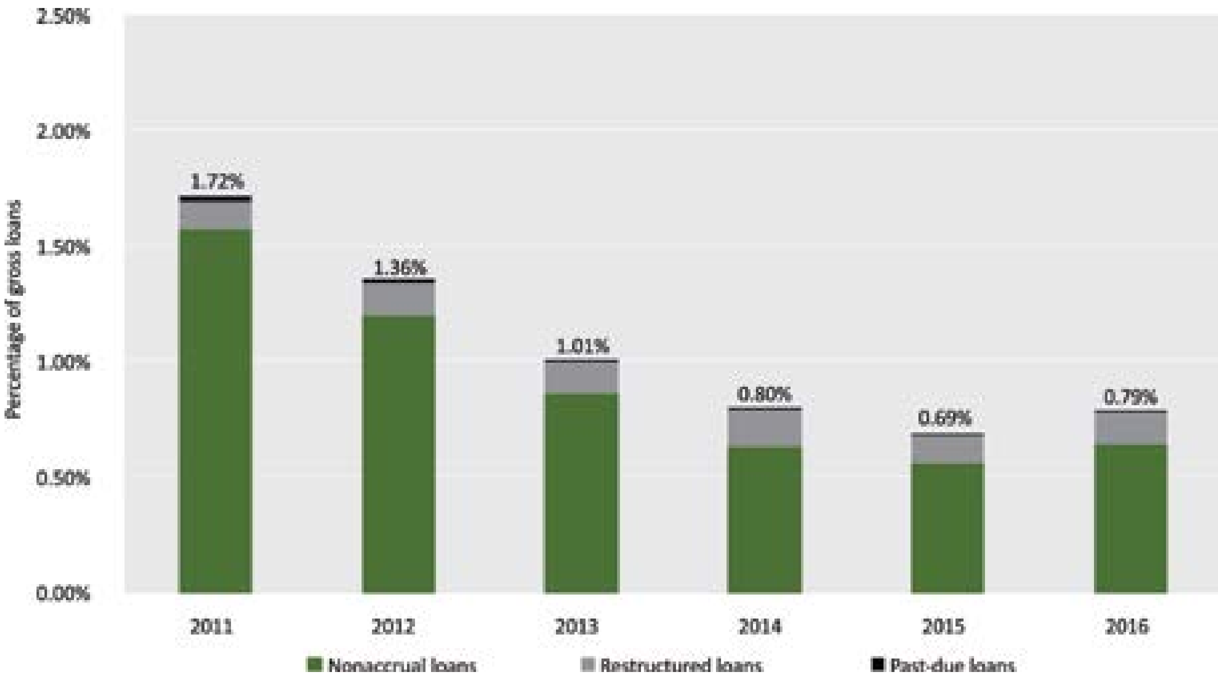
System growth

The System continued to grow at a moderate pace in 2016. Total assets increased to $319.9 billion, up $16.4 billion or 5.4 percent from 2015. Gross loan balances were $248.8 billion at year-end, up $12.9 billion or 5.5 percent from the previous year. (See figure 2.)

The growth in System loan balances was largely due to increases in real estate mortgage, agribusiness, and rural infrastructure lending. Real estate mortgage lending was up $6.6 billion, or 6.2 percent, mainly due to continued demand for cropland. Real estate mortgage loans represent the largest component of the System's loan portfolio at 46.0 percent.

Agribusiness lending, largely consisting of loans to cooperatives and loans for processing and marketing operations, was up $3.0 billion, or 8.3 percent, in 2016. Rural infrastructure lending, representing loans to electric power, communications, and water and wastewater industries, grew by $1.6 billion, or 6.4 percent.

Figure 3
FCS nonperforming loans, 2011 – 2016
As of December 31



Sources: Annual Information Statements of the Federal Farm Credit Banks Funding Corporation.

Asset quality

Overall, the quality of System loans remains relatively strong. However, credit stress continued to intensify for the crop and livestock sectors in 2016. Weak prices caused by strong production levels and relatively high input costs left many producers facing tight margins and less liquidity. Profitability for much of the livestock sector should improve in 2017, but low commodity prices will still challenge cash grain producers. Although loan delinquencies continued to be low in 2016, they are expected to increase in 2017.

As of December 31, 2016, nonperforming loans totaled $2.0 billion, or 0.79 percent of gross loans outstanding, up from $1.6 billion, or 0.69 percent, at year-end 2015. (See figure 3.) Loan delinquencies (accruing loans that are 30 days or more past due) increased to 0.26 percent of total accruing loans from 0.20 percent at year-end 2015.

The allowance for loan losses was $1.510 billion, or 0.61 percent of loans outstanding, at year-end 2016. This compares with an allowance for loan losses of $1.280 billion, or 0.54 percent of loans outstanding, at year-end 2015. The System recognized provisions for loan losses of $266 million in 2016 as compared with $106 million in 2015 and $40 million in 2014. Net loan charge-offs remained low at $45 million in 2016 as compared with $37 million in 2015.

Funding

Throughout 2016, the System had reliable access to the debt capital markets to support its mission, and investor demand for all System debt products remained favorable. Securities due within a year increased by 13.3 percent while securities with maturities greater than one year increased by 1.5 percent. In total, Systemwide debt increased by 5.9 percent.

The System's funding composition remained relatively stable in 2016. Securities due within a year accounted for 40.3 percent of total Systemwide debt compared with 37.7 percent a year ago. (See "Funding Activity in 2016" on page 39 for further discussion of the System's funding environment.)

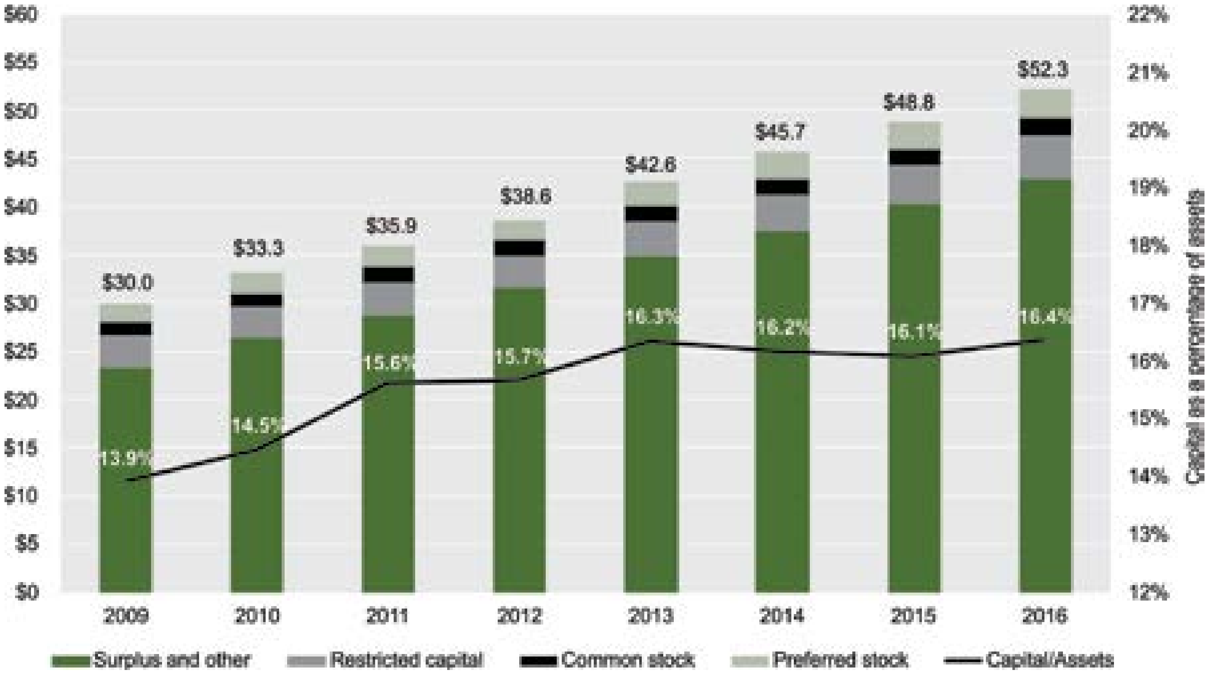
Liquidity

Each System bank maintains a liquidity reserve to ensure adequate liquidity to meet its business and financial needs, especially during unforeseen disruptions in the capital markets. As of December 31, 2016, each System bank was in compliance with the regulatory minimum levels required for their respective liquidity reserves. Liquidity position is measured by the number of days that a bank may operate with no access to funds from the capital markets. By regulation, banks must maintain at least 90 days of liquidity. The liquidity positions of the four System banks ranged from 117 days to 192 days. The System's overall liquidity position on a consolidated basis was 180 days, basically unchanged from year-end 2015 when it was 181 days.

Investments available for sale (based on fair value) increased 9.5 percent to $54.7 billion in 2016, with a weighted average yield of 1.49 percent. Mission-related and other investments available for sale (based on fair value) increased 14.7 percent to $344 million, with a weighted average yield of 2.73 percent. Mission-related and other investments held to maturity increased 6.4 percent to $2.6 billion, with a weighted average yield of 3.06 percent.

As permitted under FCA regulations, each System bank may hold federal funds and available-for-sale securities in an amount not to exceed 35 percent of its average loans outstanding for the quarter. Criteria for eligible investments are defined by FCA regulations. If an investment no longer meets the eligibility criteria, it becomes ineligible for regulatory liquidity calculation purposes, but the bank may continue to hold the investment provided certain requirements are met.

Figure 4
FCS capital, 2009 – 2016
As of December 31
Dollars in billions



Sources: Annual Information Statements of the Federal Farm Credit Banks Funding Corporation.

Capital

The System's capital position remained strong in 2016. Total capital equaled $52.3 billion at December 31, 2016, compared with $48.8 billion at year-end 2015. The System continued to build capital primarily through net income earned and retained. At year-end 2016, the System's capital-to-assets ratio was 16.4 percent, compared with 16.1 percent in 2015.

As illustrated in figure 4, surplus accounts for a large majority of total capital. FCA regulations establish minimum capital levels that each System bank and association must achieve and maintain. As of December 31, 2016, the permanent capital ratios for all System banks and associations were significantly above the regulatory minimum of 7.0 percent. The ratios ranged between 15.5 percent and 21.3 percent for System banks and between 13.2 percent and 36.6 percent for System associations. In addition, as of December 31, 2016, the FCS had $4.5 billion of restricted capital in the Farm Credit Insurance Fund.

Table 3
FCS gross loans outstanding, 2012 – 2016
As of December 31
Dollars in millions

	2012	2013	2014	2015	2016	Percent change from 2012	Percent change from 2015
Agricultural real estate mortgage loans	$92,504	$95,209	$100,811	$107,813	$114,446	23.7%	6.2%
Agricultural production and intermediate-term loans	43,446	44,309	46,305	49,204	50,282	15.7%	2.2%
Agribusiness loans to the following:							
Processing and marketing operations	10,735	13,164	16,974	19,949	21,166	97.2%	6.1%
Cooperatives	10,255	10,885	12,553	13,113	15,300	49.2%	16.7%
Farm-related businesses	2,858	2,999	3,408	3,533	3,162	10.6%	−10.5%
Rural utility loans by type of utility:							
Energy	13,193	14,304	15,036	17,925	19,577	48.4%	9.2%
Communication	3,435	4,159	5,044	6,196	6,023	75.3%	−2.8%
Water/wastewater	1,215	1,325	1,488	1,677	1,840	51.4%	9.7%
Rural home loans	6,430	6,511	6,754	7,117	7,148	11.2%	0.4%
Agricultural export finance	4,729	4,743	4,837	5,075	5,531	17.0%	9.0%
Lease receivables	2,415	2,706	2,976	3,373	3,480	44.1%	3.2%
Loans to other financing institutions	689	746	868	915	813	18.0%	−11.1%
Total	**$191,904**	**$201,060**	**$217,054**	**$235,890**	**$248,768**	**29.6%**	**5.5%**

Sources: Federal Farm Credit Banks Funding Corporation Annual Information Statements.

Borrowers served

The System fulfills its overall mission by lending to agriculture and rural America. Its lending authorities include the following:

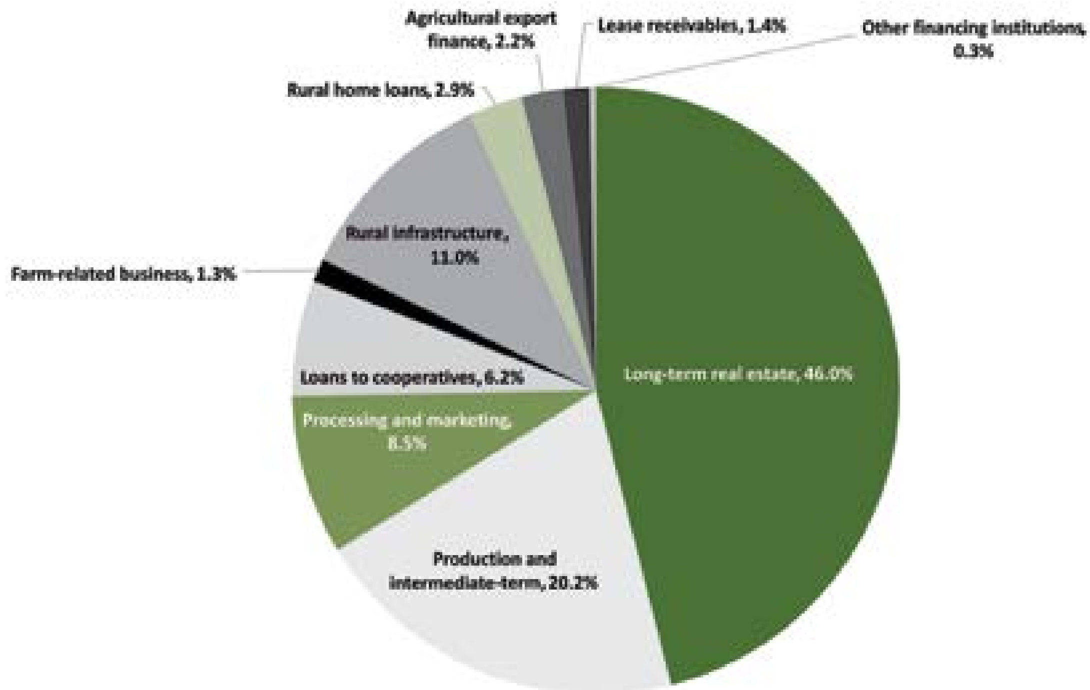
- Agricultural real estate loans
- Agricultural production and intermediate-term loans
- Loans to producers and harvesters of aquatic products
- Loans to certain farmer-owned agricultural processing facilities and farm-related businesses
- Loans to farmer-owned agricultural cooperatives
- Rural home mortgages
- Loans that finance agricultural exports and imports
- Loans to rural utilities
- Loans to farmers and ranchers for other credit needs

Also, under its similar-entity authority, the System may participate with other lenders to make loans to those who are not eligible to borrow directly from the System but whose activities are functionally similar to those of eligible borrowers. Through these participations, the System diversifies its portfolio, reducing the risks associated with serving a single industry.

Nationwide, the System had $249 billion in gross loans outstanding as of December 31, 2016. Agricultural producers represented by far the largest borrower group, with $165 billion, or 66.2 percent, of the total dollar amount of loans outstanding. See table 3 and figure 5 for a breakdown of lending by type.

As required by law, borrowers own stock or participation certificates in System institutions. The FCS had 1,341,000 loans and nearly 510,000 stockholders in 2016. Approximately 86.0 percent of the stockholders were farmers or cooperatives with voting stock. The remaining percent were nonvoting stockholders, including rural homeowners and other financing institutions that borrow from the System. Over the past five years, the total number of System stockholders has increased gradually, rising 4.5 percent since year-end 2011.

Figure 5
Farm Credit System lending by type
As of December 31, 2016



Source: 2016 Federal Farm Credit Banks Funding Corporation Annual Information Statement.

Total loans outstanding at FCS banks and associations (net of intra-System lending) increased by $12.9 billion, or 5.5 percent, during the year that ended December 31, 2016. This compares with increases of 8.7 percent in 2015 and 8.0 percent in 2014. Since year-end 2012, total System loans outstanding have increased by $56.9 billion, or 29.6 percent.

The increase in 2016 was driven by increases in real estate mortgages, loans to cooperatives, and loans to electric power utilities. Real estate mortgage loans increased $6.6 billion, or 6.2 percent, primarily because of the continued demand for cropland financing. Loans to cooperatives increased $2.2 billion or 16.7 percent because of greater seasonal financing at grain cooperatives and greater lending to agribusiness. Loans to power utilities increased $1.7 billion, or 9.3 percent, because of increased lending activity in both the electric distribution and power supply sectors.

Production and intermediate-term loans also increased, going up $1.1 billion, or 2.2 percent. This increase was driven primarily by new loan growth and to a lesser extent by the advanced purchases of production inputs (such as fertilizer, seed, and fuel) for 2017.

Processing and marketing loans increased $1.2 billion, or 6.1 percent, in 2016 because of new loan growth and advances on existing loans.

Not all lending authorities experienced increases in 2016. Compared to 2015, loan volumes in 2016 were lower to farm-related businesses, communication providers, and to other financial institutions.

System funding for other lenders

Other financing institutions

Under the Farm Credit Act, System banks may further serve the credit needs of rural America by providing funding and discounting services to certain non-System lending institutions described in our regulations as "other financing institutions" (OFIs). These include the following:

- Commercial banks
- Savings institutions
- Credit unions
- Trust companies
- Agricultural credit corporations
- Other specified agricultural lenders that are significantly involved in lending to agricultural and aquatic producers and harvesters

System banks may fund and discount agricultural production and intermediate-term loans for OFIs that demonstrate a need for additional funding to meet the credit needs of borrowers who are eligible to receive loans from the FCS. OFIs benefit by using the System as an additional source of liquidity for their own lending activities and by capitalizing on the System's expertise in agricultural lending.

As of December 31, 2016, the System served 22 OFIs, down from 23 in 2015; 24 in 2014; 26 in 2013, 2012, and 2011; and 28 in 2010 and 2009. Outstanding loan volume to OFIs was $816 million at year-end, down $101 million from 2015. OFI loan volume continues to be less than half of one percent of the System's loan portfolio. About 70 percent of the System's OFI lending activity occurs in the AgriBank district.

Syndications and loan participations with non-FCS lenders

In addition to the authority to provide services to OFIs, the Farm Credit Act gives System banks and associations the authority to partner with financial institutions outside the System, including commercial banks, in making loans to agriculture and rural America. Generally, System institutions partner with these financial institutions through loan syndications and participations.

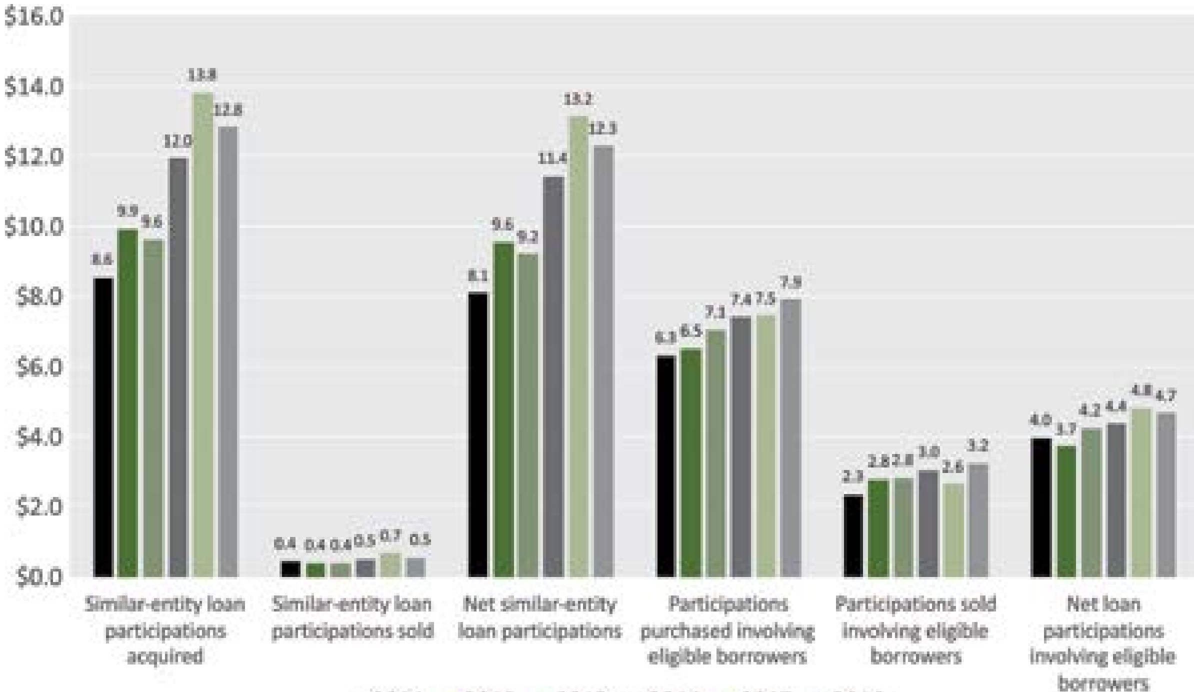
- A loan syndication (or "syndicated bank facility") is a large loan in which a group of financial institutions work together to provide funds for a borrower. Usually one financial institution takes the lead, acting as an agent for all syndicate members and serving as a liaison between them and the borrower. All syndicate members are known at the outset to the borrower.
- Loan participations are large loans in which two or more lenders share in providing loan funds to a borrower. One of the participating lenders originates, services, and documents the loan. Generally, the borrower deals with the institution originating the loan and is not aware of the other participating institutions.

Financial institutions primarily use loan syndications and participations to reduce credit risk and to comply with lending limits. For example, a financial institution with a high concentration of production loans for a single commodity could use participations or syndications to diversify its loan portfolio, or it could use them to sell loans that are beyond its lending limit. Institutions also use syndications and participations to manage and optimize capital, earnings, and liquidity. Syndications and participations allow the System to more fully meet its mission by serving agricultural and rural borrowers who might not otherwise receive funding.

The System's gross loan syndication volume has grown by more than $2 billion over the past three years to $15.4 billion at year-end 2016. This figure includes volume from syndications that System institutions have with other System institutions as well as with non-FCS institutions.

At year-end 2016, the System had $4.7 billion in net eligible-borrower loan participations with non-System lenders. Net eligible-borrower loan participations peaked in 2010 at $5.4 billion when sales of these participations were at a low point. The volume of eligible-borrower loan participations purchased from non-System lenders has grown from $6.3 billion

Figure 6
Loan participation transactions with non-System lenders, 2011– 2016
As of December 31
Dollars in billions



Sources: Farm Credit System Call Reports.

at December 31, 2011, to $7.9 billion at year-end 2016, and the volume of eligible-borrower loan participations sold to non-System lenders was $3.2 billion at year-end 2016, up from $2.3 billion in 2011.

In addition to participating in loans to eligible borrowers, FCS institutions have the authority to work with non-System lenders that originate "similar-entity" loans. A similar entity borrower is not eligible to borrow directly from an FCS institution, but because the borrower's operation is functionally similar to that of an eligible borrower's operation, the System has authority to participate in the borrower's loans (the participation interest must be less than 50 percent). Similar-entity loans contain other limitations as specified in section 4.18A of the Farm Credit Act.

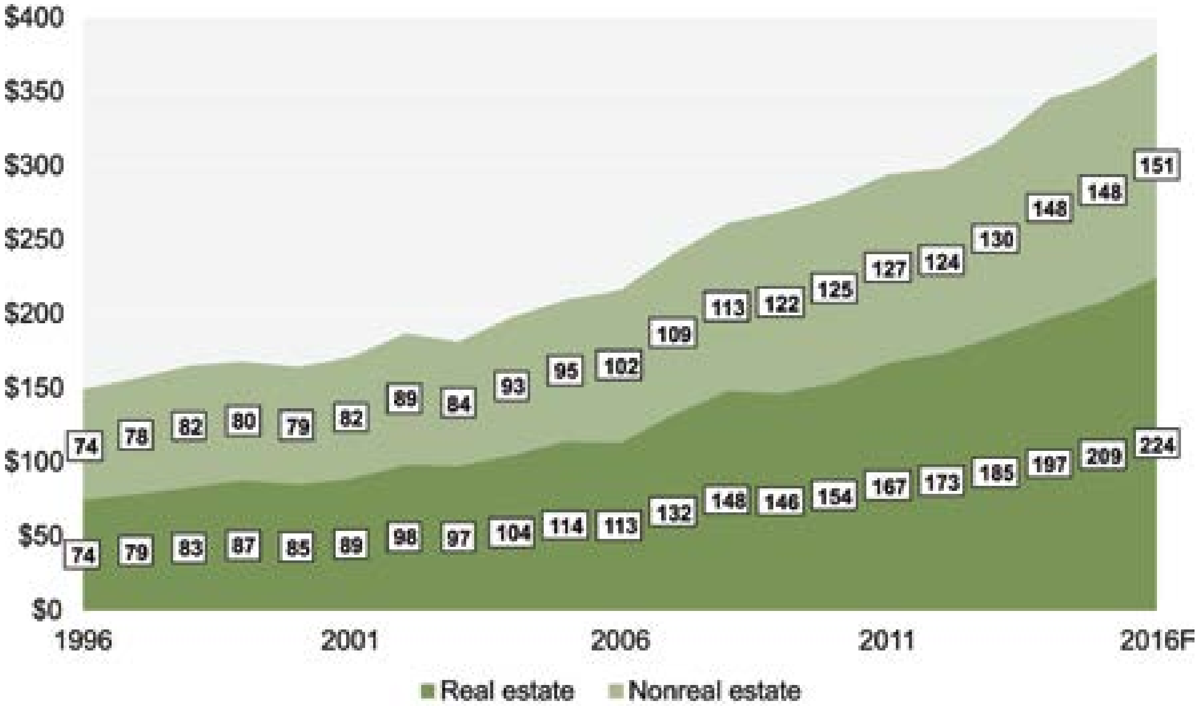
The System had $12.8 billion in acquired similar-entity loan participations as of December 31, 2016, down from $13.8 billion the prior year. As figure 6 indicates, the volume of similar-entity participations that System institutions sell to non-System institutions is relatively small, amounting to $700 million or less each year over the past six years.

AgDirect, LLP

AgDirect is a point-of-sale agricultural equipment financing program developed by Farm Credit Services of America, ACA, which is affiliated with AgriBank, FCB. AgDirect allows System institutions to participate in retail installment loans or leasing contracts originated by equipment dealerships. The program expands financing options for borrowers and institutions, and provides an additional revenue stream to AgDirect owners and AgriBank.

AgDirect financing is available in many states, with 16 System institutions participating through AgDirect. As of December 31, 2016, the total outstanding participation interests in loans purchased was $3.3 billion.

Figure 7
U.S. farm business debt, 1996 – 2015
Dollars in billions



Source: FCA's Office of Regulatory Policy, based on data from USDA, Economic Research Service.

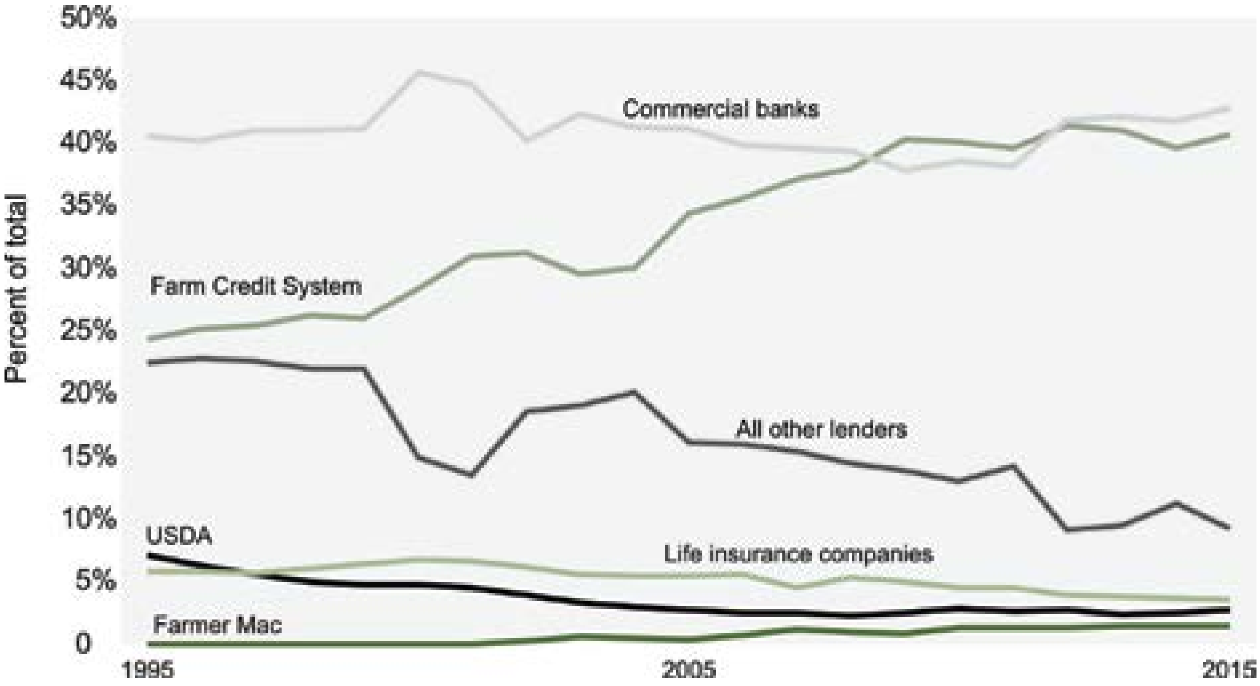
Farm debt and market shares

The U.S. Department of Agriculture's estimate of total farm business debt for the year ended December 31, 2016, was $376 billion, up 5.3 percent from its $357 billion estimate for year-end 2015.

USDA estimates that, from 2006 to 2016, total farm business debt rose by more than $180 billion, or 74 percent. (See figure 7.) During this period, farmers invested heavily in new capital items, and they took on more debt to cover rising farm production costs. Farm real estate debt grew 7.5 percent in 2016, up from the 6.1 percent rise in 2015. Non-real estate debt grew by 2.3 percent after falling slightly in 2015. Weak profit margins for major crops and livestock enterprises in 2016 reduced the rate by which producers paid down their debt and led some producers to borrow more.

On the supply side, creditors had sufficient funds to lend in 2016. Because of the continued need to finance farm production expenses, demand for credit could remain strong in 2017. On the other hand, higher farm interest rates could weaken demand for credit, particularly when used for new purchases.

Figure 8
Estimated market shares of U.S. farm business debt, 1995 – 2015



Source: USDA, Economic Research Service.
Note: Year-end estimates shown.

The most current market share information from USDA is for year-end 2015. USDA's estimate of debt by lender shows that the System held 40.6 percent of total farm business debt, while commercial banks held 42.7 percent. (See figure 8).

The System's market share of total farm business debt has been relatively stable in recent years. Except for brief periods, the FCS has typically had the largest market share of farm business debt secured by real estate. At year-end 2015, the System held 46.3 percent of this debt; by comparison, commercial banks held 37.9 percent.

Commercial banks have historically dominated non-real estate farm lending. At year-end 2015, commercial banks held 49.5 percent of this debt, and the System held 32.6 percent.

Serving Young, Beginning, and Small Farmers and Ranchers

The Farm Credit Act requires Farm Credit System banks and associations to have programs to provide financially sound and constructive credit and related services to young, beginning, and small (YBS) farmers and ranchers. Loans to YBS borrowers can help individuals enter the agriculture industry, and they can help smooth the transition of farm businesses from one generation to the next. They also allow System institutions to serve a more diversified customer base — from very small to very large operations, from producers of grain staples for export to producers of organic foods for local and regional food markets.

At FCA, we are strongly committed to ensuring that the System fulfills its responsibility to serve all creditworthy producers, including those who are young, beginning, or small. We support the YBS mission through our regulatory activities, data collection and reporting, disclosure requirements, and examination activities.

We define young farmers as those who are 35 years of age or younger, beginning farmers as those who have 10 years or less of experience at farming or ranching, and small farmers as those who normally have annual gross sales of less than $250,000. These criteria apply to the date on which a loan is made.

Characteristics of YBS producers

Generally, the distribution of Systemwide total farm lending going to the three separate YBS categories has been consistent with the shares of these farmer segments in the total farmer population. The smallest share of total System farm lending goes to the young farmer segment, and the largest share goes to the small farmer segment. Below, we look at some trends in these categories, then we discuss the System's lending to YBS borrowers.

Young

According to the 2012 Census of Agriculture, less than 6 percent of all principal farm operators and just over 8 percent of all operators (primary, secondary, and tertiary operators) were under 35 years of age in 2012. These percentages have held relatively constant from 2002 to 2012. Demographic data generally show the share of those under 35 has been relatively stable over the past decade, while median or average ages have generally been rising.

Beginning

The Census of Agriculture data show a steady decline in the share of principal farm operators who have been on their farms for less than 10 years. Of the 2.1 million principal operators in 2012, 22 percent had been on their farms for less than 10 years. Thirty years ago, that percentage was much higher: 38 percent of all principal operators in 1982 had been on their farms for less than 10 years.

Small

U.S. farms have been consolidating for generations as new technologies have increased productivity and reduced the number of farms needed. From 1982 to 2012, the share of total farms considered to be small farms — those with $250,000 or less in farm sales — declined from 96 percent to 88 percent. Within this large segment are farming operations that are growing in size or producing higher-margin agricultural products for local markets, often on a seasonal basis.

FCS lending to YBS borrowers

The Farm Credit Act stipulates that each System bank must have written policies that direct each association board to have a program for furnishing sound and constructive credit and financially related services to YBS farmers. Associations must also coordinate with other government and private sources of credit in implementing their YBS programs. In addition, each institution must report yearly on the lending volume, operations, and achievements of its YBS program. (See the YBS Programs section on page 31.)

FCA regulations require each System lender's YBS program to include a mission statement that describes the program's objectives and specific means to achieve the objectives. The regulations also require each program to include annual quantitative targets for credit to YBS farmers; these targets should be based on reliable demographic data for the institution's lending territory. YBS programs must also include outreach efforts and annual qualitative goals for offering credit and related services that are responsive to the needs of YBS farmers.

The association's board oversight and reporting are integral parts of each YBS program. Each association's operational and strategic business plan must include the goals and targets for its YBS lending. And each association must have an internal control program to ensure proper implementation and management of the YBS program; it must also have methods in place to ensure that credit is provided in a safe and sound manner and within the lender's risk-bearing capacity.

FCA's oversight and examination activities encourage System institutions to assess their performance and market penetration in the YBS area. This self-assessment increases each institution's awareness of its mission and prompts it to allocate resources to serve the YBS market segment.

In addition, we continuously consider ways to support and strengthen the System's YBS programs. For example, we issued an informational memorandum to System associations in 2014 to outline ways they can enhance their service to YBS farmers through loan programs provided by USDA's Farm Service Agency.

Please note that, because the YBS mission is focused on each borrower group separately, data are reported separately for each of the three YBS categories. Since some loans fit more than one category, adding the loans across categories does not produce an accurate measure of the System's YBS lending involvement.

System's YBS lending in 2016[2]

The number and dollar volume of loans made during the year are indicators of the extent to which System institutions are serving YBS farmers. Table 4A contains information on loans made in each category during the year; table 4B provides information on loans outstanding at the end of 2016.

Loans and commitments to YBS farmers include real estate mortgages, production and intermediate-term loans, loans to processing and marketing operations, and leases. These loan types are what we call "farm lending" in this analysis; they are a subset of total Farm Credit System lending. They do not include rural home loans.

Table 4A
YBS loans made during 2016
As of December 31

	Number of loans	Percentage of total number of System farm loans	Dollar volume of loans in millions	Percentage of total volume of System farm loans	Average loan size
Young	62,000	17.0	$9,247	11.7	$149,143
Beginning	79,166	21.7	$12,707	16.0	$160,514
Small	149,691	41.1	$12,207	15.4	$81,545

Table 4B
YBS loans outstanding
As of December 31, 2016

	Number of loans	Percentage of total number of System farm loans	Dollar volume of loans in millions	Percentage of total volume of System farm loans	Average loan size
Young	190,995	18.3	$27,784	11.0	$145,471
Beginning	279,019	26.7	$42,817	17.0	$153,457
Small	501,874	48.1	$47,699	18.9	$95,042

Sources: Annual Young, Beginning, and Small Farmer Reports submitted by each System lender through the Farm Credit banks.
Note: Since the totals are not mutually exclusive, one cannot add across young, beginning, and small categories to count total YBS lending. In 2016, the Farm Credit System made 363,988 new farm loans, totaling $79.261 billion. As of December 31, the System had 1,043,246 farm loans outstanding, amounting to $252.341 billion.

2. System data on service to YBS farmers and ranchers cover the calendar year and are reported at year-end. The statistics show loans made during the year (both number of loans and dollar volume of loans), as well as loans outstanding at year-end (both number and dollar volume). The volume measure includes loan commitments to borrowers, which typically exceed actual loan advances. Borrowers may have more than one loan; thus the loan numbers reported here do not directly measure the number of borrowers.

In table 5A, we show the change from 2015 to 2016 in the dollar volume of new loans made to YBS farmers, as well as the change in new YBS loan numbers. In table 5B, we show the same information for outstanding YBS lending from 2015 to 2016.

Table 5A
Change in new YBS lending from 2015 to 2016

	Dollar Volume	Loan Numbers
Young	−1.9%	−0.2%
Beginning	−0.3%	−0.6%
Small	3.3%	−0.2%

Table 5B
Change in outstanding YBS lending from 2015 to 2016

	Dollar Volume	Loan Numbers
Young	2.6%	1.2%
Beginning	3.2%	1.5%
Small	2.1%	−0.1%

Sources: Annual, Young, Beginning, and Small Farmer Reports submitted by each System lender through the Farm Credit banks.

Comparing the System's YBS lending with overall lending

In 2016, the YBS shares of the dollar volume of all new farm loans made generally increased while the YBS shares of the System's total farm loan numbers declined slightly. The dollar volume of all System farm loans made (including commitments) during 2016 was $79.261 billion, down 5.4 percent from 2015, and the total number of farm loans made in 2016 (363,988) grew by only half a percentage point from 2015.

In recent years, the shares of new System farm loans made to young and beginning farmers have been slowly rising. From 2015 to 2016, however, these shares declined, albeit very slightly. For young farmers, the share fell from 17.2 percent in 2015 to 17.0 percent in 2016. For beginning farmers, the share fell from 22.0 percent to 21.7 percent. (See figures 9A and 9B.)

However, the shares of loan dollar volume crept up slightly — from 11.3 percent to 11.7 percent for young farmers and from 15.2 percent to 16.0 percent for beginning farmers.

In 2016, the System's small farmer lending performed much like its young and beginning farmer lending. The share of the total number of new loans to small farmers fell from 41.4 percent to 41.1 percent, and the share of loan volume increased — from 14.1 percent in 2015 to 15.4 percent in 2016. (See figure 9C.)

YBS results for individual associations versus the System's average YBS results

YBS lending varies across FCS associations. Some institutions may have a high number or dollar volume of loans in one category and low in another, while activity levels for other institutions may be just the opposite. Because farming operations differ by type and size across lending territories, the need for credit and related services of the farming base can vary from association to association.

While the share of total outstanding System farm loans to young farmers was 18 percent, this share ranged from 4 percent to 27 percent at individual associations. Whereas 27 percent of the System's total farm loans outstanding were to beginning farmers in 2016, this share ranged across associations from 13 percent to 62 percent.

In 2016, 48 percent of the System's total farm loans outstanding went to small farmers, with the range for individual associations from 15 percent to 83 percent. In about 43 percent of all associations, the share of total farm loans outstanding going to small farmers exceeded the Systemwide average.

YBS programs

Delivering credit services

As a government-sponsored enterprise with a statutory YBS mandate, the FCS is in a unique position to assist the next generation of American farmers, and System institutions have developed and cultivated YBS programs to provide this assistance.

Using these programs, System associations may offer lower interest rates and more flexible underwriting standards, such as higher loan-to-value ratios or lower debt coverage requirements, to allow potential YBS borrowers to qualify for loans. Associations also offer training and education through their YBS programs to help these borrowers be successful.

In 2016, System institutions used the following methods to help them make loans to young, beginning, and small farmers.

- **Interest rate concessions —** offered to young and beginning farmers by more than 60 percent of associations and to small farmers by 54 percent. These percentages were consistent with 2015.

Figure 9A, 9B, and 9C
Loans made to, and loans outstanding to, YBS farmers and ranchers, 2001 – 2016

Figure 9A
Young farmers and ranchers

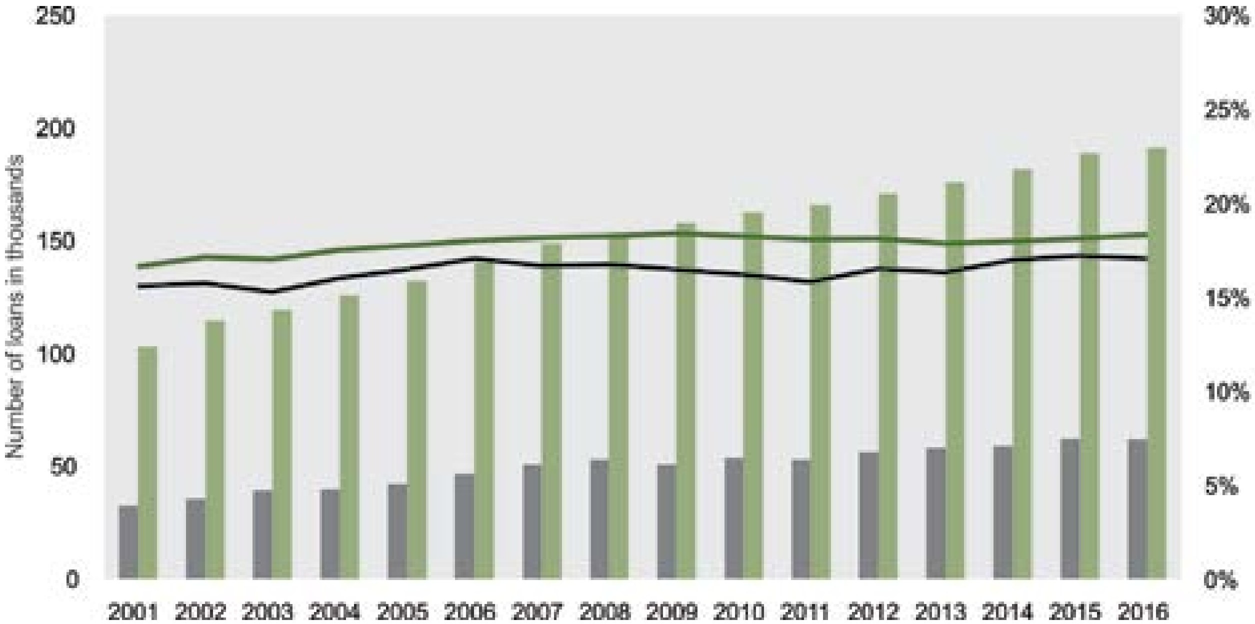


Figure 9B
Beginning farmers and ranchers

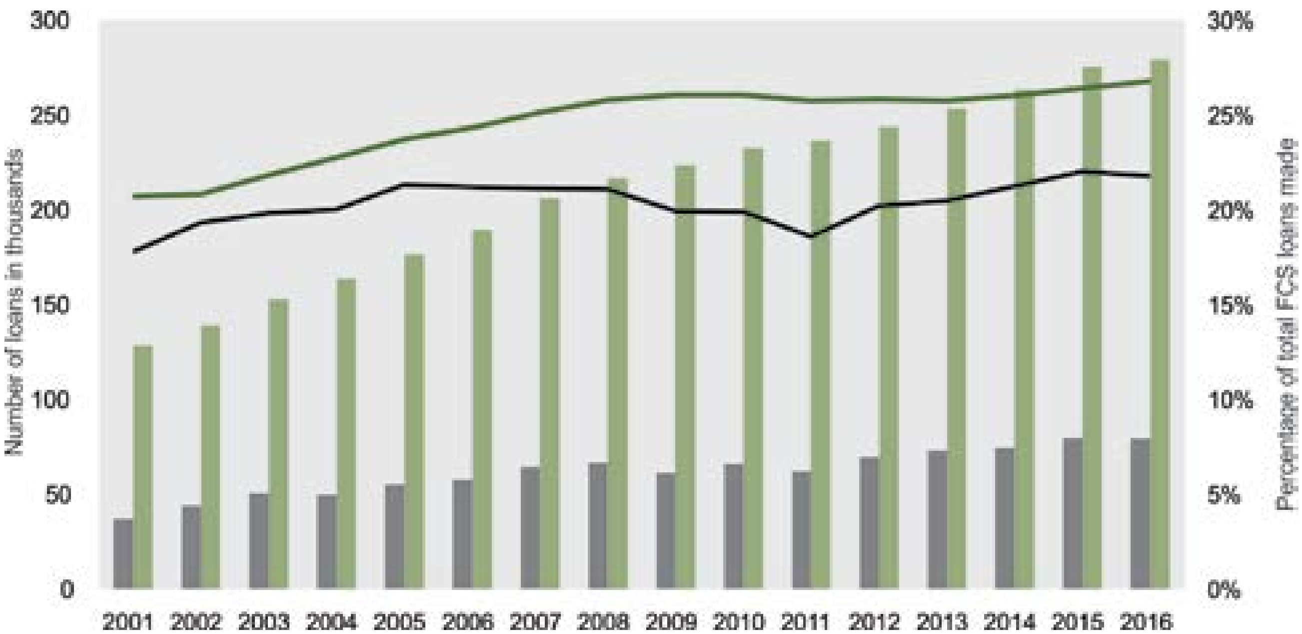
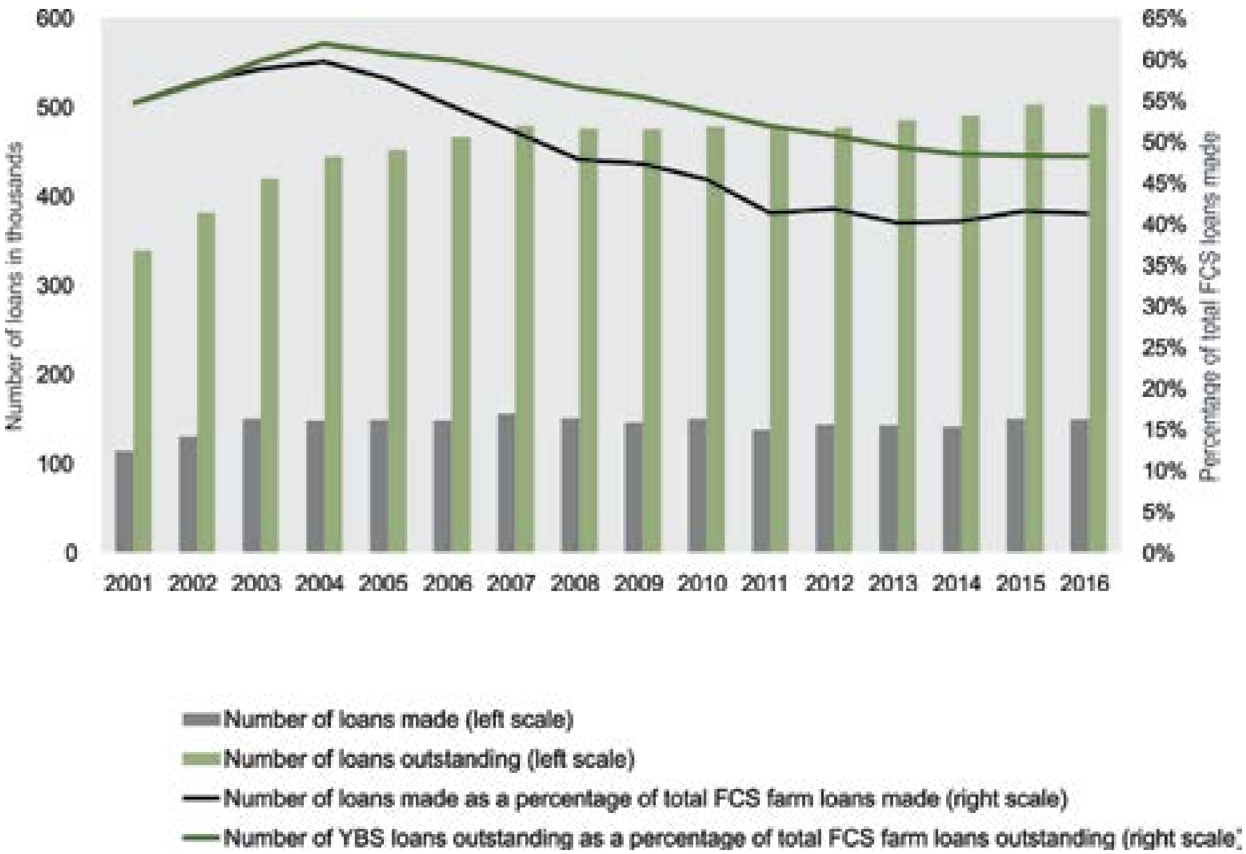


Figure 9C
Small farmers and ranchers



- **Customized or YBS-specific underwriting standards —** offered by 61 percent of associations to young farmers, by 59 percent to beginning farmers, and by 55 percent to small farmers. The percentage of associations that used this method for young farmers decreased in 2016, returning to the 2014 level. The percentages using this method for beginning and small farmers were similar to those in 2015.
- **Concessionary loan fees —** offered to young farmers by 36 percent of associations, to beginning farmers by 41 percent, and to small farmers by 35 percent of associations. These percentages were similar to those in 2015.
- **Specifically designed loan covenants —** offered to young farmers by 15 percent of associations, to beginning farmers by 16 percent, and to small farmers by 15 percent. These percentages slightly decreased from 2015.
- **Personal Guarantors/Co-Signers** — used by almost 60 percent of associations for young and beginning farmers and by over 50 percent of associations for small farmers.

As required by the Farm Credit Act, System institutions coordinate their YBS programs with other government programs whenever possible. Several state and federal programs provide interest rate reductions, guarantees, or loan participations for YBS farmers. By partnering with these government programs, FCS institutions are able to better mitigate the credit risk to these borrowers.

In 2016, approximately 45 percent of System institutions used government loan participations for loans to young farmers, 43 percent used them for loans to beginning farmers, and 41 percent of associations used them for loans to small farmers. All of these percentages were up from 2015.

Also, System institutions continued to use guarantee programs from federal, state, and local sources for YBS lending. In 2016, about 70 percent of associations — almost the same as in 2015 — indicated they had obtained loan guarantees for YBS loans.

YBS program management

FCS institutions are using various approaches and sources of information to more effectively manage and assess their YBS programs. In 2016, they continued to develop mission statements that describe program objectives and quantitative measures for achieving those objectives.

Through their marketing plans, the majority of institutions identified new market segments and developed strategies and actions to market to these segments, which include YBS farmers and ranchers. The goal is to ensure that the institutions reach out to all demographics, geographic locations, and types of agriculture practiced in their territories. To measure performance of individual YBS programs, associations primarily used annual goals for loan volume and the number of loans made.

Many associations use advisory committees to provide input on credit and related services to best serve the needs of YBS farmers in their territories. The percentage of all associations using advisory committees went up from 40 percent in 2015 to 50 percent in 2016. Advisory committees are composed of a variety of stakeholders, both internal and external.

In general, these YBS advisory committees provide input to board members at least annually. In 2016, advisory committees provided valuable input that improved outreach efforts and services for YBS farmers; for example, some committees recommended additional loan programs and more educational efforts.

FCS institutions continued to provide training to staff on their YBS programs. In 2016, almost all associations (more than in 2015) provided training at least annually. In addition, associations continue to link YBS performance criteria to the performance evaluations of management and lending staff.

Training, outreach, and education

Most System institutions offer opportunities to educate existing and potential YBS borrowers. In 2016, they developed or maintained comprehensive educational or outreach programs, sponsored seminars delivered by third parties, and sponsored local organizations that deliver education and training. Associations provide these opportunities by using the expertise of their own staff, by coordinating with other associations, and by partnering with district banks.

FCS institutions continued to conduct new studies or market research in 2016 to better understand the demographics and financial needs of current and potential YBS borrowers. The percentage of associations that completed or updated studies was comparable to 2015, and the institutions that didn't conduct studies in 2016 or 2015 relied upon either recently completed studies or the most recent Ag Census data to understand YBS demographics and financial needs in their territories.

System institutions use a variety of methods to train and educate current and potential YBS borrowers. YBS programs continue to evolve to meet the needs of changing agricultural markets. FCS programs are specialized for the YBS segment and are customized to meet the specific needs of YBS farmers through ongoing training and education. These YBS-specific programs cover such topics as the following:

- Production and risk management
- Business management, including financial recordkeeping
- Succession and estate planning
- Leadership and business start-up

In addition, System institutions continued to work with local groups, collaborating with colleges and universities and youth agricultural groups to foster continuing education. These organizations provided education in various ways: by providing online and in-person workshops and by disseminating information through social media and web-based resource centers.

Identifying and reaching potential YBS borrowers are key to fulfilling the System's mission. FCS institutions continue to use a variety of methods to market to potential YBS borrowers. Institutions foster early relationships by partnering with state or national young farmer groups, colleges of agriculture, land-grant extension offices, state or national cooperative association leadership programs, local chapters of 4-H and FFA, Ag in the Classroom, and other agricultural organizations. These outreach, training, and educational activities include local and regional YBS food producers and supporters of local food systems, as well as producers who are veterans and members of minority groups.

Institutions reach out to these potential borrowers by providing grant money, participating in conferences related to local food markets, advertising in different languages and through diverse media hubs, and creating specific programs to enhance credit opportunities for all YBS borrowers.

Regulatory Policy and Approvals

As the regulator of the Farm Credit System, we issue regulations, policy statements, and other guidance to ensure that the System, including its banks, associations, Farmer Mac, and other related entities, complies with the law, operates in a safe and sound manner, and efficiently carries out its statutory mission. Our regulatory philosophy is to provide a regulatory environment that enables the System to safely and soundly offer high-quality, reasonably priced credit and related services to farmers and ranchers, agricultural cooperatives, rural residents, and other entities on which farming depends.

We strive to develop balanced, well-reasoned regulations whose benefits outweigh their costs. With our regulations, we seek to meet two general objectives. The first is to ensure that the System continues to be a dependable source of credit and related services for agriculture and rural America while also ensuring that System institutions comply with the law and with the principles of safety and soundness. The second is to promote participation by member-borrowers in the management, control, and ownership of their System institutions.

Regulatory activity in 2016

The following paragraphs describe some of FCA's regulatory efforts in 2016, along with several projects that will remain active in 2017. More information on these topics is available on our website.

To access board policy statements, FCA bookletters, and informational memorandums, go to www.fca.gov/law/guidance.html. To access proposed rules and final rules whose effective dates are pending, go to www.fca.gov. Under the Law & Regulations tab, select **FCA Regulations**. Then from the menu on the left, select **FCA Pending Regulations and Notices**.

Governance

Freedom of Information Act (FOIA) regulations — The FCA board approved a final rule in September 2016 to amend the regulations to reflect updates required by the FOIA Improvement Act of 2016.

Military Lending Act — We issued an informational memorandum to System institutions in February 2017 to provide information about the Military Lending Act, which protects active -duty members of the military, their spouses, and their dependents from certain lending practices.

New accounting standard on financial instruments – credit losses — We issued an informational memorandum to System institutions in September 2016 to provide initial information about Accounting Standard Update No. 2016-13, Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.

Guidelines for proposals to merge or consolidate banks and associations — We issued an informational memorandum to System institutions in June 2016 to help ensure that initial merger requests contain all the necessary information.

Compensation for 2017 — We issued an informational memorandum in January 2017 to communicate the annual adjustment in the maximum annual compensation payable to FCS bank directors. The adjustment reflects the change in the Consumer Price Index.

Lending

Flood insurance — The FCA board approved a final rule in October 2016 to amend the regulations on flood insurance to implement the private flood insurance provisions of the Biggert-Waters Flood Insurance Reform Act of 2012.

Personal and intangible property — We issued an informational memorandum to System institutions in August 2016 to provide guidance on how collateral evaluation policies and procedures should address the evaluation of personal and intangible property that is taken as security for a loan.

Servicing loans to borrowers in distressed industries — We issued an informational memorandum to System institutions in January 2016 as a follow-up to the January 2015 memorandum titled "Portfolio Management in Volatile Times." The 2016 memorandum expanded the discussion of the servicing of loans when industries are under widespread stress.

Loan syndications and assignment markets study — We continued to study loan syndications and assignment markets to determine whether our regulations should be modified to reflect significant changes in the markets.

Capital and investments

Capital requirements — The FCA board approved a final rule in March 2016 to modify the regulatory capital requirements for System banks and associations. The purpose of the rule is to modernize capital requirements while ensuring that institutions continue to hold enough regulatory capital to fulfill their mission as a government-sponsored enterprise. The rule ensures that the System's capital requirements are comparable to the Basel III framework and the standardized approach that the federal banking regulatory agencies have adopted, but it also recognizes the cooperative structure and the organization of the System.

Margin and capital requirements for swap entities — The FCA board approved an interagency final rule in June 2016 that finalizes the interim final rule to implement Title III of the Terrorism Risk Insurance Program Reauthorization Act of 2015. The rule exempts the noncleared swaps and noncleared security-based swaps of certain counterparties from the initial and variation margin requirements of the joint final rule on margin and capital requirements for covered swap entities.

Tier 1/tier 2 capital framework guidance — We issued an informational memorandum to System institutions in November 2016 to communicate our expectations for effective implementation of the tier 1/tier 2 capital regulations. In addition, the FCA board approved a bookletter in December 2016 to clarify and interpret certain provisions of the final rule.

Similar-entity authority — The FCA board approved a bookletter in March 2016 that provides guidance to System institutions that purchase participations in loans originated by non-System lenders to qualified similar-entity borrowers.

Farmer Mac

Farmer Mac board governance and standards of conduct — The FCA board approved a final rule in July 2016 that clarifies and strengthens existing regulations on Farmer Mac board governance and standards of conduct.

Farmer Mac investment eligibility — The FCA board approved a proposed rule in January 2016 that would consider changes related to eligible investment asset classes and address the removal of references to credit ratings as required by section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Other

National Oversight and Examination Program for 2017 — We issued an informational memorandum in September 2016 that summarized the National Oversight Plan for 2017. The plan detailed strategies for addressing critical risks and other areas of focus.

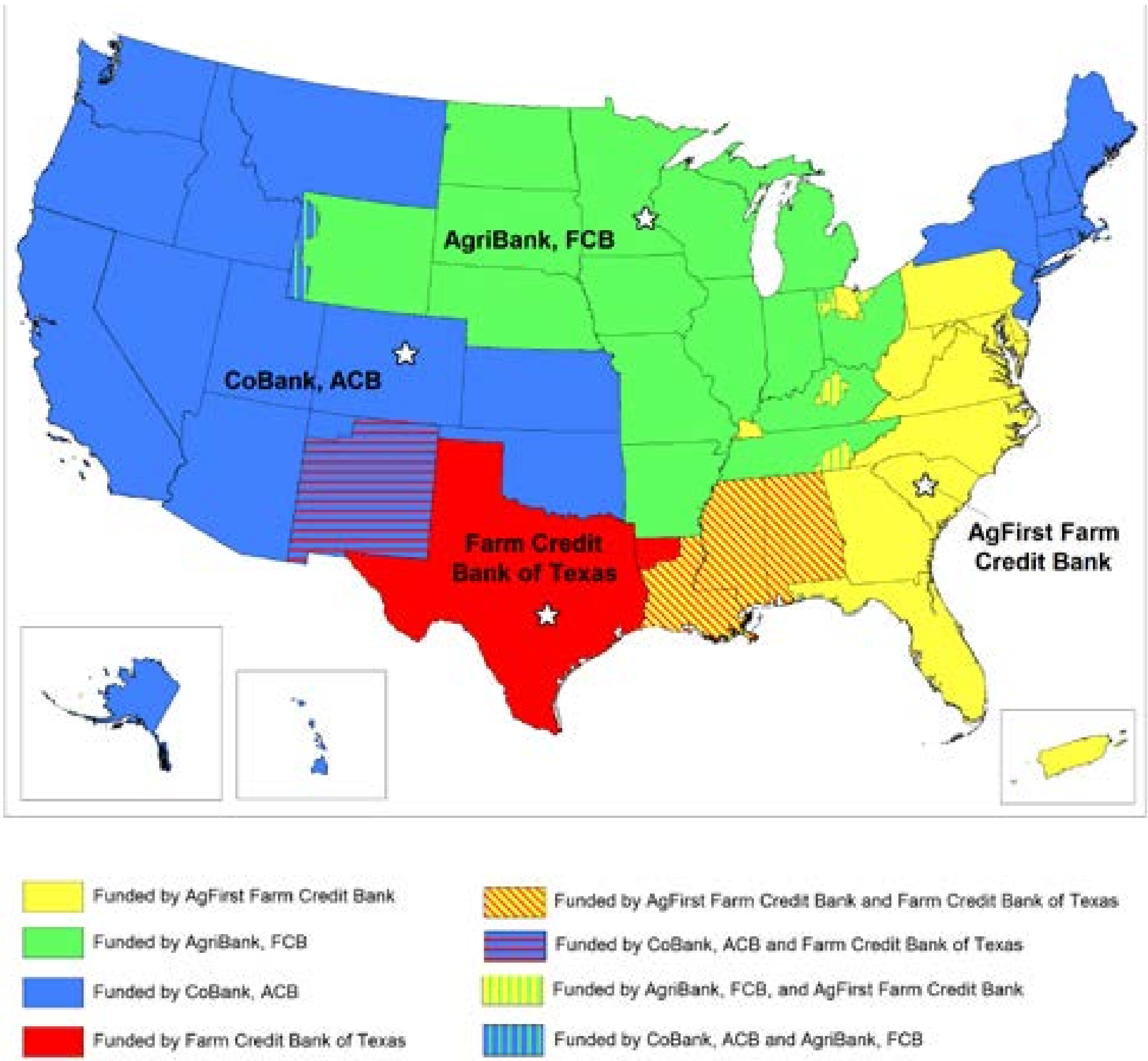
Corporate activity in 2016

In 2016 and early 2017, we analyzed and approved three corporate applications.

- On January 1, 2016, two agricultural credit associations (ACAs) affiliated with CoBank, ACB, merged their operations following stockholder approval. The production credit association (PCA) and federal land credit association (FLCA) subsidiaries associated with the ACAs also merged.
- On August 1, 2016, an ACA affiliated with the Farm Credit Bank of Texas relocated its headquarters.
- On January 1, 2017, two ACAs affiliated with CoBank merged their operations following stockholder approval. The PCA and FLCA subsidiaries associated with the ACAs also merged.

The total number of associations as of January 1, 2017, was 73 (71 ACAs and 2 FLCAs), compared with 74 associations a year earlier. Figure 10 shows the chartered territory of each FCS bank. Details about specific corporate applications are available on FCA's website at www.fca.gov/info/mergers.html.

Figure 10
Chartered territories of FCS banks



Note: As of January 1, 2017, CoBank was funding 23 associations in the indicated areas and serving cooperatives nationwide; Farm Credit Bank of Texas was funding 14 associations; AgriBank, FCB, was funding 17 associations; and AgFirst Farm Credit Bank was funding 19 associations. The FCS contains a total of 77 banks and associations.

Funding activity in 2016

During 2016, the System maintained reliable access to the debt capital markets. Investors were attracted by the System's status as a government-sponsored enterprise (GSE), as well as its long-term financial performance and strength.

Risk spreads and pricing on System debt securities during 2016 remained favorable for the System, with some instances of volatility relative to corresponding U.S. Treasuries. Demand for GSE debt increased because of regulatory changes promoting its use coupled with the continuing decline in debt issuances by the two housing-related government-sponsored enterprises, which are in conservatorship. As a result of the strong demand for System debt, the System was able to continue to issue debt on a wide maturity spectrum at very competitive rates.

The System funds loans and investments primarily with a combination of consolidated Systemwide debt and equity capital. The Funding Corporation, the fiscal agent for System banks, sells debt securities such as discount notes, bonds, designated bonds, and retail bonds on behalf of the System. This process allows funds to flow from worldwide capital-market investors to agriculture and rural America, thereby providing rural communities with efficient access to global resources. At year-end 2016, Systemwide debt outstanding was $257.8 billion, representing a 5.9 percent increase from the preceding year-end.

Several factors contributed to the $14.5 billion increase in Systemwide debt outstanding. Gross loans increased $12.9 billion in 2016, while the System's combined investments, federal funds, and cash balances increased by $3.2 billion during the year.

The System had $2.50 billion in outstanding perpetual preferred stock at the end of 2016, $309 million more than at the previous year-end. It had $499 million in outstanding subordinated debt at year-end 2016, a decrease of $1.05 billion from year-end 2015. Some System institutions called their subordinated debt after FCA approved a new rule that changed the regulatory capital treatment of subordinated debt; the rule took effect on January 1, 2017.

As the System's regulator, we have several responsibilities pertaining to System funding activities. The Farm Credit Act requires the System to obtain our approval before distributing or selling debt. We make it a high priority to respond efficiently to the System's requests for debt issuance approvals. For example, we have a program that allows the System to issue discount notes at any time up to a maximum of $60 billion as long as it provides us with periodic reports on this activity. In addition, we approve the majority of longer-term debt issuances through a monthly "shelf" approval program. For 2016, we approved $186.5 billion in longer-term debt issuances through this program.

The amount of debt issued by the System increased significantly in 2016. For the 12 months ended December 31, 2016, the System issued $334 billion in debt securities, compared with $298 billion for 2015, $330 billion for 2014, $377 billion for 2013, and $371 billion for 2012. The System issued more debt in 2016 primarily because it exercised more call options on its outstanding debt. Unsettling global events, as well as intermittent domestic economic concerns, caused significant volatility during the year, which created advantageous repricing opportunities for System callable debt. In fact, the $58 billion in calls exercised during 2016 was $5 billion more than the combined total for the two preceding years.

Favorable investor sentiment during 2016 and a continuation of relatively low yields on the full spectrum of debt instruments allowed the System to access a wide range of debt maturities. Their weighted average of remaining maturity decreased by just over one month during 2016 to 2.7 years. The weighted-average interest rates for insured debt increased for a second consecutive year, going from 1.01 percent as of December 31, 2015, to 1.18 percent as of December 31, 2016.

To participate in the issuance of an FCS debt security, a System bank must maintain, free from any lien or other pledge, specified eligible assets (available collateral) that are at least equal in value to the total amount of its outstanding debt securities. Securities subject to the available collateral requirements include Systemwide debt securities for which the bank is primarily liable, investment bonds, and other debt securities that the bank may have issued individually.

Furthermore, until recently, our regulations required each System bank to maintain a net collateral ratio (primarily assets divided by liabilities) of not less than 103 percent.[3] We required certain System banks to maintain higher minimum net collateral ratios. Throughout 2016, all System banks kept their net collateral ratios above the required minimum, with 105.5 percent being the lowest for any single bank as of December 31, 2016.

All System banks have kept their respective days of liquidity above the required minimum levels. The lowest liquidity levels at any single bank as of December 31, 2016, were as follows:

- 22 days (15 days regulatory minimum) of Level 1 assets
- 52 days (30 days regulatory minimum) of Level 1 and 2 assets
- 117 days (90 days regulatory minimum) of Level 1, 2, and 3 assets
- 143 days overall (including the supplemental liquidity buffer)

In addition to the protections provided by the joint and several liability provision, the Funding Corporation and the System banks have entered into the following voluntary agreements.

- The Amended and Restated Market Access Agreement, which establishes certain financial thresholds and provides the Funding Corporation with operational oversight and control over the System banks' participation in Systemwide debt obligations.
- The Amended and Restated Contractual Interbank Performance Agreement, which is tied to the Market Access Agreement and establishes certain measures that monitor the financial condition and performance of the institutions in each System bank's district. For all of 2016, all Farm Credit System banks maintained scores higher than the benchmarks in the Contractual Interbank Performance Agreement.

3. FCA's new tier 1/tier 2 capital regulations, which took effect on January 1, 2017, eliminated the net collateral ratio for the banks.

Maintaining a Dependable Source of Credit for Farmers and Ranchers

As federally chartered cooperatives, the banks and associations of the Farm Credit System are limited-purpose lenders. According to Congress, the purpose of the FCS is to "improve the income and well-being of American farmers and ranchers" by providing credit and related services to them, their cooperatives, and to "selected farm-related businesses necessary for efficient farm operations."

Making loans exposes the System to risk. To manage this risk, System institutions must have both sufficient capital and effective risk-management controls.

As the independent regulator of the FCS, the Farm Credit Administration examines and supervises System institutions. We monitor specific risks in each institution; we also identify and monitor risks that affect the System as a whole.

Through our risk-based examination and supervisory program, our examiners determine how issues facing an institution or the agriculture industry may affect the nature and extent of risk in that institution.

Our examiners also evaluate whether each institution is meeting its public mission. They do so by determining whether each institution is complying with laws and regulations and whether it is serving the credit needs of eligible agricultural producers and cooperatives, including young, beginning, and small farmers and ranchers.

Conducting a risk-based examination and oversight program

As required by the Farm Credit Act, FCA examines each FCS institution at least once every 18 months. In the interim between these statutory examinations, we also monitor and examine institutions as risk and circumstances warrant. This approach allows us to customize our examination activities to each institution's specific risks. In addition, we develop a National Oversight Plan every year that takes certain systemic risks into account.

We have designed our examination and oversight program to monitor and address FCS risk as effectively and efficiently as possible. Therefore, we assign highest priority to institutions, or the parts of an institution's operations, that present the greatest risk. This approach also considers the ability of an FCS institution to identify and manage both institution-specific and systemic risks. When institutions are either unable or unwilling to address unsafe and unsound practices or to comply with laws and regulations, we take appropriate supervisory or enforcement action.

Through our oversight, we require FCS institutions to have the programs, policies, procedures, and controls to effectively identify and manage risks. For example, our regulations require FCS institutions to have effective loan underwriting and loan administration processes. We also have specific regulations requiring FCS institutions to maintain strong asset-liability management capabilities. Our oversight program also requires compliance with laws and regulations.

We use a comprehensive regulatory and supervisory framework for ensuring System safety and soundness. FCS institutions, on their own and in response to our efforts, continue to improve their risk management systems.

Identifying and responding to potential threats to safety and soundness

Because of the dynamics and risks in the agricultural and financial industries, FCA assesses whether FCS institutions have the culture, governance, policies, procedures, and management controls to effectively identify and manage risks. We employ various processes for evaluating certain systemic risks in both agriculture and the financial services industry that can affect an institution, a group of institutions, and the System as a whole.

Currently, we are emphasizing the following areas:

- **Intensifying credit risk — Deeper into the commodities cycle.** The cycle of declining prices in certain key commodities continues with many affected producers projecting losses or limited profits in 2017. This situation increased credit and collateral risk in some agricultural sectors. Fortunately, System institutions currently have the financial capacity and risk-bearing ability to work with borrowers experiencing stress. In January 2016, FCA issued an Informational Memorandum on servicing loans to borrowers in distressed industries. As we explained in this memorandum, we expect System institutions to intensify loan servicing efforts as borrowers begin encountering increased stress and we noted this is occurring. Conditions in the farm economy, as well as the response of FCS institutions to borrower stress, will require close attention from FCA examiners.

- Implementing the New Capital Regulations. FCA adopted a final rule establishing new capital regulations. These regulations went into effect on January 1, 2017. The regulations modernize the capital requirements and ensure institutions will hold enough capital to fulfill their mission as a government-sponsored enterprise and remain safe and sound. They also update the System's capital requirements to make them comparable with the Basel III framework regulations of other federal banking agencies, and to meet the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. We will assess the institutions' strategies and internal controls that promote accurate capital reporting and compliance with the new capital regulations over the next year.

When we identify systemic issues, we inform institutions about those issues by producing the following:

- FCA board policy statements
- Bookletters
- Reports of examination
- Informational memorandums

We keep an online library of documents. Go to our website at www.fca.gov, click on the Law & Regulations tab, and select Info Memos, Bookletters, and Other Guidance from the dropdown menu.

Measuring the System's safety and soundness

FCA uses the Financial Institution Rating System (FIRS) to indicate safety and soundness threats in each institution. Similar to the systems used by other federal banking regulators, the FIRS is a CAMELS-based system, with component ratings for capital, assets, management, earnings, liquidity, and sensitivity, all factoring into an overall composite rating.

The FIRS process includes quantitative benchmarks for evaluating institution performance, qualitative rating criteria for evaluating risk management practices, and outlook ratings for evaluating risks. These benchmarks help our examiners apply FIRS ratings consistently from one institution to the next.

Our examiners assign component and composite ratings to each institution on a scale of 1 to 5. A composite rating of 1 indicates an institution is sound in every respect. A rating of 3 means an institution displays a combination of financial, management, or compliance weaknesses ranging from moderate to severe. A 5 rating represents an extremely high immediate or near-term probability of failure.[4]

Through our monitoring and oversight program, our examiners continually evaluate institutional risk and regularly review and update FIRS ratings to reflect current risks and conditions. We disclose the FIRS composite and component ratings to the institution's board and CEO to give them perspective on the safety and soundness of their institution.

We also disclose these ratings to each association's funding bank to ensure that the bank takes any actions necessary to address safety and soundness issues as it administers its direct loan with the institution.

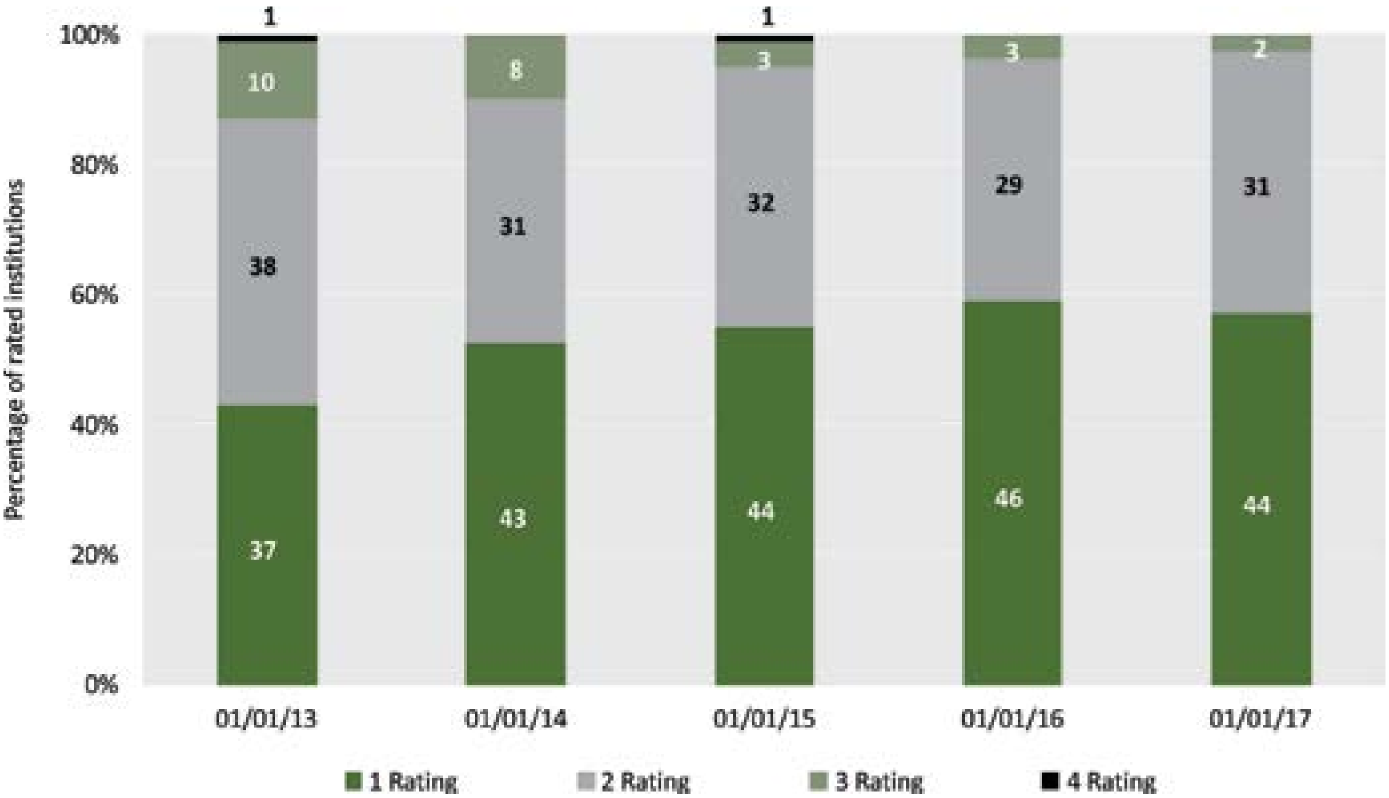
In addition, we issue examination reports and other communications to provide the institution board with an assessment of management's performance, the quality of assets, and the financial condition and performance of the institution.

As figure 11 shows, risks were higher in 2013 when stresses from the weather, price volatility, and the global economy affected some institutions. The ratings have improved since then, and the FIRS ratings on January 1, 2017, show that the financial condition and performance of the FCS was strong. The System's strength reduces the risk to investors in FCS debt, to the Farm Credit System Insurance Corporation, and to FCS institution stockholders.

At January 1, 2017, 44 FCS institutions were rated 1 (57 percent), 31 were rated 2 (40 percent), and 2 were rated 3 (3 percent). The institutions rated 3 were less than 1 percent of the System's total assets. There were no institutions with a 4 or 5 rating. (FCA applies FIRS ratings only to the banks and associations of the FCS, not to the System's service corporations. It also applies a FIRS rating to Farmer Mac, but Farmer Mac is not included in figure 11.)

4. See the Glossary for a complete description of the FIRS ratings.

Figure 11
Financial Institution Rating System (FIRS) composite ratings for the FCS, 2013 – 2017



Source: FCA's FIRS ratings database.

Note: Figure 11 reflects ratings for only the System's banks and direct-lending associations; it does not include ratings for the System's service corporations, Farmer Mac, or the Federal Farm Credit Banks Funding Corporation. Also, the numbers shown on the bars reflect the total number of institutions with a given rating; please refer to the y-axis to determine the percentage of institutions receiving a given rating.

Providing differential supervision and enforcement

FCA uses a risk-based supervisory and enforcement program to respond to the risks and particular oversight needs of each FCS institution. Risks are inherent in lending, and managing risks associated with a single sector of the economy — in this case, agriculture — presents an additional challenge for FCS lenders. If we discover unacceptable risks, we require institutions to take corrective action to mitigate the risks. Some corrective actions include reducing risk exposures, increasing capital and enhancing earnings, and strengthening risk management.

We use a three-tiered supervision program: normal supervision, special supervision, and enforcement actions.

Institutions under normal supervision are performing in a safe and sound manner and are complying with laws and regulations. These institutions are able to correct weaknesses in the normal course of business.

For those institutions displaying more serious or persistent weaknesses, we shift from normal to special supervision, and our examination oversight increases accordingly. Under special supervision, we give an institution clear and firm guidance to address weaknesses, and we give the institution time to correct the problems.

If informal supervisory approaches have not been or are not likely to be successful, we will use our formal enforcement authorities to ensure that FCS institutions are safe and sound and that they comply with laws and regulations. We may take an enforcement action for a number of reasons:

- A situation threatens an institution's financial stability.
- An institution has a safety or soundness problem or has violated a law or regulation.
- An institution's board is unable or unwilling to correct problems we have identified.

Our enforcement authorities include the following powers:

- To enter into formal agreements
- To issue cease-and-desist orders
- To levy civil money penalties
- To suspend or remove officers, directors, and other persons

If we take an enforcement action, the FCS institution must operate under the conditions of the enforcement document and report back to us on its progress in addressing the issues identified. The document may require the institution to take corrective actions in such areas as financial condition and performance, portfolio management, asset quality, and institution management or governance. Our examiners oversee the institution's performance to ensure compliance with the enforcement action.

As of January 1, 2017, no FCS institutions were under enforcement action.

Protecting borrower rights

Agricultural production is risky for many reasons — adverse weather, changes in government programs, international trade issues, fluctuations in commodity prices, and crop and livestock diseases. These risks can sometimes make it difficult for borrowers to repay loans.

The Farm Credit Act provides System borrowers certain rights when they apply for loans and when they have difficulty repaying loans. The act requires FCS institutions to notify borrowers of the right to seek restructuring of loans before the institutions begin foreclosure. It provides borrowers an opportunity to seek review of certain credit and restructuring decisions. The Farm Credit Act also provides borrowers the opportunity to buy or lease back their former agricultural properties when System institutions acquire the properties through foreclosure. FCA examines institutions to make sure that they are complying with these provisions.

We also receive and review complaints from borrowers who believe their rights have been denied. In 2016, we received 42 borrower complaints. The number of complaints increased in 2016 with the decline in the farm economy.

Generally, borrowers who contact us with complaints are seeking clarification, additional information, and options to redress their concerns. If we find violations of law or regulations, we have several options to bring about corrective action.

Condition of Farmer Mac

Farmer Mac is a stockholder-owned, federally chartered instrumentality of the United States and an institution of the Farm Credit System. Created in 1988, Farmer Mac provides a secondary market for agricultural real estate mortgage loans, rural housing loans, and rural utility cooperative loans.

This secondary market is designed to increase the availability of long-term credit at stable interest rates to America's rural communities and to provide liquidity and lending capacity to rural lenders.

Farmer Mac conducts activities through four programs:

- Farm & Ranch (formerly Farmer Mac I), which involves mortgage loans secured by first liens on agricultural real estate and rural housing.
- USDA Guarantees (formerly Farmer Mac II), which involves certain agricultural and rural loans guaranteed by the U.S. Department of Agriculture, including farm ownership loans, operating loans, and rural business and community development loans.
- Rural Utilities Program, which involves loans to finance cooperatively owned rural electrification and telecommunications systems.
- Institutional Credit, which involves Farmer Mac's purchase or guarantee of collateralized bonds known as AgVantage securities. AgVantage bonds are general obligations of lenders that are secured by pools of eligible loans.

Farmer Mac purchases eligible loans directly from lenders, provides advances against eligible loans by purchasing obligations secured by those loans, securitizes assets and guarantees the resulting securities, and issues long-term standby purchase commitments (standbys) for eligible loans. Securities guaranteed by Farmer Mac may be held either by the originator of the underlying assets or by Farmer Mac, or they may be sold to third-party investors.

FCA regulates Farmer Mac through the Office of Secondary Market Oversight (OSMO), which was established by the Food, Agriculture, Conservation, and Trade Act Amendments of 1991. This office provides for the examination and general supervision of Farmer Mac's safe and sound performance of its powers, functions, and duties.

The statute requires OSMO to be a separate office within our agency and to report directly to the FCA board on matters of policy. The law also stipulates that OSMO's activities must, to the extent practicable, be carried out by individuals who are not responsible for supervising the banks and associations of the FCS.

Through OSMO, we perform the following functions:

- Examine Farmer Mac at least annually for capital adequacy, asset quality, management performance, earnings, liquidity, and interest rate sensitivity
- Supervise and issue regulations governing Farmer Mac's operations
- Oversee and evaluate Farmer Mac's safety and soundness and mission achievement

OSMO reviews Farmer Mac's compliance with statutory and regulatory minimum capital requirements and supervises its operations and condition throughout the year. Table 5 summarizes Farmer Mac's condensed balance sheets at the end of each calendar year from 2011 to 2016.

Table 5
Farmer Mac condensed balance sheets, 2011 – 2016
As of December 31
Dollars in millions

	2011	2012	2013	2014	2015	2016	2015 – 2016
Total assets	$11,883.5	$12,622.2	$13,361.8	$14,287.8	$15,540.4	$15,606.0	0.4%
Total liabilities	$11,329.0	$12,029.2	$12,787.3	$13,506.0	$14,986.6	$14,962.4	–0.2%
Net worth or equity capital	$554.5	$593.0	$574.5	$781.8	$553.7	$643.6	16.2%

Sources: Farmer Mac's Annual Reports on Securities and Exchange Commission Form 10-K.

Capital

On December 31, 2016, Farmer Mac's net worth (that is, equity capital determined using generally accepted accounting principles [GAAP]) was $643.6 million, compared with $553.7 million a year earlier. Its net worth was 4.1 percent of its on-balance-sheet assets as of December 31, 2016, compared with 3.6 percent at the end of 2015. Net worth went up primarily because of increases in retained earnings and accumulated other comprehensive income. The increase in accumulated other comprehensive income occurred largely because Farmer Mac reclassified $2.0 billion of its USDA-guaranteed securities from available-for-sale to held-to-maturity.

When Farmer Mac's off-balance-sheet program assets (essentially its guarantee obligations) are added to its total on-balance-sheet assets, net worth was 3.1 percent as of December 31, 2016, compared with 2.6 percent in 2015. As of December 31, 2016, Farmer Mac continued to be in compliance with all statutory and regulatory minimum capital requirements.

At year-end 2016, Farmer Mac's core capital (the sum of the par value of outstanding common stock, the par value of outstanding preferred stock, paid-in capital, and retained earnings) remained above the statutory minimum requirement. As of December 31, 2016, it totaled $609.7 million, exceeding the statutory minimum capital requirements[5] of $466.5 million by $143.2 million or 30.7 percent.

Its regulatory capital (core capital plus allowance for losses) exceeded the required amount as determined by the Risk-Based Capital Stress Test.[6] Farmer Mac's regulatory capital totaled $617.1 million as of December 31, 2016, exceeding the regulatory risk-based capital requirement of $104.8 million by $512.3 million.

Regulatory capital was 4.0 percent of total Farm & Ranch and Rural Utilities Program volume (including both on- and off-balance-sheet volume but excluding USDA guarantees). Risk exposure on USDA guarantee loans is very low because they are guaranteed by the U.S. Department of Agriculture. Table 6 offers a historical perspective on capital and capital requirements for 2011 through 2016.

Table 6
Farmer Mac capital positions, 2011 – 2016
As of December 31
Dollars in millions

	2011	2012	2013	2014	2015	2016
GAAP equity	$554.5	$593.0	$574.5	$781.8	$553.7	$643.6
Core capital	$475.2	$519.0	$590.7	$766.3	$564.5	$609.7
Regulatory capital	$492.7	$535.9	$604.0	$776.4	$571.1	$617.1
Statutory requirement	$348.6	$374.0	$398.5	$421.3	$462.1	$466.5
Regulatory requirement	$52.9	$58.1	$90.8	$121.6	$72.2	$104.8
Excess core capital over statutory requirement*	$126.5	$145.0	$192.2	$345.0	$102.4	$143.2
Capital margin excess over the minimum	36.3%	38.8%	48.2%	81.9%	22.2%	30.7%

Sources: Farmer Mac's Annual Reports on Securities and Exchange Commission Form 10-K.

* Farmer Mac is required to hold capital at or above the statutory minimum capital requirement or the amount required by FCA regulations as determined by the Risk-Based Capital Stress Test model, whichever is higher.

5. The statute requires minimum capital of 2.75 percent for on-balance-sheet assets and 0.75 percent for off-balance-sheet obligations.
6. See the FCA website at www.fca.gov/info/farmer_mac_test.html for more information about the Risk-Based Capital Stress Test.

We published a proposed rule in February 2016 governing eligibility criteria for Farmer Mac's nonprogram investments. The proposed rule also includes revised creditworthiness standards; as required by the Dodd-Frank Wall Street Reform and Consumer Protection Act, these standards will replace references to credit ratings in these regulations. We expect the final rule to be presented for FCA board action in mid-2017.

We published a final rule in July 2016 on Farmer Mac's corporate governance and standards of conduct. The rule covers essential safety and soundness matters, including regulation, examination and enforcement authorities, required board committees, risk management, internal controls reporting, and disclosure requirements.

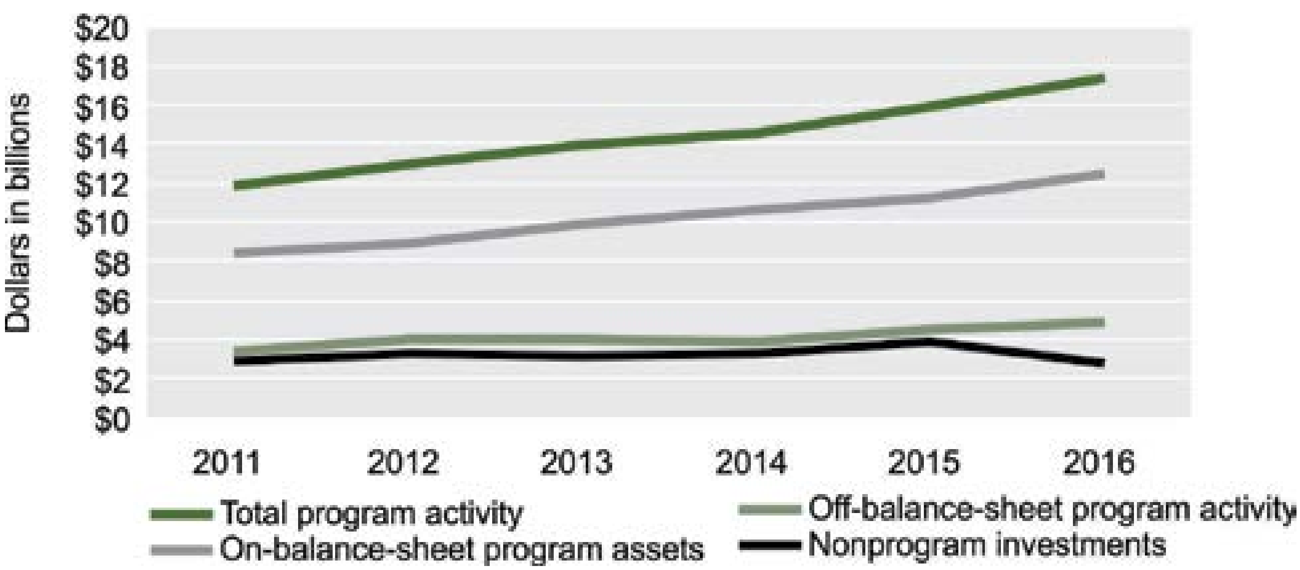
Program activity

Farmer Mac's total program activity increased to $17.4 billion on December 31, 2016, from $15.9 billion a year earlier. (See figure 12.) Farmer Mac experienced steady growth in its Farm & Ranch loan purchases, as well as its AgVantage program. AgVantage bonds are general obligations of the issuing financial institution that are purchased or guaranteed by Farmer Mac. Each AgVantage security is secured by eligible loans under one of Farmer Mac's programs in an amount at least equal to the outstanding principal amount of the security.

Off-balance-sheet program activity consists of standbys, certain AgVantage securities, and agricultural mortgage-backed securities (AMBS) sold to investors. At the end of December 2016, 28.1 percent of program activity consisted of off-balance-sheet obligations, as compared with 28.8 percent[7] a year earlier.

Farmer Mac's Long-Term Standby Purchase Commitment product is similar to a guarantee of eligible pools

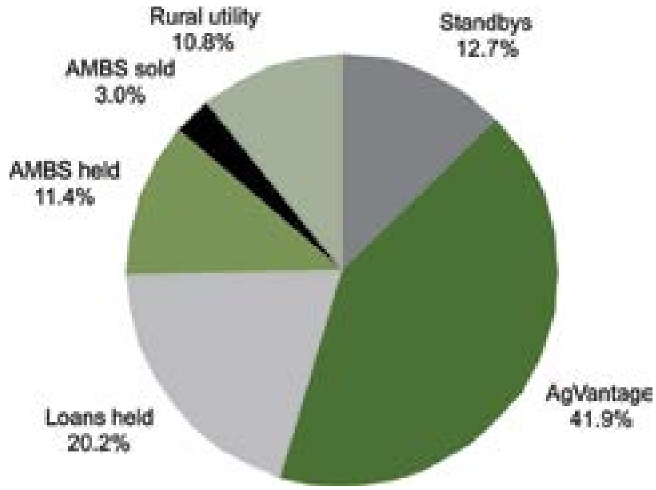
Figure 12
Farmer Mac program activity and nonprogram investment trends
As of December 31



Sources: Farmer Mac's Annual Reports on Securities and Exchange Commission Form 10-K.

7. Sources: Farmer Mac's Annual Reports on Securities and Exchange Commission Form 10-K.

Figure 13
Farmer Mac total program activity
As of December 31, 2016



Source: Farmer Mac's Report on Securities and Exchange Commission Form 10-K.
AMBS = agricultural mortgage-backed securities.

of program loans. Under the standbys, a financial institution pays an annual fee in return for Farmer Mac's commitment to purchase loans in a specific pool under specified conditions at the option of the institution. As shown in figure 13, standbys represented 12.7 percent of Farmer Mac's total program activity in 2016.

Asset quality

Figure 14 shows Farmer Mac's allowance for losses, its levels of substandard Farm & Ranch assets, and its 90-day delinquencies relative to outstanding program volume, excluding AgVantage loan volume.

On December 31, 2016, Farmer Mac's allowance for losses totaled $7.4 million, compared with $6.6 million on December 31, 2015. Of its Farm & Ranch program portfolio, $165.2 million was substandard, representing 2.69 percent of the principal balance of Farm & Ranch loans purchased, guaranteed, or committed to be purchased. This compares with $104.5 million, or 1.83 percent, on December 31, 2015. Assets are considered to be substandard when they have a well-defined weakness or weaknesses that, if not corrected, are likely to lead to some losses.

As of December 31, 2016, Farmer Mac's 90-day delinquencies decreased to $21.0 million, or 0.34 percent of non-AgVantage Farm & Ranch loans, compared with $32.1 million, or 0.56 percent, as of December 31, 2015.

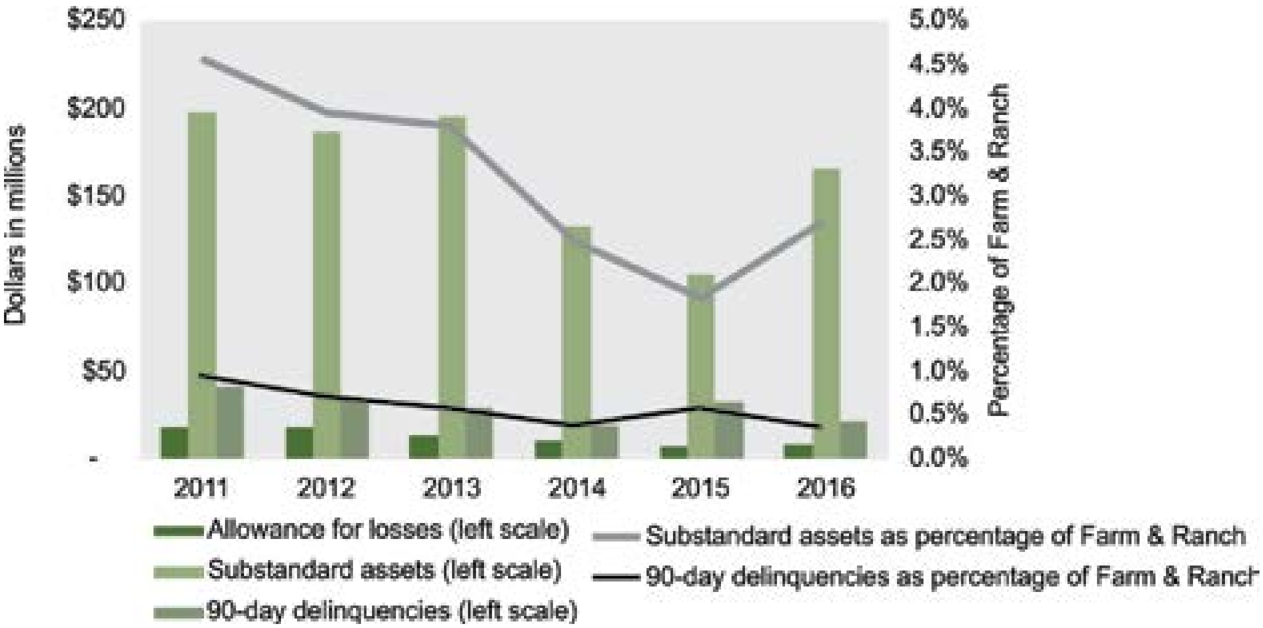
Real estate owned as of December 31, 2016, was $1.53 million, up from $1.37 million a year earlier. Farmer Mac reported no delinquencies in its pools of rural utility cooperative loans.

Earnings

Farmer Mac reported net income available to common stockholders of $64.2 million (in accordance with GAAP) for the year ended December 31, 2016, up from $47.4 million reported at year-end 2015. Core earnings for 2016 were $53.8 million, compared with $47.0 million in 2015.[8] Net interest income, which excludes guarantee fee income, was reported at $139.2 million in 2016, up from $125.8 million in 2015. Guarantee fee income was $14.9 million, compared with $14.1 million in 2015. Table 7 shows a six-year trend for the basic components of income.

8. Core earnings provide a non-GAAP measure of financial results that excludes the effects of certain unrealized gains and losses and nonrecurring items. Farmer Mac reports core earnings to present an alternative measure of earnings performance. The components included in core earnings calculations are at Farmer Mac's discretion.

Figure 14
Allowance, nonperforming asset, and delinquency trends, 2011 – 2016
Dollars in millions



Sources: Farmer Mac's Annual Reports on Securities and Exchange Commission Form 10-K.

Table 7
Farmer Mac condensed statements of operations, 2011 – 2016
As of December 31
Dollars in millions

	2011	2012	2013	2014	2015	2016	Growth rate 2014 – 2015
Total revenues	$73.3	$122.0	$164.4	$103.6	$145.9	$160.8	10%
Total expenses	$59.5	$78.1	$92.5	$65.4	$98.5	$96.6	–2%
Net income available to common shareholders	$13.8	$43.9	$71.8	$38.3	$47.4	$64.2	35%
Core earnings	$42.9	$49.6	$54.9	$53.0	$47.0	$53.8	14%

Sources: Farmer Mac's Annual Reports on Securities and Exchange Commission Form 10-K.

Challenges Facing the Agricultural Economy and the Farm Credit System

The following paragraphs identify the key challenges facing the Farm Credit System and Farmer Mac and their ability to fulfill their missions. We discuss both the challenges encountered in 2016 and those expected in 2017. We first discuss the challenges arising from the farm economy, then the challenges arising from the general economy.

The farm economy

A multiyear decline in farm profitability is challenging the agricultural sector in 2017. Margins for both crop and livestock producers remain under pressure. Challenges include rising interest rates and continued strength in the U.S. dollar. Another challenge is the uncertainty surrounding trade policy, which could produce either positive or negative effects for U.S. agriculture. Both domestic and global economies are expected to improve some in 2017, which would likely increase demand for U.S. farm products.

The Farm Credit System portfolio's credit quality remained favorable at the end of 2016 although several measures of quality slipped a bit. Fortified by solid earnings and a buildup of capital in recent years, the System appears to be in a good position to respond to an increase in farm economy stress.

The U.S. agricultural economy in 2016 was shaped by several factors:

- Good weather for producing crops both in the United States and around the world
- Record U.S. crop yields
- A build-up of inventory
- Lower farm prices

Although crop margins were either low or negative in 2016, record yields for corn, soybeans, and wheat resulted in higher-than-expected revenues. Per-bushel margins were closer to break-even than in the previous two years.

Low feed costs benefited livestock producers, but record meat, broiler, and milk output drove down farm prices for livestock and livestock products. For 2016, producer margins were negative for cattle, mixed for hogs and dairy (depending on the month), and positive for broilers. For both crops and livestock products, slow economic growth in key export markets and the continued strength of the U.S. dollar limited gains in export sales, putting downward pressure on commodity prices.

For the farm sector as a whole, net cash income fell for a third consecutive year from the historic highs of 2013. USDA estimates that net cash income fell 12 percent in 2016. Government payments helped offset lower crop receipts.

Farmers continued to adjust to the lower income environment by cutting equipment purchases and other expenses, restructuring debt, and using lines of credit for operating expenses. U.S. farmers carrying large amounts of debt are increasingly likely to experience cash flow problems unless profits improve. A continuation of weak profits will likely result in more loan delinquencies and other credit quality issues for agricultural lenders in the coming year.

One risk factor for the farm sector in 2017 is the cost of borrowing. Interest rates began edging up in 2016, and the expenses of farm borrowers may soon reflect these higher interest rates. About 57 percent of System loan volume will be repriced in 2017, and about a fourth of the volume is to be repriced within five years (see Figure 15).

Major commodity prices

Over the past four years (2013 to 2016), global production of the major crops has generally exceeded consumption. Nearly every year during this period, good weather (and higher acreage in many cases) generated record global crops of corn, soybeans, and wheat. Consumption and trade expanded as well, but not enough to prevent a buildup in world inventories and downward pressure on commodity prices. Average U.S. farm prices for these three crops dropped each year from record highs set in 2012, leading to declines in cash receipts and farm incomes. The only exception was an increase in soybean prices in 2016 because of a shortfall in South American production. Farm prices for cotton and rice followed a similar downward trajectory although cotton prices rose in 2016 because of stronger foreign demand.

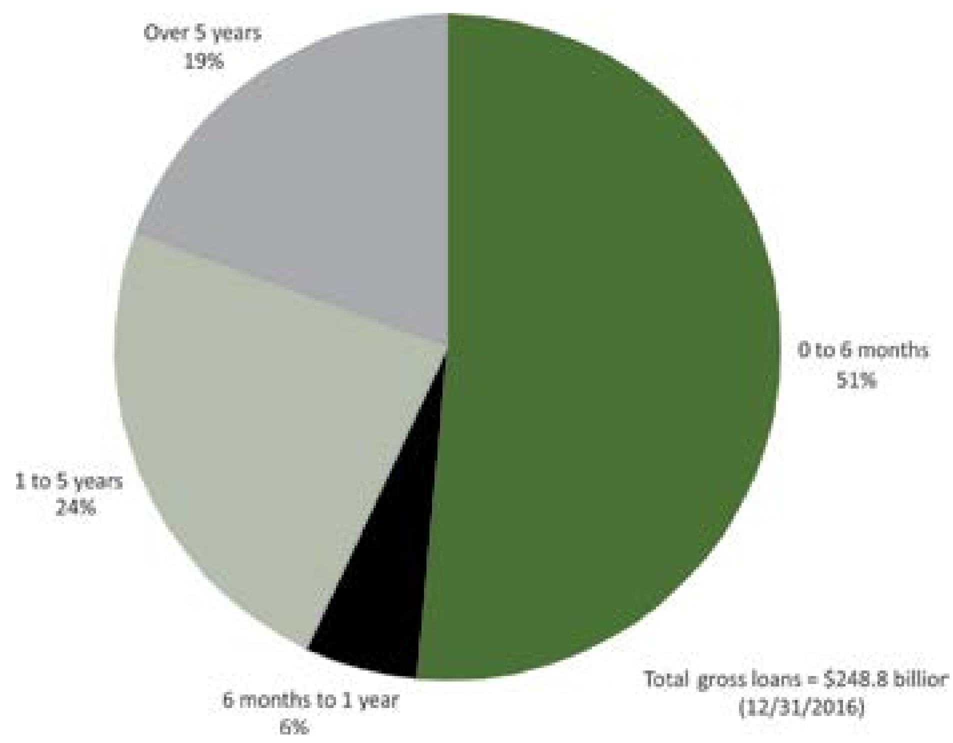
On the basis of trend yields and potential shifts in acreage, USDA's early forecast (made in May 2017) indicates that U.S. farm prices for the 2017/18 marketing year will be flat for corn, down for soybeans, and up for wheat. USDA also projects a rebound in South American corn and soybean production for crops harvested in 2017, which is expected to increase competition for U.S. exports throughout the rest of 2017 and into 2018. The multiyear weakness in crop prices has reduced margins and working capital for many producers.

In the animal sector, farm prices peaked two years later in 2014, after record-high grain prices had prompted livestock producers to scale back production. Since then, production has increased. Rising supplies in 2016 resulted in a decline in farm prices for steers, hogs, broilers, and milk. The USDA outlook for 2017 is for record total meat and poultry production and record milk production. Prices for steers and hogs are expected to decline from their 2016 levels while broiler prices stay flat and milk prices rebound. A significant advantage for the livestock sector is the relatively strong domestic and export demand, which has supported farm prices in early 2017. For the poultry sector, however, occasional U.S. outbreaks of avian influenza remain a source of uncertainty.

Farm income

After significant declines in farm income between 2013 and 2016, USDA is forecasting mostly stable cash receipts and production expenses in 2017. Both crop and livestock receipts are expected to be mostly unchanged because individual commodities are expected to offset one another. For crops, a

Figure 15
System loan volume by repricing interval
As of December 31, 2016



Source: 2016 Annual Information Statement of the Federal Farm Credit Banks Funding Corporation.

Figure 16
Inflation-adjusted net cash income for the farm sector, 1960 – 2017
In billions of 2009 dollars

Source: USDA, World Agricultural Supply and Demand Estimates, May 10, 2016.

$1.4-billion decline in wheat receipts is expected to offset a $1.3-billion gain in cotton receipts. For animal (and animal product) receipts, cattle/calf receipts are forecast to be down $4.5 billion, nearly offsetting a projected rise in milk receipts of $4.7 billion.

Farm production expenses are forecast to remain flat for 2017. Lower expenses for feed, livestock purchases, and fertilizer are expected to offset higher expenses for fuel, interest, and hired labor.

When receipts and expenses are combined, U.S. net cash farm income is forecast to rise 1.8 percent in 2017 to $93.5 billion primarily because of the sale of 2016 crop inventories and an increase in farm-related income. When adjusted for inflation, net cash income is projected to be unchanged from 2016 to 2017.

Another aggregate measure, net farm income, which counts the value of inventories as part of prior-year income, is projected to be down 8.7 percent, the fourth consecutive year of declines after reaching a record high in 2013. Direct government farm program payments also continue to support net farm income although they are forecast to decline 4 percent to $12.5 billion in 2017, or about 13 percent of net cash income.

While net cash income in inflation-adjusted terms (2009 dollars) is down sharply in recent years from 2012's high of nearly $129 billion, it is still near its long-run average of $83.7 billion. Figure 16 indicates that the farm economy's real net cash income has fluctuated between $70 billion and $90 billion. It also suggests that the sharp peaks in net cash income in the early 1970s and in the period from 2011 to 2014 were aberrations.

Cropland values

Between 2009 and 2014, the U.S. average cropland value rose sharply as major crop prices soared. Then, after consecutive years of declining farm income, the average value leveled off in 2015 and softened in 2016, particularly in the nation's midsection. USDA's August 2016 land values report shows that U.S. cropland values fell 1 percent in 2016 (as of June), compared with increases of 7.6 percent in 2014 and just 0.7 percent in 2015.

In the Corn Belt, cropland values declined modestly in 2016, with the largest drop occurring in Illinois, at 2.6 percent. The Central and Northern Plains states also experienced declines for 2016, while small gains in cropland value were registered in most states in the Southern Plains, Southeast, and West.

The Federal Reserve Banks' quarterly surveys of agricultural bankers show that, from the fourth quarter of 2015 to the fourth quarter of 2016, cropland values declined 1 percent in the Chicago Federal Reserve District. Bankers in the Kansas City Federal Reserve District report nonirrigated cropland is down 6 percent from 2015, with values down 13 percent in Kansas.

Most of the bankers surveyed expected farmland values to remain stable or decline in the first quarter of 2017. Large global supplies of agricultural commodities and continued pressure on farm prices are expected to reduce farm profits and therefore farmland bids. A rise in long-term interest rates over the next few years would put additional downward pressure on cropland values.

Some observers currently see farmland as "reasonably priced" because the capitalized value, defined as the rental rate divided by the 10-year Treasury rate, remains above the average land value in many areas. But the gap is narrowing and could easily evaporate with a sharp (albeit unexpected) rise in interest rates or a deterioration in profitability.

U.S. agricultural exports

USDA forecasts agricultural exports in fiscal year 2017 to rise to $136 billion, led by gains in bulk crops (e.g., wheat, corn, soybeans, and cotton), tree nuts, and animal products. This is up 5 percent from FY 2016 and a turnaround from two consecutive years of declines caused by slow world economic growth, a strong U.S. dollar, lower exports of high-value products, and falling prices for bulk commodities. In FY 2017, improved global economic conditions have generated additional demand, but export competition remains keen because of large global stocks of most commodities.

By commodity group, USDA projects a 13 percent gain in FY 2017 for bulk crops. The largest dollar gains are projected for soybeans following a 2016 production shortfall in South America and for cotton because of improved foreign demand by China, Vietnam, and several other countries. Horticultural exports are up 3 percent, with gains in tree nuts more than offsetting small declines in fruits and vegetables. On a volume basis, most bulk crops (and their products) are forecast to increase except for soybean meal and oil, and feeds and fodders such as distillers dried grains.

The value of animal product exports for FY 2017 is expected to rise 10 percent. All livestock categories are expected to rise as export volume increases. Larger meat supplies and lower prices have spurred purchases of U.S. products by foreign consumers.

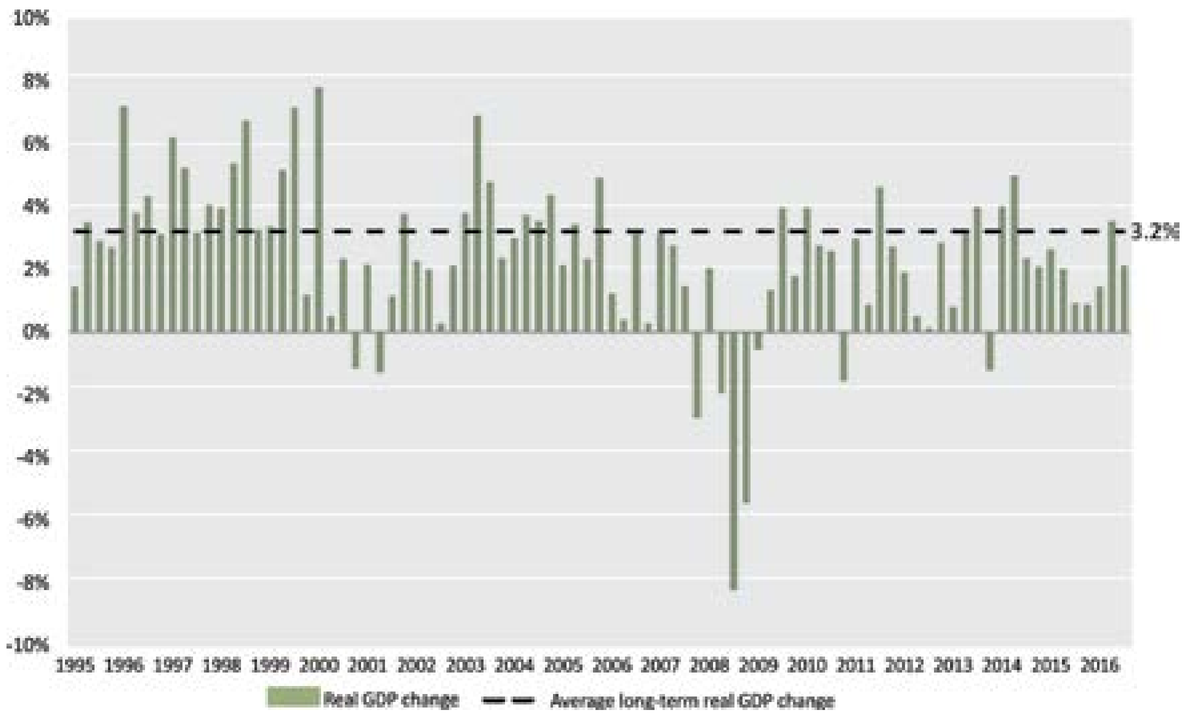
Worldwide economic conditions are important to U.S. agricultural export demand. Global growth in per capita gross domestic product is expected to increase from 1.2 percent in 2016 to 1.6 percent in 2017. An acceleration is expected in key agricultural markets, including Canada and Mexico, while growth is expected to remain above 5 percent for China.

Another key export driver is the value of the U.S. dollar, which has increased substantially since early 2014 relative to the currencies of many U.S. agricultural customers and competitors. According to USDA, the agricultural exports-weighted dollar value index is expected to maintain its strength, with a 3.7 percent appreciation in 2017. This raises the cost of U.S. goods to importing countries and makes competitor products a better bargain.

Besides economic growth and exchange rates, trade policy can also affect U.S. agricultural exports. Changes in trade policy resulting from recently announced U.S. plans to enter into trade negotiations with major trading partners could have either positive or negative effects for U.S. agriculture, depending upon the commodity and changes in market access or other terms of trade.

Regardless of the source of export uncertainty, trade disruptions or even moderate shifts in export demand that create large price impacts can easily affect farm borrowers and the Farm Credit System. The severity depends on the importance of exports for an indi-

Figure 17
U.S. real GDP growth, 2009 dollars, quarterly
Seasonally adjusted annualized rate



Source: FCA's Office of Regulatory Policy, based on data from the U.S. Department of Commerce, Bureau of Economic Analysis.
Note: The long-term rate, which is the average real GDP for 1947 to 2016, is 3.2 percent.

vidual commodity and the prevalence of that commodity in the System's loan portfolio. For example, soybean exports account for nearly half of that crop's production, and the cash grains category (which includes soybeans) accounts for 17 percent of the System's loan portfolio. For individual System associations, the portfolio shares can be substantially higher for specific commodities, so exposure at the association level can be greater than for the System as a whole.

The general economy

Economic growth

Real gross domestic product (GDP) for the U.S. economy grew 1.6 percent in 2016, slower than the increase of 2.6 percent in 2015. (See figure 17.) The growth in real GDP was driven primarily by personal consumption expenditures, residential fixed investment, exports, federal government spending, and state and local government spending. Downturns in private inventory investment and nonresidential fixed investment, combined with import growth and slower growth in personal consumption expenditures, contributed to slower GDP growth.

The March 2017 consensus forecast from Consensus Economics projects real GDP for the U.S. economy to increase to 2.2 percent for 2017. Real personal consumption is projected to increase by 2.7 percent, real government consumption is projected to increase by 0.5 percent, and real business investment is projected to increase by 3.2 percent in 2017.

Real net exports are calculated by deducting imports from exports; therefore, a negative real export balance indicates that imports exceeded exports. Real net exports totaled –$562 billion in 2016, and imports are expected to further outpace exports in 2017, with real net exports forecast at –$639 billion.

Employment prospects

Overall, the labor market strengthened further in 2016, but the pace of improvement slowed. Payroll employment averaged about 187,000 new jobs per month in 2016, almost 39,000 jobs per month slower than in 2015. In February 2017, about 235,000 jobs were created. The average job growth over the first two months of 2017 is right in line with the pace for the first two months of 2015 and is considerably higher than the same period in 2016.

The number of people filing for unemployment claims has also declined. For the week ended March 25, 2017, the four-week moving average of seasonally adjusted initial unemployment claims was 254,250. The moving average has remained below 300,000 since March 2015. The last time the four-week moving average remained below 300,000 for this long was the early-to-mid 1970s.

In 2016, the unemployment rate declined from 4.9 percent in January to 4.7 percent in December 2016, and averaged 4.9 percent for the year. The unemployment rate in February 2017 remained relatively unchanged at 4.7 percent. The consensus forecast from Consensus Economics projects a slight decline in the unemployment rate for 2017 to 4.6 percent.

The labor force participation rate is the percentage of adult Americans working or actively looking for a job. The annual average participation rate increased slightly from 62.7 percent in 2015 to 62.8 percent in 2016. In February 2017, the labor force participation rate was 63.0 percent. This is a 0.1 percentage point increase over the prior month and 0.2 percentage points higher than the 2016 average.

Wages have shown gradual improvement over the past year. In December 2016, the average hourly earnings for all employees on private nonfarm payrolls increased by 2.9 percent over the year to $26. In December 2016, growth in the employment cost index for the wages and salaries of workers in private industry increased by 2.2 percent over the year — slightly faster than the 1.9 percent year-over-year increase in December 2015. The consensus forecast from Consensus Economics projects employment costs to increase by 2.5 percent in 2017.

Employment in nonmetropolitan areas

According to USDA, unemployment in nonmetropolitan areas continues to decline and has fallen close to pre-recession levels. The rural population also stabilized in 2015. Between 2010 and 2014, the rural population declined by 0.3 percent and remained stable in 2015. Meanwhile, rural employment has risen modestly. Seasonally adjusted rural employment grew 0.5 percent over the first half of 2016 but still remains below pre-recession levels. The labor force participation rate has also shown a modest increase in nonmetropolitan areas.

Consumer price inflation

Inflation affects agriculture by raising input costs, curbing consumer demand for high-value products (dairy, meat, and processed foods), and reducing consumption of food away from home. Greater inflationary pressures also increase the likelihood of higher long-term interest rates. In 2016, the consumer price index (CPI) for all items increased 2.1 percent before seasonal adjustments. This is a larger increase than the 0.7 percent increase in 2015. It is also higher than the average increase over the past 10 years of 1.8 percent.

Increases in energy prices contributed to higher total inflation. The CPI energy price index increased 5.4 percent in 2016 — following declines in both 2014 and 2015. While energy prices increased in 2016, food prices declined. As shown in the table below, all six major grocery store food group indexes declined in 2016.

Table 8

Price declines by index of grocery store food group from 2015 to 2016

Grocery store food group index	Percentage decline in 2016
Meats, poultry, fish, and eggs	5.4
Fruits and vegetables	2.4
Dairy and related products	1.3
Nonalcoholic beverages	0.9
Cereals and bakery products	0.7
Other food at home	0.3

The index for food away from home again rose in 2016. The increase of 2.3 percent in 2016 was preceded by an increase of 2.6 percent in 2015. Over the past 10 years, average growth was 2.3 percent.

The core CPI (excluding food and energy prices) increased by 2.2 percent in 2016 — this is 0.1 percentage points higher than in 2015. Core CPI increased 0.2 percent in February 2017, with a year-over-year increase of 2.2 percent. The forecast from Consensus Economics for the change in total CPI is 2.5 percent for 2017.

An alternative measure of price inflation is the price index for personal consumption expenditures. The Federal Reserve uses this measure to target inflation for policy decisions. The index for personal consumption expenditures includes a broader range of expenditures than the CPI and is based on business surveys rather than the consumer surveys used for CPI. Like core CPI, the core index for personal consumption expenditures excludes food and energy prices, which are more volatile. In 2016, this index increased by 1.5 percent — 1.1 percentage points more than in 2015.

Overall, inflation has increased over the past year and moved closer to the Federal Reserve's long-term target level of 2.0 percent. With inflation close to target levels and strength in the labor market, the Federal Reserve decided in March 2017 to raise the target range for the federal funds rate to 0.75 percent to 1.0 percent. It has begun to slowly tighten monetary policy and to raise expectations for future interest rate increases.

The Federal Reserve has also indicated that it may begin shrinking its balance sheet in 2017. Following the 2009 recession, its holdings increased significantly when it purchased longer-maturity securities and began a policy of reinvesting the proceeds of these purchases. As the Federal Reserve divests itself of these holdings or changes its policy regarding reinvestment, changes in longer-term interest rates could occur.

Housing sector

According to the Federal Housing Finance Agency, the seasonally adjusted house price index increased by 6.2 percent from the fourth quarter of 2015 to the fourth quarter of 2016. Home prices rose in 46 states and Washington, D.C., during 2016. The top five states in annual appreciation were Oregon, Colorado, Florida, Washington, and Nevada. Housing starts are estimated to have increased by 4.9 percent in 2016 or 1.17 million homes. The consensus forecast from Consensus Economics for housing starts is 1.27 million homes in 2017.

International trade

The U.S. dollar has been strengthening since 2011 and began appreciating more rapidly in mid-2014. It continued to strengthen through 2016 as the U.S. economy advanced, interest rates in the United States started to rise, and expectations of further increases in interest rates began to materialize. As the currency appreciates relative to the currencies of trade partners, U.S. imports tend to go up, and U.S. exports tend to go down.

In the first months of 2017, the dollar weakened slightly. The March 2017 trade-weighted U.S. dollar index level was 125.26, which is slightly lower than the November 2016 level. Still, the dollar remains strong and poses continued challenges for international trade.

In January 2017, the U.S. total goods and services deficit was $48.5 billion. This is a year-over-year increase of $5.1 billion — meaning the value of imported goods and services increased relative to exports. Driving this change is a $13.3 billion increase in exports (7.4 percent growth), which was outpaced by an $18.4 billion increase in imports (8.3 percent growth). Because imports increased more than exports, net exports declined. The largest trade deficits for the United States exist with China and the European Union; the largest trade surpluses exist with South and Central America and Hong Kong.

Household and business borrowing

The results of the Federal Reserve's January 2017 Senior Loan Officer Opinion Survey on Bank Lending Practices show that bank standards on commercial and industrial loans remained relatively unchanged while standards on commercial real estate loans were tightened over the fourth quarter of 2016.

Demand for commercial and industrial loans remained relatively unchanged in the fourth quarter while demand for lines of credit increased. Demand for commercial real estate loans showed some signs of weakening in the fourth quarter. Banks indicated that standards on residential mortgage loans remain relatively unchanged, while demand for most types of home-purchase loans weakened.

Banks also indicated that they expect to see improvements in asset quality for commercial and industrial loans, as well as residential real estate loans, in 2017. Therefore, they expect to relax underwriting standards on these loans. However, banks expect asset quality to remain relatively unchanged on commercial real estate loans, and they expect to tighten standards on these loans.

In the fourth quarter of 2016, household debt service payments as a percentage of disposable income was 9.98 percent and has varied little since mid-2013. The peak value was in the fourth quarter of 2007 at 13.21 percent. From December 31, 2015, to December 31, 2016, homeowner's equity in real estate increased by 10.9 percent. The last year-over-year decline (a drop of 4.2 percent) occurred in the second quarter of 2011. In the fourth quarter of 2008, the decline was 35.1 percent.

Federal deficit

The annual deficit for fiscal year 2016 was $587 billion — approximately 34 percent more than the $438 billion deficit in 2015. In 2016, the deficit totaled 3.2 percent of GDP. Driven by increases in mandatory, discretionary, and net interest spending, federal spending outpaced revenue growth in 2016, rising to 20.9 percent of GDP. According to the Congressional Budget Office (CBO), the deficit is projected to decrease by $29 billion to $559 billion in fiscal year 2017. The deficit as a percentage of GDP is expected to decrease to 2.9 percent, which is a 0.3 percentage point decrease from 2016.

Debt held by the public increased by $1.1 trillion to $14.2 trillion in 2016. This increase amounted to 77 percent of GDP, about a 4 percent increase over 2015. In 2017, debt held by the public as a percentage of GDP is expected to increase to 77.5 percent for a total of $14.8 trillion. According to the CBO, debt at these levels could have significant consequences for both the economy and the federal budget. When interest rates increase, federal spending on interest payments may rise considerably. Therefore, any increases in the interest rates in 2017 may drive up the federal deficit even higher in 2017.

Federal borrowing also reduces national savings over time and would result in a lower net investment, lower productivity, and lower total wages. Fiscal policy could also become more constrained in its response to unexpected economic events. The likelihood of a fiscal crisis in the United States would increase if investors demand significantly higher interest rates to compensate them for the additional risk of financing the government debt at higher levels.

Farm Credit System portfolio

Total System loan volume grew 5.5 percent in 2016. Loan volume grew in many commodity categories; however, growth in loans to the cash grains and cattle sectors was below the Systemwide average. Profits were down in 2016 for both of these sectors.

Lending to finance production inputs, inventories, equipment, and real estate purchases increased even though commodity prices declined. Mortgage loan volume grew because of continued demand for farmland. Also, growth in loans to cooperatives, marketing and processing operations, and rural utilities (particularly to electric power utilities) contributed to overall loan growth.

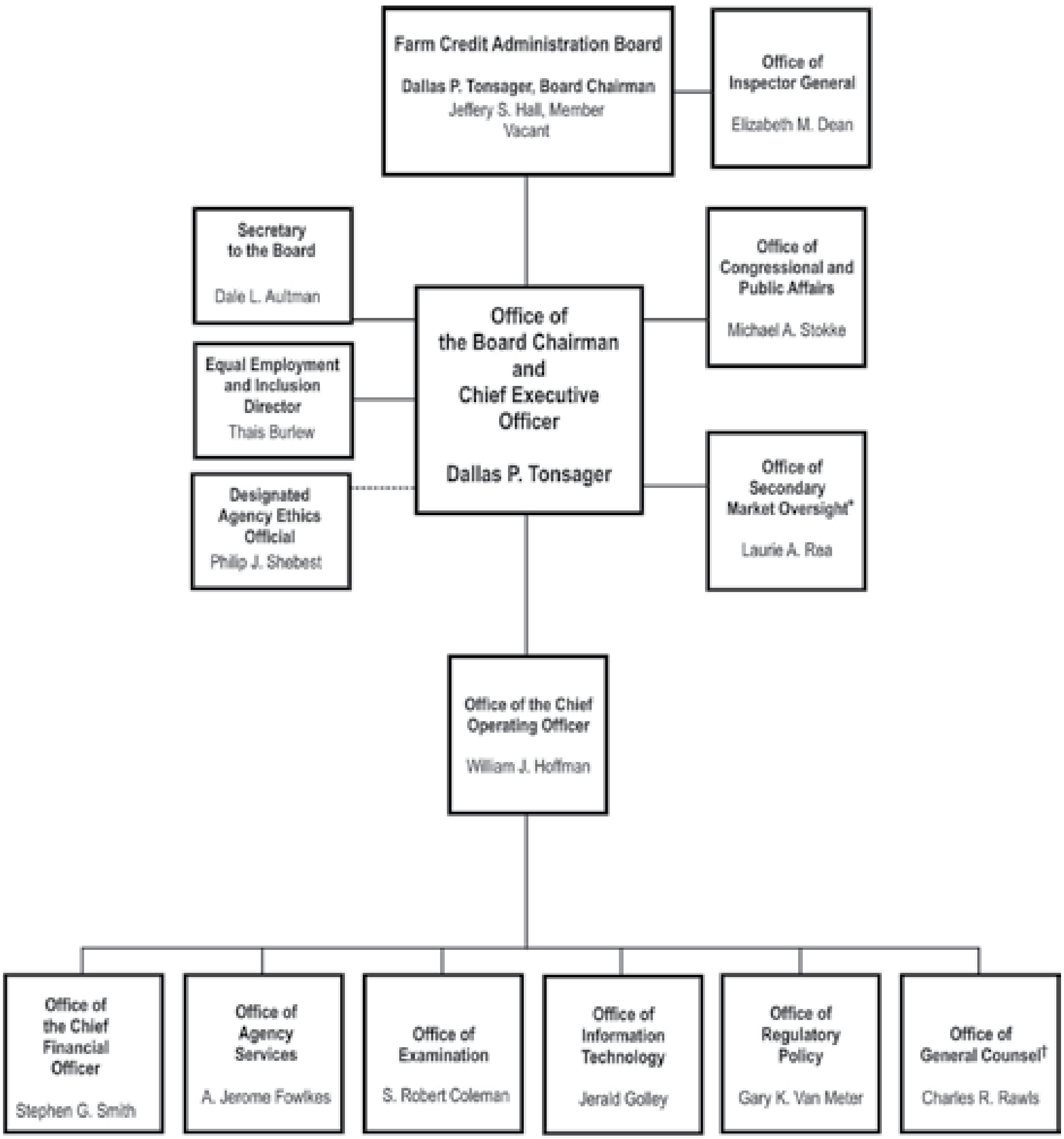
Portfolio quality remained favorable but declined modestly during the year. At the end of 2016, 94.5 percent of System loans were classified as acceptable, down 1.5 percentage points from a year earlier. The largest change in quality was for production and intermediate-term lending, for which the share of acceptable loans fell 3.5 percentage points. In comparison, for real estate loans, acceptable volume declined by just 1.4 percentage points.

After declining for six years, nonaccrual loans bounced up in 2016, reflecting the increase in stress in the farm economy, particularly for grain, dairy, and cattle operations. The System reported $2.0 billion in nonperforming loans at year-end, or 0.79 percent of total System loans, compared with $1.6 billion in the prior year (0.69 percent). Still, the current percentage is well below the peak in 2009 when the nonperforming share of System loans was 2.14 percent. The System also reported $45 million in net charge-offs on loans, up from $37 million the prior year.

Overall, the System remains in a strong financial position despite modest declines in credit quality as farmers continue to adjust to low or negative profit margins.

Appendix

Figure 18
FCA organizational chart
As of May 2017



*Reports to the Board for policy and to the CEO for administration.
†Maintains a confidential advisory relationship with each of the Board members.

Farm Credit Administration offices

As of December 31, 2016, FCA had 311 full- and part-time employees. These employees are divided among the following offices, with the majority serving in the Office of Examination.

The **FCA Board** manages, administers, and establishes policies for FCA. The board approves the policies, regulations, charters, and examination and enforcement activities that ensure a strong FCS. The board also provides for the examination and supervision of the FCS, including Farmer Mac, and oversees the activities of the FCS Building Association, which acquires, manages, and maintains FCA headquarters and field office facilities.

The **Chairman of the FCA Board** serves as the chief executive officer (CEO). The CEO enforces the rules, regulations, and orders of the FCA board. He or she directs the implementation of policies and regulations adopted by the FCA board. The Office of the Chief Executive Officer plans, organizes, directs, coordinates, and controls FCA's day-to-day operations and leads the agency's efforts to achieve and manage a diverse workforce.

The **Chief Operating Officer** has broad responsibility for planning, directing, and controlling the operations of the Offices of Agency Services, Examination, Regulatory Policy, and General Counsel in accordance with the operating philosophy and policies of the FCA board. He or she supervises and provides policy direction to the executive staff responsible for managing these offices. The COO oversees and coordinates the development and implementation of the agencywide strategic, operating, and budget plans and activities. The COO also coordinates the resolution of internal policy, personnel, and program issues with agency executive leadership and the FCA board.

The **Office of Agency Services**, which was created in April 2016, manages human capital and administrative services for the agency. This includes providing the following services to the agency: staffing and placement, job evaluation, compensation and benefits, payroll administration, performance management and awards, employee relations, employee training and development, contracting, acquisitions, records and property management, supply services, agency purchase cards, design, publication, and mail service.

The **Office of the Chief Financial Officer,** which was created in April 2016, manages and delivers timely, accurate, and reliable financial services to the agency. The office establishes financial policies and procedures and oversees the formulation and execution of the agency's budget. The office reports periodically on the status of the agency's financial position, results of operations, and budgetary resources. It also oversees the agency's travel management, internal controls, and personnel security programs.

The **Office of Congressional and Public Affairs (OCPA)** serves as the agency's principal point of contact for Congress, the media, other government agencies, FCS institutions, employees, System borrowers, and the public. OCPA develops and monitors legislation pertinent to FCA and the FCS, serves as the agency's congressional liaison, facilitates intergovernmental relations, and prepares testimony for the chairman and other board members. The office also provides information to external audiences through news releases, fact sheets, reports, and other publications. It cultivates relationships with media representatives who report on matters related to agriculture and rural credit, and it manages the content of the FCA website. OCPA also organizes special meetings, briefings for international visitors, and field hearings.

The **Office of Examination** is responsible for examining and supervising each FCS institution in accordance with the Farm Credit Act and applicable regulations. The office develops oversight plans; conducts examinations; monitors the System's condition and current and emerging risks to the System; and develops supervisory strategies to ensure that the FCS operates in a safe and sound manner, complies with the law and regulations, and fulfills its public policy purpose. For more information about the role of the Office of Examination, go to www.fca.gov/law/guidance.html and click View Board

Policy Statements to read “Examination Policy” (FCA-PS-53).

The **Office of General Counsel (OGC)** provides the FCA board and staff with legal counsel as well as guidance on the Farm Credit Act and general corporate, personnel, ethics, and administrative matters. OGC supports the agency’s development and promulgation of regulations, enforcement of applicable laws and regulations, and implementation of conservatorships and receiverships. The office represents and advises the agency on civil litigation. It also serves as the liaison to the Federal Register, administers the agency’s ethics program, and handles Freedom of Information Act requests.

The **Office of Information Technology (OIT),** which was created in June 2015, manages and delivers the agency’s information technology, data analysis infrastructure, and the security supporting agency technology resources. The office is responsible for the planning and control of information technology investments and leading change to improve the efficiency and effectiveness of agency operations. OIT is responsible for continuing to leverage FCA’s investment in technology by collaborating across agency offices to identify and re-engineer business processes. OIT provides strategies to collaborate across offices on business intelligence tools to develop analysis models to meet the strategic needs of the agency.

The **Office of Inspector General** provides independent and objective oversight of agency programs and operations through audits, inspections, investigations, and the review of proposed legislation and regulations. The office promotes economy and efficiency within FCA and seeks to prevent and detect fraud, waste, abuse, and mismanagement in the agency’s programs and operations.

The **Office of Regulatory Policy (ORP)** manages policy and regulation development activities that ensure the safety and soundness of the FCS and support the System’s mission. Policy and regulation development activities include the analysis of policy and strategic risks to the System on the basis of economic trends and other risk factors. ORP also evaluates all regulatory and statutory prior approvals for System institutions on behalf of the FCA board, including chartering and other corporate approvals as well as funding approvals.

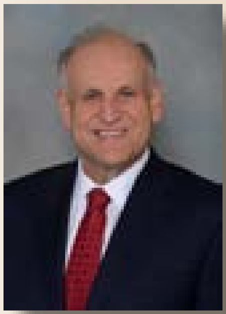
The **Office of Secondary Market Oversight (OSMO)** provides for the examination, regulation, and supervision of Farmer Mac to ensure its safety and soundness and the accomplishment of its public policy purpose as authorized by Congress. OSMO also ensures that Farmer Mac complies with applicable laws and regulations, and it manages FCA’s enforcement activities with respect to Farmer Mac.

The **Secretary to the Board** serves as the parliamentarian for the board and keeps permanent and complete records of the acts and proceedings of the board. He or she ensures that the board complies with statutory, regulatory, and internal operation reporting requirements. The secretary to the board also serves as secretary to the Farm Credit System Insurance Corporation board. In addition, he or she serves as the Sunshine Act official for the FCA board.

The **Office of Equal Employment Opportunity and Inclusion** manages and directs the diversity, inclusion, and equal employment opportunity (EEO) program for FCA and FCSIC. The office serves as the chief liaison with the Equal Employment Opportunity Commission and the Office of Personnel Management on all EEO, diversity, and inclusion issues. The office provides counsel and leadership to agency management to carry out its continuing policy and program of nondiscrimination, affirmative action, and diversity.

The **Designated Agency Ethics Official** is designated by the FCA chairman to administer the provisions of title I of the Ethics in Government Act of 1978, as amended, to coordinate and manage FCA’s ethics program and to provide liaison to the Office of Government Ethics with regard to all aspects of FCA’s ethics program.

Agency officials

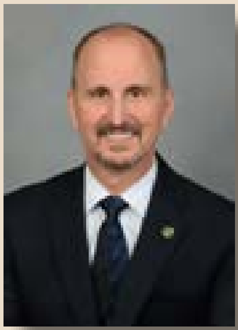


William J. Hoffman is chief operating officer. During Mr. Hoffman's tenure as FCA's COO (from 2008 to the present), the agency has issued several significant final rules, including a rule that updates and modernizes the agency's capital regulations and a rule requiring System institutions to include strategies in their business and marketing plans that emphasize diversity and inclusion. As COO, Mr. Hoffman has also supported diversity and inclusion programs and events at FCA. Before taking this position, Mr. Hoffman was executive assistant to Chairman and CEO Nancy C. Pellett. Prior to this, he served as the associate director for examination and supervision in the Office of Secondary Market Oversight, which oversees the Federal Agricultural Mortgage Corporation. He began his career as a credit representative in the Louisville Farm Credit District. In 1986 he joined the St. Louis Farm Credit Bank as vice president of risk assets. He later was the CEO of PennWest Farm Credit, ACA. Before joining FCA in 2004, he was involved in agricultural finance in the private sector and several international projects.

S. Robert Coleman is director of the Office of Examination. Before being named to this position in October 2010, he was director of the agency's Office of Secondary Market Oversight for five years. Mr. Coleman joined FCA in 1986 as an examiner in the Office of Examination. He held various positions in that office, providing technical support to FCA field offices and to the Policy Development and Planning Division. During this period, Mr. Coleman completed the commissioning program and became a commissioned examiner in 1990. In 1994, he transferred to the Office of Policy and Analysis, where he served as a policy analyst specializing in regulation development, and then as a senior policy analyst. Mr. Coleman was named director of the Regulation and Policy Division in June 2003. He holds the Chartered Financial Analyst designation, which the CFA Institute awarded him in 2000.

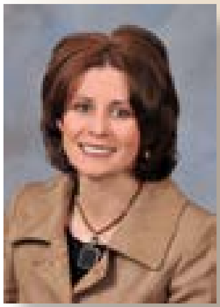
Elizabeth M. Dean is inspector general. Before assuming this position in 2013, Ms. Dean was the deputy inspector general and counsel to the inspector general since 1989. As deputy IG and counsel, she directed the investigative function of FCA's OIG, periodically conducted inspections and evaluations, performed legal duties, and comanaged the OIG. From 1986 to 1989, Ms. Dean served as a senior attorney in FCA's Office of General Counsel, Litigation, and Enforcement Division. Ms. Dean served on active duty as a U.S. Navy judge advocate from 1982 until 1986; she retired from the U.S. Naval Reserves in 2000. Upon completing law school in 1981, she worked for the attorney general of the state of Ohio in the Criminal Activities Branch.

A. Jerome Fowlkes is chief human capital officer and director of the Office of Agency Services. Previously, from April to October 2016, he served as acting director of the Office of Agency Services. From March 2014 to April 2016, he served as deputy director of the Office of Management Services. From September 2012 to March 2013, he served as the associate director and team leader of the Credit and Mission Team in the Office of Regulatory Policy. He joined FCA in 2010 as a senior financial analyst. Before that, he managed a portfolio of venture capital loans and investments for the Small Business Administration's Office of Liquidation and was responsible for negotiating and collecting outstanding obligations from portfolio companies. He has served as a commercial lender and vice president at the predecessors to Bank of America and SunTrust. He has also worked as an investment banker at BIA Capital Strategies. He holds an MBA from the College of William and Mary and a B.S. in finance from Virginia Tech.

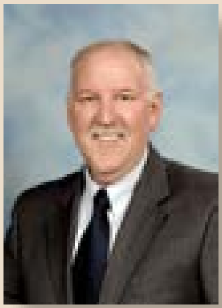


Jerald Golley is chief information officer and director of the Office of Information Technology. Before joining FCA in November 2015, Mr. Golley had 25 years of IT management experience. Most recently, he was the deputy CIO for the Commodity Futures Trading Commission for six years. In 1996, he founded AMI Technical Consultants, Inc., a software development, internet hosting, and technical consulting company based in Denver; he served as CEO there until 2009. He began his career as a programmer and geographic information system specialist at American Management Systems in Rosslyn, Virginia, where he worked from 1990 to 1994. Mr. Golley served in the 101st Airborne Division of the U.S. Army based out of Ft. Campbell, Kentucky, from 1982 to 1984. He holds a bachelor's degree in geography, with a minor in computer science from the State University of New York at Oneonta, as well as a Master of Arts in geography and geographic information systems from the State University of New York at Binghamton.

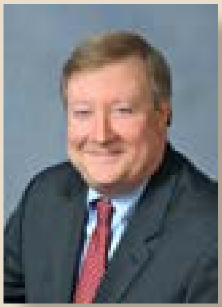
Charles R. Rawls is the FCA general counsel. Before joining FCA in March 2003, he was general counsel and vice president for legal, tax, and accounting at the National Council of Farmer Cooperatives. During the consideration of the 2002 farm bill, he served as the general counsel of the Senate Committee on Agriculture, Nutrition, and Forestry. From 1998 to 2001, he was general counsel for the USDA, and from 1993 to 1998 he was chief of staff to the deputy secretary of agriculture. From 1988 to 1993, he was legislative director and then administrative assistant to Congressman Martin Lancaster. From 1985 to 1988, he was associate general counsel of the House Committee on Agriculture. He was counsel to the House Agriculture Subcommittee on Forests, Family Farms, and Energy from 1983 to 1985.



Laurie A. Rea is director of the Office of Secondary Market Oversight (OSMO). She was named to this position in January 2011. Ms. Rea joined FCA in 1986 after graduating from San Diego State University. She has held several positions with the agency, beginning with the Office of Examination where she became a commissioned FCA examiner in 1989. In 1992, she joined the Office of Policy and Analysis (now the Office of Regulatory Policy), where she gained experience in policy and regulation development. From 2005 until 2011, Ms. Rea served as associate director and finance and capital markets team leader in the Office of Regulatory Policy, where she managed the approval of Systemwide debt securities and led the agency's regulatory capital and investment policy development. Ms. Rea is a Chartered Financial Analyst from the CFA Institute and a Certified Risk Professional.



Stephen G. Smith is chief financial officer and director of the Office of the Chief Financial Officer. Previously, from 2005 to 2016, he served as the agency's director of the Office of Management Services. From 2001 to 2005, he served as the agency's inspector general. He joined FCA in 1981 as a technical specialist. He is a commissioned FCA examiner and served in several leadership roles, including associate regional director for the Albany, New York field office, senior staff director for the chief examiner, and director of the Technical and Operations Division. In 1993, he assumed responsibilities as director of the Information Resources Division. He was named chief information officer in 1996, directing all technology and information operations for FCA. Before joining the agency, he worked at the North Central Jersey Farm Credit Association.

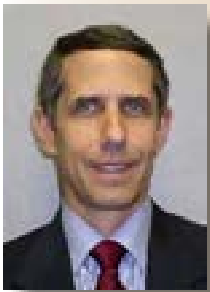


Michael Stokke is director of the Office of Congressional and Public Affairs. Prior to joining FCA, Mr. Stokke was founder and president of Prairie Strategies, a consulting firm based in Illinois, where he advised corporations and nonprofit organizations. He served as deputy chief of staff to former Speaker of the House Dennis Hastert from February 1998 to October 2007. Prior to this, Mr. Stokke served as chief of staff for the Office of the Speaker in the Illinois House of Representatives from 1995 to 1998. He served as chief of staff for Representative Thomas W. Ewing of Illinois from 1991 through 1994. From 1987 to 1991, he was assistant director of personnel for the Office of the Governor of Illinois. He also served as assistant to the secretary of the Illinois Department of Transportation from 1985 to 1987.

Gary K. Van Meter is director of the Office of Regulatory Policy (ORP). He was named to this position in November 2010 after having served as the deputy director of ORP for five years. Prior to this, he served in the Office of General Counsel (OGC) for 17 years. In OGC, he served as a senior attorney and later as senior counsel before joining ORP. Mr. Van Meter holds a J.D. from West Virginia University College of Law and a master of law in taxation from Georgetown University Law Center. He is also a certified public accountant. From 1972 to 1974, Mr. Van Meter was an enlisted member of the U.S. Marine Corps, and he was an officer in the U.S. Navy Judge Advocate General's (JAG) Corps from 1981 to 1986.

Dale L. Aultman became secretary to the FCA board in January 2011. He began working at FCA in 1988. For the first 10 years, he worked in the Office of Examination, where he became a commissioned examiner. Then for 12 years, he was a policy analyst in the Office of Regulatory Policy. Mr. Aultman is a member of the National Association of Parliamentarians. In 2010, he became Virginia's eighth electronic notary. In 2007, he completed FCA's Supervisory Development Program. Mr. Aultman graduated with distinction from Southwestern Graduate School of Banking at the Southern Methodist University and holds a finance degree from the University of Oklahoma.

Thais Burlew is director of Equal Employment Opportunity and Inclusion. Before joining FCA in September 2011, she served as executive manager in the Office of EEO and Inclusiveness at the U.S. Postal Service. From 2001 to 2008, Ms. Burlew held several positions at the U.S. Equal Employment Opportunity Commission, including attorney advisor to Chair Naomi Churchill-Earp and acting chief for the Intake and Compliance Branch. Prior to this, she served as advocate for the Housing and Consumer Law Clinic and for the Juvenile Special Education Clinic. Ms. Burlew earned a J.D. magna cum laude from David A. Clarke School of Law at the University of the District of Columbia, where she served as managing and associate editor of the school's law review. She also holds a B.S. in criminal justice from Middle Tennessee State University.



Philip J. Shebest is the designated agency ethics official (DAEO). As DAEO, Mr. Shebest administers the ethics program for FCA and the Farm Credit System Insurance Corporation. In addition to serving as DAEO, Mr. Shebest is an assistant general counsel in the Office of General Counsel and the agency contracts officer. While at FCA, he has held the position of alternate DAEO, as well as acting general counsel, chief administrative officer and chief human capital officer. Prior to joining FCA in 1990, Mr. Shebest was a senior attorney with the Drug Enforcement Administration and a lieutenant in the U.S. Navy Judge Advocate General's Corps. A graduate of East Stroudsburg University of Pennsylvania and Temple School of Law, he is a member of the Pennsylvania bar, as well as a certified mediator.

Glossary

Agricultural Credit Association — An ACA results from the merger of a federal land bank association (or a federal land credit association) and a PCA and has the combined authority of the two institutions. An ACA borrows funds from an FCB or ACB to provide short-, intermediate-, and long-term credit to farmers, ranchers, and producers and harvesters of aquatic products. It also makes loans to these borrowers for certain processing and marketing activities, to rural residents for housing, and to certain farm-related businesses.

Agricultural Credit Bank — An ACB results from the merger of a farm credit bank and a bank for cooperatives and has the combined authorities of those two institutions. An ACB is also authorized to finance U.S. agricultural exports and provide international banking services for farmer-owned cooperatives. CoBank is the only ACB in the FCS.

Bank for Cooperatives — A BC provided lending and other financial services to farmer-owned cooperatives, rural utilities (electric and telephone), and rural sewer and water systems. It was also authorized to finance U.S. agricultural exports and provide international banking services for farmer-owned cooperatives. The last remaining BC in the FCS, the St. Paul Bank for Cooperatives, merged with CoBank on July 1, 1999.

Farm Credit Act — The Farm Credit Act of 1971, as amended, (12 U.S.C. §§ 2001 – 2279cc) is the statute under which the FCS operates. The Farm Credit Act recodified all previous acts governing the FCS.

Farm Credit Bank — FCBs provide services and funds to local associations that, in turn, lend those funds to farmers, ranchers, producers and harvesters of aquatic products, rural residents for housing, and some agriculture-related businesses. On July 6, 1988, the Federal Land Bank and the Federal Intermediate Credit Bank in 11 of the 12 then-existing Farm Credit districts merged to become FCBs. The mergers were required by the Agricultural Credit Act of 1987.

Farm Credit Leasing Services Corporation — The Leasing Corporation is a service entity owned by CoBank, ACB. It provides equipment leasing and related services to eligible borrowers, including agricultural producers, cooperatives, and rural utilities.

Farm Credit System Insurance Corporation — FCSIC was established by the Agricultural Credit Act of 1987 as an independent U.S. government-controlled corporation. Its purpose is to ensure the timely payment of principal and interest on insured notes, bonds, and other obligations issued on behalf of FCS banks and to act as conservator or receiver of FCS institutions. The FCA board serves ex officio as the board of directors for FCSIC. The chairman of the FCSIC board of directors must be an FCA board member other than the current chairman of the FCA board.

Federal Agricultural Mortgage Corporation — Farmer Mac was created with the enactment of the Agricultural Credit Act of 1987 to provide a secondary market for agricultural real estate and rural housing mortgage loans.

Federal Farm Credit Banks Funding Corporation — The Funding Corporation, based in Jersey City, New Jersey, manages the sale of Systemwide debt securities to finance the loans made by FCS institutions. It uses a network of bond dealers to market its securities.

Federal Intermediate Credit Bank — The Agricultural Credits Act of 1923 provided for the creation of 12 FICBs to discount farmers' short- and intermediate-term notes made by commercial banks, livestock loan companies, and thrift institutions. The Farm Credit Act of 1933 authorized farmers to organize PCAs, which could discount notes with FICBs. As a result, PCAs became the primary entities for delivery of short- and intermediate-term credit to farmers and ranchers. The FICBs and the federal land banks in all Farm Credit System districts merged to become FCBs or the ACB. Thus, no FICBs remain within the FCS.

Federal Land Bank — The Federal Farm Loan Act of 1916 provided for the establishment of 12 federal land banks to provide long-term mortgage credit to farmers and ranchers, and later to rural home buyers. All federal land banks and FICBs have merged to become FCBs or part of the ACB. Thus, no federal land banks remain.

Federal Land Bank Association — These associations were lending agents for FCBs before they received their affiliated banks' direct-lending authority to make long-term mortgage loans to farmers, ranchers, and rural residents for housing. As lending agents, the associations did not own loan assets but made loans only on behalf of the FCBs with which they were affiliated. As of October 1, 2000, all active federal land bank associations had received direct-lending authority and did not serve as lending agents for FCBs.

Federal Land Credit Association — An FLCA is the regulatory term FCA uses for a federal land bank association that owns its loan assets. An FLCA borrows funds from an FCB to make and service long-term loans to farmers, ranchers, and producers and harvesters of aquatic products. It also makes and services housing loans for rural residents.

Financial Institution Rating System — The FIRS is similar to the Uniform Financial Institutions Rating System used by other federal banking regulators. However, unlike the Uniform Financial Institutions Rating System, the FIRS were designed to reflect the no depository nature of FCS institutions. The FIRS provides a general framework for assimilating and evaluating all significant financial, asset quality, and management factors to assign a composite rating to each System institution. The ratings are described below.

Rating 1 — Institutions in this group are basically sound in every respect; any negative findings or comments are of a minor nature and are anticipated to be resolved in the normal course of business. Such institutions are well managed, resistant to external economic and financial disturbances, and more capable of withstanding the uncertainties of business conditions than institutions with lower ratings. Each institution in this category exhibits the best performance and risk management practices for its size, complexity, and risk profile. These institutions give no cause for regulatory concern.

Rating 2 — Institutions in this group are fundamentally sound but may reflect modest weaknesses correctable in the normal course of business. Since the nature and severity of deficiencies are not material, such institutions are stable and able to withstand business fluctuations. Overall risk management practices are satisfactory for the size, complexity, and risk profile of each institution in this group. While areas of weakness could develop into conditions of greater concern, regulatory response is limited to the extent that minor adjustments are resolved in the normal course of business and operations continue in a satisfactory manner.

Rating 3 — Institutions in this category exhibit a combination of financial, management, operational, or compliance weaknesses ranging from moderately severe to unsatisfactory. When weaknesses relate to asset quality or financial condition, such institutions may be vulnerable to the onset of adverse business conditions and could easily deteriorate if concerted action is not effective in correcting the areas of weakness. Institutions that are in significant noncompliance with laws and regulations may also be accorded this rating. Risk management practices are less than satisfactory for the size, complexity, and risk profile of each institution in this group. Institutions in this category generally give cause for regulatory concern and require more than normal supervision to address deficiencies. Overall strength and financial capacity, however, still make failure only a remote possibility if corrective actions are implemented.

Rating 4 — Institutions in this group have an immoderate number of serious financial or operating weaknesses. Serious problems or unsafe and unsound conditions exist that are not being satisfactorily addressed or resolved. Unless effective actions are taken to correct these conditions, they are likely to develop into a situation that will impair future viability or constitute a threat to the interests of investors, borrowers, and stockholders. Risk management practices are generally unacceptable for the size, complexity, and risk profile of each institution in this group. A potential for failure is present but is not yet imminent or pronounced. Institutions in this category require close regulatory attention, financial surveillance, and a definitive plan for corrective action.

Rating 5 — This category is reserved for institutions with an extremely high, immediate or near-term probability of failure. The number and severity of weaknesses or unsafe and unsound conditions are so critical as to require urgent external financial assistance. Risk management practices are inadequate for the size, complexity, and risk profile of each institution in this group. In the absence of decisive corrective measures, these institutions will likely require liquidation or some form of emergency assistance, merger, or acquisition.

Government-sponsored enterprise — A GSE is typically a federally chartered corporation that is privately owned, designed to provide a source of credit nationwide, and limited to servicing one economic sector. Each GSE has a public or social purpose. GSEs are usually created because the private markets did not satisfy a purpose that Congress deems worthy — either to fill a credit gap or to enhance competitive behavior in the loan market. Each is given certain features or benefits (called GSE attributes) to allow it to overcome the barriers that prevented purely private markets from developing. The FCS is the oldest financial GSE.

Participation — A loan participation is usually a large loan in which two or more lenders share in providing loan funds to a borrower to manage credit risk or overcome a legal lending limit for a single credit. One of the participating lenders originates, services, and documents the loan. Generally, the borrower deals with the institution originating the loan and is not aware of the other participating institutions.

Production Credit Association — PCAs are FCS entities that deliver only short- and intermediate-term loans to farmers and ranchers. A PCA borrows money from its FCB to lend to farmers. PCAs also own their loan assets. As of January 1, 2003, all PCAs were eliminated as independent, stand-alone, direct-lender associations. All PCAs are now subsidiaries of ACAs.

Syndication — A loan syndication (or "syndicated bank facility") is a large loan in which a group of banks work together to provide funds for a borrower. Usually one bank takes the lead, acting as an agent for all syndicate members and serving as the focal point between them and the borrower. All syndicate members are known at the outset to the borrower and they each have a contractual interest in the loan.

Acronyms and abbreviations

ACA — agricultural credit association

ACB — agricultural credit bank

CAMELS — capital, assets, management, earnings, liquidity, and sensitivity

CEO — chief executive officer

Farm Credit Act — Farm Credit Act of 1971, as amended

Farmer Mac — Federal Agricultural Mortgage Corporation

FCA — Farm Credit Administration

FCB — farm credit bank

FCS — Farm Credit System

FCSIC — Farm Credit System Insurance Corporation

FIRS — Financial Institution Rating System

FLCA — federal land credit association

GAAP — generally accepted accounting principles

OFIs — other financing institutions

PCA — production credit association

USDA — U.S. Department of Agriculture

YBS — young, beginning, and small (farmers and ranchers)

Additional information

The Farm Credit Administration 2016 Annual Report on the Farm Credit System is available on FCA's website at www.fca.gov. For questions about this publication, contact FCA:

Office of Congressional and Public Affairs
Farm Credit Administration
1501 Farm Credit Drive
McLean, VA 22102-5090
Telephone: 703-883-4056
Fax: 703-790-3260
Email: info-line@fca.gov

With support from the system banks, the Federal Farm Credit Banks Funding Corporation prepares the financial press releases, the System's Annual and Quarterly Information Statements, and the System's combined financial statements. These documents are available on the Funding Corporation's website at www.farmcreditfunding.com. For copies of these documents, contact the Funding Corporation:

Federal Farm Credit Banks
Funding Corporation
10 Exchange Place, Suite 1401
Jersey City, NJ 07302
Telephone: 201-200-8000

The Farm Credit System Insurance Corporation's annual report is available on its website at www.fcsic.gov. To receive copies of this report, contact FCSIC:

Farm Credit System Insurance Corporation
1501 Farm Credit Drive
McLean, VA 22102
Telephone: 703-883-4380

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Office of Congressional and Public Affairs
Farm Credit Administration
1501 Farm Credit Drive
McLean, VA 22102
703-883-4056
www.fca.gov