2016 ANNUAL INFORMATION STATEMENT OF THE FARM CREDIT SYSTEM

Federal Farm Credit Banks Funding Corporation
101 Hudson Street, Suite 3505 • Jersey City, New Jersey 07302 • 201-200-8000

MARCH 1, 2017

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This annual information statement provides important information for investors in the debt securities jointly issued by the four Farm Credit System Banks — AgFirst Farm Credit Bank, AgriBank, FCB, CoBank, ACB and Farm Credit Bank of Texas (collectively, the Banks). These debt securities, which we refer to as Systemwide Debt Securities, include:

- Federal Farm Credit Banks Consolidated Systemwide Bonds,
- Federal Farm Credit Banks Consolidated Systemwide Discount Notes,
- Federal Farm Credit Banks Consolidated Systemwide Medium-Term Notes, and
- any other debt securities that the Farm Credit System Banks may jointly issue from time to time.

This annual information statement does not constitute an offer to sell or a solicitation of an offer to buy Systemwide Debt Securities. Systemwide Debt Securities are offered by the Federal Farm Credit Banks Funding Corporation on behalf of the Banks pursuant to offering circulars for each type of debt offering. The relevant offering circular as of this date is the Federal Farm Credit Banks Consolidated Systemwide Bonds and Discount Notes Offering Circular dated December 8, 2014.

The offering circular may be amended or supplemented from time to time and a new offering circular may be issued. Before purchasing Systemwide Debt Securities, you should carefully read the relevant offering circular, the most recent annual and quarterly information statements and other current information released by the Funding Corporation regarding the Banks and/or Systemwide Debt Securities. At this time, no Systemwide Debt Securities are being offered under the Federal Farm Credit Banks Global Debt Program Offering Circular dated October 10, 1996, the Federal Farm Credit Banks Consolidated Systemwide Medium-Term Notes Offering Circular dated July 19, 1993, as amended by supplements dated February 26, 1997 and June 11, 1999, or the Federal Farm Credit Banks Consolidated Systemwide Master Notes Offering Circular dated December 21, 1999, as amended by the supplement dated August 20, 2001. No securities previously offered under the Global Debt Program Offering Circular or the Master Notes Offering Circular are currently outstanding.

Systemwide Debt Securities are the joint and several obligations of the Banks and are not obligations of or guaranteed by the United States government. Systemwide Debt Securities are not required to be registered and have not been registered under the Securities Act of 1933. In addition, the Banks are not required to file and do not file periodic reports under the Securities Exchange Act of 1934. Systemwide Debt Securities have not been recommended by any federal or state securities commission or regulatory authority. Furthermore, these authorities have not confirmed the accuracy or determined the adequacy of any offering material.

Certification

The undersigned certify that (1) we have reviewed this annual information statement, (2) this annual information statement has been prepared in accordance with all applicable statutory or regulatory requirements, and (3) the information contained in this annual information statement is true, accurate, and complete to the best of the signatories' knowledge and belief.

Roy Tiarks	Theresa E. McCabe	Karen R. Brenner
Roy Tiarks	Theresa E. McCabe	Karen R. Brenner
Chairman of the Board	President and CEO	Managing Director — Financial Management Division

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WHERE YOU CAN FIND ADDITIONAL INFORMATION

Farm Credit System quarterly and annual information statements and press releases relating to financial results or other developments affecting the System issued by the Federal Farm Credit Banks Funding Corporation (Funding Corporation) for the current fiscal year and the two preceding fiscal years, as well as offering circulars relating to Systemwide Debt Securities, are available on the Funding Corporation's website located at www.farmcreditfunding.com. Other information regarding the System can be found on the System's website located at www.farmcredit.com.

In addition, copies of quarterly and annual reports of each Bank and each Farm Credit Bank (AgFirst Farm Credit Bank, AgriBank, FCB and Farm Credit Bank of Texas) combined with its affiliated Associations may be obtained from each individual Bank. Bank addresses and telephone numbers where copies of these documents may be obtained are listed on page S-30 of this annual information statement. These documents and further information on each Bank or each Farm Credit Bank combined with its affiliated Associations and links to a Bank's affiliated Associations' websites are also available on the Funding Corporation's website or each Bank's website as follows:

- AgFirst Farm Credit Bank — www.agfirst.com
- AgriBank, FCB — www.agribank.com
- CoBank, ACB — www.cobank.com
- Farm Credit Bank of Texas — www.farmcreditbank.com

Information contained on these websites is not incorporated by reference into this annual information statement and you should not consider information contained on these websites to be part of this annual information statement.

FIVE-YEAR SUMMARY OF SELECTED COMBINED FINANCIAL DATA AND KEY FINANCIAL RATIOS

The following selected combined financial data for each of the five years in the period ended December 31, 2016 has been derived from the audited combined financial statements of the Farm Credit System. The selected combined financial data and combined financial statements of the Farm Credit System combine the financial condition and operating results of each of the Banks, their affiliated Associations, the Federal Farm Credit Banks Funding Corporation, and the Farm Credit Insurance Fund, and reflect the investments in, and allocated earnings of, certain service organizations owned by the Banks or Associations. All significant intra-System transactions and balances have been eliminated in combination. Because System entities are financially and operationally interdependent, we believe providing the combined financial information is more meaningful to investors in Systemwide Debt Securities than financial information relating to the Banks on a stand-alone basis (i.e., without the Associations).

While this annual information statement reports on the combined financial condition and results of operations of the Banks, Associations, and other System entities specified above, only the Banks are jointly and severally liable for payments on Systemwide Debt Securities. Note 21 to the accompanying combined financial statements provides combining Bank-only financial condition and results of operations information. Copies of quarterly and annual reports of each Bank are available on its website; see page 2 for a listing of the websites.

The combined statement of condition at December 31, 2016 and 2015 and the related combined statements of income, of comprehensive income, of changes in capital, and of cash flows for each of the three years in the period ended December 31, 2016 and related notes appear elsewhere in this annual information statement.

	2016	2015	2014	2013	2012
			(in millions)		
Combined Statement of Condition Data					
Loans	$248,768	$235,890	$217,054	$201,060	$191,904
Allowance for loan losses	(1,506)	(1,280)	(1,237)	(1,238)	(1,343)
Net loans	247,262	234,610	215,817	199,822	190,561
Cash, Federal funds sold and investments	62,575	59,378	57,839	51,893	46,928
Accrued interest receivable	2,140	1,973	1,824	1,719	1,668
Other property owned	75	96	132	198	324
Total assets	319,915	303,503	282,733	260,662	246,528
Systemwide bonds and medium-term notes	228,254	211,053	198,360	188,739	183,290
Systemwide discount notes	29,528	32,282	26,971	18,636	14,547
Subordinated debt	499	1,550	1,550	1,549	1,548
Other bonds	2,431	2,879	3,627	3,215	2,399
Total liabilities	267,604	254,669	237,027	218,061	207,919
Capital	52,311	48,834	45,706	42,601	38,609
Combined Statement of Income Data					
Net interest income	$ 7,447	$ 7,015	$ 6,804	$ 6,674	$ 6,477
(Provision for loan losses) loan loss reversal	(266)	(106)	(40)	31	(313)
Net noninterest expense	(2,158)	(2,024)	(1,819)	(1,844)	(1,824)
Income before income taxes	5,023	4,885	4,945	4,861	4,340
Provision for income taxes	(175)	(197)	(221)	(221)	(222)
Net income	$ 4,848	$ 4,688	$ 4,724	$ 4,640	$ 4,118

Combined Key Financial Ratios

Certain combined key financial ratios of the System are set forth below:

	2016	2015	2014	2013	2012
Return on average assets	1.56%	1.64%	1.77%	1.86%	1.74%
Return on average capital	9.44	9.87	10.62	11.43	10.96
Net interest income as a percentage of average earning assets	2.49	2.55	2.64	2.78	2.87
Operating expense as a percentage of net interest income and noninterest income	34.6	35.0	33.8	33.4	32.2
Net loan charge-offs as a percentage of average loans	0.02	0.02	0.03	0.03	0.13
Nonperforming assets as a percentage of loans and other property owned	0.82	0.73	0.86	1.11	1.53
Allowance for loan losses as a percentage of loans outstanding at year end	0.61	0.54	0.57	0.62	0.70
Capital as a percentage of total assets at year end	16.4	16.1	16.2	16.3	15.7
Capital and allowance for loan losses as a percentage of loans outstanding at year end	21.6	21.2	21.6	21.8	20.8
Debt to capital at year end	5.12:1	5.21:1	5.19:1	5.12:1	5.39:1

BUSINESS

Overview of the Farm Credit System

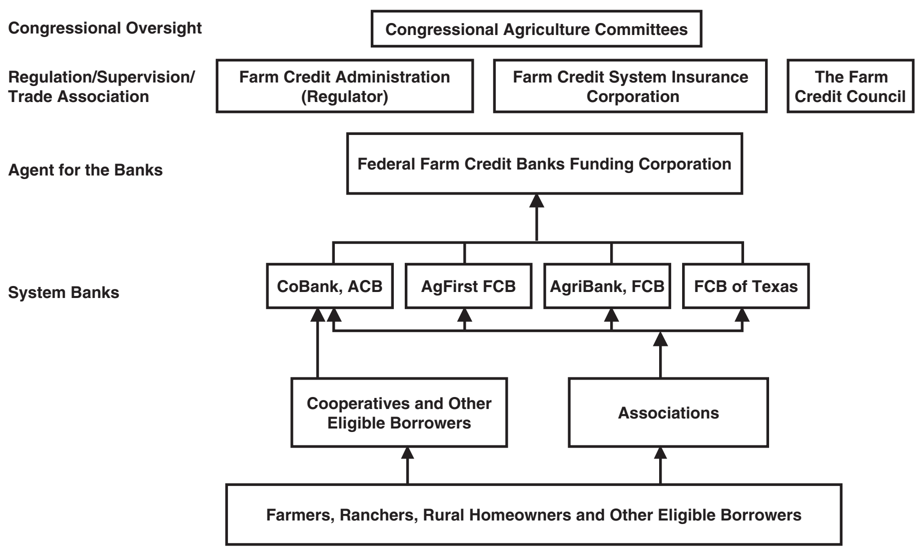
The Farm Credit System is a federally chartered network of borrower-owned lending institutions comprised of cooperatives and related service organizations. Cooperatives are organizations that are owned and controlled by their members who use the cooperatives' products or services. The U.S. Congress authorized the creation of the first System institutions in 1916. Our mission is to support rural communities and agriculture with reliable, consistent credit and financial services. We do this by making appropriately structured loans to qualified individuals and businesses at competitive rates and providing financial services and advice to those persons and businesses.

Consistent with our mission of supporting rural America, we also make rural residential real estate loans, finance rural power, communication and water infrastructures and make loans to support agricultural exports and to finance other eligible entities.

Congress established the Farm Credit Administration as the System's independent federal regulator to examine and regulate System institutions, including their safety and soundness. System institutions are federal instrumentalities.

Structure/Ownership of the Farm Credit System

The following chart depicts the current overall structure and ownership of the System.



The Associations are cooperatives owned by their borrowers, and the Farm Credit Banks (AgFirst, AgriBank and Texas) are cooperatives primarily owned by their affiliated Associations. The Agricultural Credit Bank (CoBank) is a cooperative principally owned by cooperatives, other eligible borrowers and its affiliated Associations. The Banks and Associations each have their own board of directors and are not commonly owned. Each Bank and Association manages and controls its own business activities, operations and financial performance.

The Banks jointly own the Funding Corporation. The Funding Corporation, as agent for the Banks, issues and markets Systemwide Debt Securities in order to raise funds for the lending activities and operations of the Banks and Associations. The Funding Corporation also provides the Banks with certain consulting, accounting and financial reporting services, including the preparation of the System's quarterly and annual information statements and the System's combined financial statements contained in those information statements. As the System's financial spokesperson, the Funding Corporation is primarily responsible for financial disclosure and the release of public information concerning the financial condition and performance of the System.

Systemwide Debt Securities are the general unsecured joint and several obligations of the Banks. Systemwide Debt Securities are not obligations of and are not guaranteed by the United States government. In addition, Systemwide Debt Securities are not the direct obligations of the Associations and, as a result, the capital of the Associations may not be available to support principal or interest payments on Systemwide Debt Securities.

Our Business Model

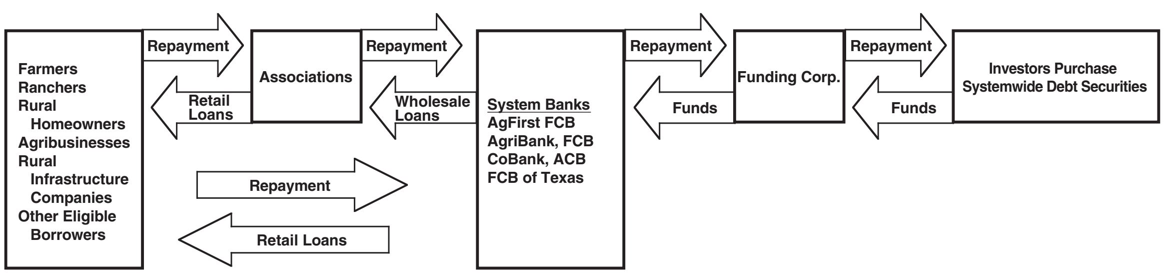
A Bank and its affiliated Associations are financially and operationally interdependent as the Bank is statutorily required to serve as an intermediary between the financial markets and the retail lending activities of its affiliated Associations. The Banks are the primary source of funds for the Associations. Associations are not legally authorized to accept deposits and may not borrow from other financial institutions without the approval of their affiliated Bank. The Banks are not legally authorized to accept deposits and they principally obtain their funds through the issuance of Systemwide Debt Securities. Other less significant sources of funding for the Banks include internally generated earnings and the issuance of common and preferred equities. As a result, the loans made by the Associations are primarily funded by the issuance of Systemwide Debt Securities by the Banks. The repayment of Systemwide Debt Securities is dependent upon the ability of borrowers to repay their loans from the Associations. In addition, CoBank makes retail loans and leases directly to cooperatives, rural infrastructure companies, and other eligible borrowers. The Banks also purchase loan participations from Associations, other Banks and non-System lenders. Therefore, the repayment of Systemwide Debt Securities is also dependent upon the ability of these borrowers to repay their loans.

The chart below illustrates the flow of funds from investors in Systemwide Debt Securities to the System's borrowers and the ultimate repayment of funds to investors resulting from borrower loan repayments.

Overview of Our Business

As required by the Farm Credit Act, we specialize in providing financing and related services to eligible, creditworthy borrowers in the agricultural and rural sectors, to certain related entities, and to domestic or foreign parties in connection with the export of U.S. agricultural products. We make credit available in all 50 states, the Commonwealth of Puerto Rico, and, under conditions set forth in the Farm Credit Act, U.S. territories.

System institutions may also provide a variety of financially related services to their borrowers, as discussed in the "Products and Services — Financially Related Services" section.



Government-Sponsored Enterprise Status

In order to better accomplish our mission, Congress has granted the System certain attributes that result in government-sponsored enterprise status for the System. As a government-sponsored enterprise, we have traditionally been able to raise funds at competitive rates and terms, in varying economic environments. This ability to raise funds has historically allowed us to make competitively priced loans to eligible borrowers through all economic cycles and thus accomplish our mission. (See "Risk Factors" for a discussion of the potential impact of changes on the sovereign credit rating of the U.S. on the System given its government-sponsored enterprise status and the uncertainty about the future of government-sponsored enterprises.)

Agricultural Industry Overview

The agricultural sector has been a key economic force in the U.S. economy and is strongly affected by domestic and global economic conditions. The System was created to provide support for this sector because of its significance to the well-being of the U.S. economy and the U.S. consumer. Profitability in our business is dependent on the health of the U.S. agricultural sector, which is heavily influenced by domestic and world demand for agricultural products, and impacted by government support programs, including crop insurance, to producers of certain agricultural commodities. (See "Risk Factors" for a discussion of potential changes in the agricultural spending policies of the U.S. government in light of the U.S. budget deficit and its potential impact on the System's borrowers.) Further, off-farm income is important to the repayment ability of many agricultural producers. Accordingly, our business also may be impacted by the health of the general U.S. economy.

System Lending Institutions

The two types of entities through which we conduct our lending business are the Banks and the Associations.

Banks

At December 31, 2016, the System had four Banks (three Farm Credit Banks and one Agricultural Credit Bank). The Banks' lending operations include wholesale loans to their affiliated Associations and loan participations in eligible loans purchased from Associations, other Banks and non-System lenders. In addition, CoBank, as the Agricultural Credit Bank, has additional nationwide authority to make retail loans directly to agricultural and rural infrastructure cooperatives and businesses and other eligible entities.

The Banks obtain a substantial majority of funds for their lending operations through the issuance of Systemwide Debt Securities, but also obtain some of their funds from internally generated earnings and from the issuance of common and preferred equities.

Associations

As of January 1, 2017, the System had 73 Associations throughout the nation and the Commonwealth of Puerto Rico. There were 71 Agricultural Credit Associations with Production Credit Association subsidiaries and Federal Land Credit Association subsidiaries, and two Federal Land Credit Associations. The Federal Land Credit Associations make real estate mortgage loans, including rural residential real estate loans. Agricultural Credit Associations may, directly or through their subsidiaries, make real estate mortgage loans, production and intermediate-term loans, agribusiness loans (processing and marketing loans, and certain farm-related business loans) and rural residential real estate loans. These retail loans are made to farmers, ranchers, producers or harvesters of aquatic products, farm-related businesses and rural homeowners. Associations may also purchase eligible loan participations from other System entities and non-System lenders.

The Associations obtain a substantial majority of the funds for their lending operations from borrowings from their affiliated Bank, but also obtain some of their funds from internally generated earnings and from the issuance of equities.

Districts

Each Bank combined with its affiliated Associations is referred to as a District. The following table lists the four Districts and provides information about the asset size and the loan portfolio size of each District as of December 31, 2016.

District	Assets	Loans
	(in millions)	
AgFirst	$ 36,821	$ 27,458
AgriBank	119,007	99,069
Texas	27,953	22,426
CoBank	136,537	104,779

There is substantial variation among the Districts with respect to size, number and mix of Associations. The largest Associations, those with assets over $1 billion, accounted for 53.7% and 52.2% of the System's assets at December 31, 2016 and 2015 and accounted for 65.1% and 63.4% of the System's loans at December 31, 2016 and 2015. A summary of these Associations by asset size can be found in the Supplemental Financial Information on pages F-82 and F-83.

Products and Services

Loans by Banks

The Banks lend to the Associations in their District and, to a much lesser extent, other eligible financing institutions relating to their agricultural loan portfolios (e.g., national or state banks, trust or finance companies, savings institutions or credit unions).

CoBank also may make the following types of loans:

- Agribusiness loans — primarily to finance the operations of cooperatives and other businesses in various agricultural sectors such as grain handling and marketing, farm supply, food processing, dairy, livestock, fruits, nuts, vegetables, cotton, biofuels and forest products,
- Rural power (formerly referred to as energy) loans —primarily to finance electric generation, transmission and distribution systems supporting rural areas,
- Rural communication loans — primarily to finance rural communication companies,
- Rural water/waste water loans — primarily to finance water and waste water systems supporting rural areas, and
- Agricultural export finance loans — primarily to provide short- and medium-term trade finance to other banks to support U.S. exporters for international trade of agricultural products. The federal government guarantees a portion of these loans.

The primary products and services related to these loans, except agricultural export finance loans, include term loans, revolving lines of credit, project financing, leasing, tax-exempt bond issuances, capital markets services and cash management and investment products.

The Banks may purchase participations in loans made by the Associations, other Banks and non-System lenders to eligible borrowers or certain entities whose operations are functionally similar to those of an eligible borrower and may also participate in any loan originated or purchased by CoBank.

Loans by Associations

The Associations offer the following types of loans to their borrowers:

- Real estate mortgage loans — generally to purchase farm real estate, refinance existing mortgages, construct various facilities used in agricultural operations, or purchase other rural residential/lifestyle real estate for both full-time and part-time farmers. In addition, credit for other agricultural purposes and family needs is available to full-time and part-time farmers. Real estate mortgage loans have maturities ranging from 5 to 40 years and must be secured by first liens on the real estate. These loans may be made only in amounts up to 85% of the appraised value of the property taken as security or up to 97% of the appraised value if guaranteed by a federal, state, or other governmental agency. The actual percentage of loan-to-appraised value when loans are made is generally lower than the statutory maximum percentage.
- Production and intermediate-term loans — for operating funds, equipment and other purposes. Eligible financing needs include operating inputs (such as labor, feed, fertilizer, and repairs), livestock, family living expenses, income taxes, debt payments on machinery or equipment, and other business-related expenses. Production loans may be made on a secured or unsecured basis and are most often made for a period of time that matches the borrower's normal production and marketing cycle, which is typically less than 12 months. Intermediate-term loans typically finance depreciable capital assets of a farm or ranch. Examples of the uses of intermediate-term loans are to purchase or refinance farm machinery, vehicles, equipment, breeding livestock, or farm buildings, to make improvements, or to provide working capital. Intermediate-term loans are made for a specific term, generally 10 years or less. These loans may be made on a secured or unsecured basis, but are normally secured.
- Agribusiness loans — may be made on a secured or unsecured basis and included:
  - Processing and marketing loans — for operations to process or market the products produced by a farmer, rancher, or producer or harvester of aquatic products, or by a cooperative.
  - Farm-related business loans — to eligible borrowers that furnish certain farm-related business services to farmers or ranchers that are directly related to their agricultural production.
- Rural residential real estate loans — to purchase a single-family dwelling that will be the primary residence in rural areas, which may include a town or village that has a population of not more than 2,500 persons. In addition,

the loan may be to remodel, improve, or repair a rural home, or to refinance existing debt. These loans must be secured by a first lien on the property, except that it may be secured by a second lien if the System institution also holds the first lien on the property.

Associations may also purchase participations in loans made by other Associations, System Banks and non-System lenders to eligible borrowers or certain entities whose operations are functionally similar to those of an eligible borrower.

Loan Interest Rate and Prepayment Features

Depending on the purpose of the loan, its repayment terms and the creditworthiness of the borrower, several interest rate (fixed or floating) and prepayment features may be available for a loan. Indexed floating-rate loans are tied solely to an external index such as the London InterBank Offered Rate (LIBOR) or the prime rates charged by certain commercial banks (Prime). The interest rate on an adjustable-rate loan may be fixed for a period of time and adjusted periodically by predetermined amounts and may have an adjustment rate cap or floor for each period as well as for the life of the loan. The interest rate on an administered-rate loan may be adjusted periodically on a basis internally determined by the lending institution. The interest rate on a fixed-rate loan will not change for the fixed-rate period of the loan.

A range of prepayment options exists on fixed- and floating-rate loans. These options range from loans with "make-whole" prepayment fee provisions, i.e., the borrower pays an additional amount when the loan is prepaid to cover the loss from the residual higher-cost funding that can occur as a result of the prepayment, to loans that may be prepaid without any prepayment fee provisions.

Investments in Rural America

In addition to making loans to accomplish the System's Congressionally mandated mission to finance agriculture and rural America, the Banks and Associations may make investments in rural America to address the diverse needs of agriculture and rural communities across the country. Examples of these investments include partnerships with agricultural and rural community lenders, investments in rural economic development and infrastructure, health care facilities, and investments in obligations and mortgage securities that increase the availability of affordable housing in rural America. The Farm Credit Administration approves these investments on a case-by-case basis.

Financially Related Services

System institutions also provide a variety of products and services to their borrowers designed to enhance their business. Products and services provided by certain System institutions include:

- acting as an agent or broker, credit and mortgage life or disability insurance developed specifically for System borrowers to protect the repayment of loan obligations,
- acting as an agent or broker, various types of crop insurance covering specific risks (e.g., hail, fire, or lightning) and multi-peril crop insurance to protect against unpredictable weather and volatile markets in a combination of yield and revenue-based products,
- acting as an agent or broker, livestock risk protection that provides revenue protection during unpredictable declines in the livestock industry,
- estate planning, record keeping, and tax planning and preparation,
- fee appraisal services, and
- cash management products and services and other related services to allow borrowers to more effectively manage their financial positions.

The Banks and Associations make the above-described insurance available through private insurers.

A limited number of institutions have entered into a contractual arrangement to provide financial support to a captive reinsurance company in a specified dollar amount, which is not material to the System's financial condition or results of operations. That company provides reinsurance for crop insurance policies written by Approved Insurance Providers as designated by the United States Department of Agriculture (USDA). The involved System institutions share in the gains and losses of the captive reinsurance company in accordance with the terms of the contract, but are responsible for losses only up to predetermined limits as set forth in the contract.

In addition, a subsidiary of one Bank and certain other System institutions provide leasing services to their customers that include a broad spectrum of lease options tailored to the borrower's unique financial needs. These services include the leasing of equipment, vehicles and facilities used by our borrowers in their businesses.

Customers

Our borrowers consist of farmers, ranchers, producers and harvesters of aquatic products, agricultural and rural infrastructure cooperatives and businesses, rural homeowners and other eligible entities, including other eligible financing institutions (e.g., national or state banks, trust or financing companies, savings institutions or credit unions).

We make loans and provide financially related services to qualified borrowers in the agricultural and rural sectors and to certain related entities. Our loan portfolio at the System level is diversified by commodity and geographic location (with two commodities exceeding 9% of total assets). On a combined basis, loans to farmers of cash grains totaled 13.4% of the System's total assets at December 31, 2016, and 13.7% at December 31, 2015. Loans to borrowers raising livestock, which do not include poultry and dairy, represented 9.6% of the System's total assets at December 31, 2016 as compared with 9.7% at December 31, 2015. However, due to the geographic territories served by individual Banks and Associations, most System institutions have higher concentrations of certain types of loans or commodities than does the System as a whole.

As part of our mission, we have established policies and programs for furnishing sound and constructive credit and related services to young, beginning, and small farmers and ranchers. A summary of these activities can be found in the Supplemental Financial Information on pages F-84 and F-85.

In accordance with the Farm Credit Act, each borrower, as a condition of borrowing, is generally required to invest in capital stock or participation certificates (non-voting equity investment) of the Association or Bank that originates the loan. The initial investment requirement may vary by Association or Bank, with the minimum being the statutory minimum amount of 2% of the loan amount or $1,000, whichever is less. The different classes of capital stock and participation certificates and the manner in which capital stock and participation certificates are issued, retired and transferred are set forth in the respective Bank's or Association's bylaws. The Bank or Association generally has a first lien on the capital stock and participation certificates as collateral for the repayment of the borrower/stockholder loan. For a more detailed discussion of these requirements, see Note 12 to the System's combined financial statements contained in this annual information statement.

Loan Underwriting Standards

Credit risk arises from the potential inability of a borrower to meet a repayment obligation. This credit risk is managed at both the Association and Bank levels. Farm Credit Administration regulations establish loan-to-value limits for real estate mortgage loans and require that collateral be posted for real estate mortgage and some production loans. System institutions are required to adopt written standards for prudent lending and effective collateral evaluation.

Underwriting by Associations

The Associations manage credit risk through the use of underwriting standards, credit analysis of borrowers and portfolio management techniques. When making a loan, the Associations consider many factors about the borrower and apply certain underwriting standards to the lending process. The factors considered in the underwriting process include but are not limited to borrower integrity, credit history, cash flows, equity, and collateral, as well as other sources of loan repayment, loan pricing and an evaluation of management and the board of directors, if applicable. Additionally, many borrowers have off-farm sources of income that enhance their debt repayment capacity. Other factors that may influence the risk profiles of the loan portfolios of Associations include the impact of vertical integration (control over all stages of production of a commodity) and urban and recreational influences on real estate values, which tend to reduce farm income volatility at the producer level.

To mitigate credit risk, each Association establishes lending limits, which represent the maximum amount of credit that can be extended to any one borrower. Further, in some instances, portfolio risk is managed through the purchase and sale of loan participations with other lenders in order to diversify portfolio concentrations by borrower, commodity and geography.

Underwriting by Banks

The Banks also employ risk management practices when making wholesale loans to their affiliated

Associations and loans to their retail borrowers. With respect to retail lending, the Banks manage credit risk through the use of underwriting standards, credit analysis of borrowers and portfolio management techniques. Similar to the Associations, when making a loan, they consider many factors about the borrower and apply underwriting standards to the lending process. The factors considered, and underwriting standards utilized, include borrower earnings, cash flows, equity, and collateral, as well as loan pricing and an evaluation of management and the board of directors, if applicable. The Banks, similar to the Associations, also mitigate credit risk by establishing lending limits and manage the portfolio through the purchase and sale of loan participations.

In the case of wholesale loans to Associations, the assets of the Association secure the Bank's loan to the Association and the lending terms are specified in a general financing agreement between each Association and its affiliated Bank. These financing agreements typically include:

- measurable, risk-based covenants,
- collateralization of the loan by substantially all Association assets,
- the Bank's prior approval of certain loans made by an Association,
- a defined borrowing base calculation or maximum loan amount,
- a prohibition against other borrowings without the Bank's approval, and
- loan rates tied to financial performance.

Competition

The System competes with other lenders, including local, regional, national and international commercial banks, insurance companies, manufacturers and suppliers, captive finance companies of manufacturers and suppliers and non-traditional lenders. Competition varies throughout the nation. System charters and regulations impose geographic and authority limitations on System institutions that are not imposed on its competitors. Commercial banks have a broad spectrum of lines of business and financially related services they can offer and may also have access to competitively priced funds for their lending activities as these banks have the ability to accept deposits.

Competition is also a consideration in connection with the issuance of Systemwide Debt Securities. In addition to securities issued by the U.S. Treasury, we compete with Fannie Mae, Freddie Mac, the Federal Home Loan Banks, other federal government-sponsored enterprises, foreign governments and other highly rated issuers for funds raised through the issuance of unsecured debt in the debt markets. Increases in the issuance of debt by these other issuers could lead to higher interest costs on our debt securities than would otherwise be the case. (See "Risk Factors" for a discussion of how changing perceptions of government-sponsored enterprise status may intensify competition in connection with the issuance of Systemwide Debt Securities.)

Federal Farm Credit Banks Funding Corporation

As agent for the Banks, the Funding Corporation issues and markets Systemwide Debt Securities. The Funding Corporation, which was established by the Farm Credit Act, is owned by the Banks and is located in the metropolitan New York City area. The composition of the board of directors of the Funding Corporation is defined by statute and is comprised of nine voting members: four current or former Bank directors and three Bank chief executive officers or presidents elected by the Banks, and two additional voting members appointed by the shareholder-elected members of the board of directors after seeking recommendations from and consulting with the Secretary of the Treasury and the Chairman of the Board of Governors of the Federal Reserve System. The appointed directors cannot be affiliated with the System or our regulator and cannot be actively engaged with a member of the group of banks and securities dealers involved in selling Systemwide Debt Securities. The president of the Funding Corporation serves as a non-voting member of the Funding Corporation's board of directors.

At December 31, 2016, the Funding Corporation utilized a selling group of 27 banks and securities dealers to sell Systemwide Debt Securities. The Funding Corporation's selling group distributes Systemwide Debt Securities to investors, including, but not limited to, commercial banks, states, municipalities, pension and mutual funds, insurance companies, investment companies, corporations and foreign banks and governments. In addition, the Funding Corporation assists the Banks with respect to a variety of asset/liability management and certain specialized funding activities.

The Funding Corporation, subject to Farm Credit Administration approval, is responsible for determining the amounts, maturities, rates of interest, and terms of each issuance of Systemwide Debt Securities and for establishing conditions of participation in the issuances of Systemwide Debt Securities by the Banks. In this regard, the Funding Corporation and all of the Banks have entered into the Second Amended and Restated Market Access Agreement to establish conditions for each Bank's participation in the issuance of Systemwide Debt Securities. For a detailed discussion of the Market Access Agreement, see "Description of Systemwide Debt Securities — Repayment Protections — Agreements Among Certain System Institutions — Second Amended and Restated Market Access Agreement" below.

The Funding Corporation also provides the Banks with certain consulting, accounting, and financial reporting services, including the preparation of the System's quarterly and annual information statements and the System's combined financial statements contained in those information statements. As the System's financial spokesperson, the Funding Corporation is primarily responsible for financial disclosure and the release of public information concerning the financial condition and performance of the System.

Federal Agricultural Mortgage Corporation (Farmer Mac)

Farmer Mac provides a secondary market for qualified agricultural mortgage loans, rural housing mortgage loans, rural utilities loans (to cooperative borrowers made by cooperative lenders) and the guaranteed portion of agricultural and rural development loans guaranteed by the U.S. Department of Agriculture. By statute, the Farmer Mac board of directors consists of 15 members, of which five are representatives of the System.

Some System institutions have entered into guarantee agreements with Farmer Mac that provide a credit enhancement on certain loans or to manage their capital positions. These transactions present counterparty risk should Farmer Mac fail to perform under these guarantees. However, this risk is considered "secondary" in that System institutions rely primarily on customer loan repayment capacity. These agreements are commonly referred to as long-term standby commitment to purchase agreements. System institutions may also securitize mortgage loans by exchanging the loans for Farmer Mac mortgage-backed securities. At December 31, 2016 and 2015, Farmer Mac guaranteed $1.825 billion and $2.113 billion of loans issued by System institutions and System institutions had exchanged $782 million and $665 million of loans for mortgage-backed securities issued by Farmer Mac.

The System is financially and operationally separate and distinct from Farmer Mac with no ties similar to those that bind the other System institutions. Additionally, the financial information of Farmer Mac is not included in the combined financial statements of the System. While Farmer Mac is statutorily defined as an institution of the System and is examined and regulated by the Farm Credit Administration, any reference to the System herein does not include Farmer Mac, and no System institution is liable for any debt or other obligation of Farmer Mac. Furthermore, Farmer Mac is not liable for any debt or other obligation of any other System institution except for contractual obligations arising from business transactions between Farmer Mac and certain System institutions. The assets of the Farm Credit Insurance Fund do not support any debt or other obligations of Farmer Mac nor do the System's independent credit ratings apply to Farmer Mac, which has not been rated by any Nationally Recognized Statistical Rating Organization.

The Farm Credit Council

The Farm Credit Council is a federated trade association representing the System before Congress, the Executive Branch and others. The Farm Credit Council provides the mechanism for member "grassroots" involvement in the development of System positions and policies with respect to federal legislation and government actions that impact the System. The financial information of The Farm Credit Council is not included in the combined financial statements of the System.

Governance

Boards of Directors

Each Bank and Association has its own board of directors, which is primarily comprised of directors elected by the stockholders, that oversees the management of the Bank or the Association. Farm Credit Administration regulations require each Bank and Association to have a nominating committee that is responsible for identifying, evaluating and nominating candidates for director positions. Stockholder-elected directors must constitute at least 60 percent of the members of the board. Therefore, each board of directors may include outside directors appointed by the stockholder-elected directors. In addition, each Bank and each Association with assets exceeding $500 million is required to have at least two outside directors, who are independent of any System affiliation. All other Associations must have at least one outside director. Each Bank and Association board of directors must have a member who is a "financial expert," as defined in regulations issued by the Farm Credit Administration, except for those Associations with assets of $500 million or less, who may retain a financial advisor to satisfy this requirement. The boards of directors represent the interests of the stockholders of their particular institution. Each board of directors performs the following functions, among others:

- selects, compensates and evaluates the chief executive officer,
- approves the strategic plan and annual operating plans and budget,
- advises management on significant issues facing the institution, and
- oversees the financial reporting process, including the adequacy of the institution's internal controls, communications with stockholders and the institution's legal and regulatory compliance.

In addition to having a nominating committee, each Bank and Association has an audit committee and a compensation committee and may also have additional committees as determined by the board of directors of the Bank or Association. The audit committee members must be members of the board of directors and, if required to have a director as a financial expert as discussed above, the financial expert must serve on the audit committee. The audit committee is responsible for the oversight of the financial reporting process and the institution's internal controls, including those over the preparation of the financial reports, and the appointment, compensation and retention of the independent auditors. The compensation committee is responsible for reviewing compensation policies and plans for senior officers and employees, and must approve the overall compensation program for senior officers. The Funding Corporation has a board of directors, an audit committee, a governance committee and a compensation committee that perform the same functions for the Funding Corporation. In addition, the Funding Corporation has established a System Audit Committee, as described below.

Presidents' Planning Committee

The Presidents' Planning Committee is comprised of the chief executive officer or president of: each Bank, twelve Associations, the Funding Corporation and The Farm Credit Council. The Presidents' Planning Committee serves in a management coordination capacity for the System and provides a key advisory role in the System's decision-making process.

The Presidents' Planning Committee has certain broad responsibilities including:

- establishing and advancing strategic direction,
- identifying and analyzing business opportunities,
- providing advice and recommendations on legislative and regulatory issues,
- improving communications within the System and with the System's various stakeholders and external entities, and
- identifying and monitoring systemic risks, including reputational risks.

The Presidents' Planning Committee carries out these responsibilities with the objective of promoting and protecting the System's core values and strengths. Subcommittees of the Presidents' Planning Committee include: the Executive Committee, the Risk Management Committee, the Finance Committee, and the Business Practices Committee. These subcommittees aid System communication and promote the sharing of best practices. The subcommittees actively engage in discussions about topics where common action is needed by the System.

Coordinating Committee

The Coordinating Committee is comprised of the Chairman and Vice Chairman of the Board and chief executive officer of the Funding Corporation, the Chairman and Vice Chairman of the Presidents' Planning Committee, an additional member from the Presidents' Planning Committee who is an Association chief executive officer, and a member of the executive committee of The Farm Credit Council board of directors. The Farm Credit Council chief executive officer is an ex officio member of the Coordinating Committee who is not entitled to vote on any matters.

The Coordinating Committee's mission is to address issues that impact the System at the national level. This includes monitoring developments in the U.S. and world economies, the financial markets, agriculture, public policy, and regulatory developments to determine if threats or opportunities exist that demand a coordinated, System-level approach.

The Coordinating Committee has certain responsibilities including:

- ensuring coordination among the Funding Corporation board of directors, The Farm Credit Council board of directors and the Presidents' Planning Committee,
- establishing System-level planning and contingency priorities, and identifying and responding to emerging issues, threats or opportunities that require attention at the national level,
- providing overall direction and oversight of activities related to the established priorities, and
- communicating with boards and management of System institutions on a timely basis regarding activities of the Coordinating Committee.

System Audit Committee

As required by regulation, the board of directors of the Funding Corporation has established a System Audit Committee and adopted a written charter for the Committee. The charter provides for a Committee comprised of at least five members but not more than six members — one of the Funding Corporation's outside directors, two Bank or Association directors, one outside person who has no current affiliation with the System and is a financial expert and a second Funding Corporation's outside director or a second outside member. The second outside member must have no current affiliation with the System and be a financial expert. At the discretion of the board, a sixth member of the Committee may be added for purposes of succession planning. Under the charter, the Funding Corporation's board of directors selects all members of the System Audit Committee and appoints the chairman and vice chairman. The chairman of the System Audit Committee must be a financial expert. A copy of the charter is available on the Funding Corporation's website at www.farmcreditfunding.com.

The System Audit Committee reports to the board of directors of the Funding Corporation. The responsibilities of the System Audit Committee include, among other things:

- the oversight of the Funding Corporation's system of internal controls related to the preparation of the System's quarterly and annual information statements,
- the integrity of the System's quarterly and annual information statements,
- the review and assessment of the impact of accounting and auditing developments on the System's combined financial statements,
- the review and assessment of the impact of accounting policy changes related to the preparation of the System's combined financial statements,
- the appointment, compensation, retention and oversight of the System's independent auditors with the agreement of the Funding Corporation's board of directors,
- the pre-approval of allowable non-audit services at the System level,
- the establishment and maintenance of procedures for the receipt, retention and treatment of complaints regarding accounting, internal accounting controls or auditing matters at the System level and for the confidential, anonymous submission of concerns regarding questionable System accounting, internal accounting controls or auditing matters,
- the receipt of various reports from Funding Corporation management on internal controls, off-balance sheet arrangements, critical accounting policies, and material alternative accounting treatments that may impact the System's combined financial statements,
- the review and approval of the scope and planning of the annual audit by the System's independent auditors,
- the approval of policies and procedures for the preparation of the System's quarterly and annual information statements, and
- the review and approval of the System's quarterly and annual information statements and financial press releases, after discussions with management and the independent auditors.

Internal Control Over Financial Reporting

The principal executive officer and principal financial officer, or persons performing similar functions, of each System institution are responsible for establishing and maintaining disclosure controls and procedures, as well as internal control over financial reporting for their institutions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with accounting principles generally accepted in the United States of America that will be used in reports to the Farm Credit Administration, in reports to their respective members and in the preparation of combined System financial statements.

Internal control over financial reporting is subject to inherent limitations and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate. Managements of System institutions have used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control — Integrated Framework (2013)* to assess the effectiveness of internal control over financial reporting. Based on testing of the design and effectiveness of key internal controls, certifications and other information furnished by the principal executive officer and principal financial officer of each System institution, as well as incremental procedures performed by the Funding Corporation over the combining process, Funding Corporation management has completed an assessment of the effectiveness of the System's internal control over financial reporting as of December 31, 2016 and has included a report on the assessment on page F-2 of this annual information statement.

The System has also engaged PricewaterhouseCoopers LLP, the System's independent auditors, to opine on the effectiveness of the System's internal control over financial reporting based on its integrated audits. Their report can be found on pages F-3 and F-4.

Code of Ethics

Each Bank and the Funding Corporation have adopted codes of ethics that apply to their chief executive officers, certain other executives, and finance and accounting senior professionals who are involved with the preparation of the System's financial statements and the maintenance of the financial records supporting the financial statements.

A copy of the Funding Corporation's code of ethics related to the preparation of the System's quarterly and annual information statements can be accessed on the Funding Corporation's website at www.farmcreditfunding.com. The Funding Corporation will disclose material amendments to or any waivers from a required provision of the codes of ethics for any individual covered by the Banks' or the Funding Corporation's codes of ethics by including that information in future information statements. No such amendments or waivers were made in 2016. Each Bank's code of ethics includes similar content and can be accessed through each of their respective websites listed on page 2.

Complaints Regarding Accounting, Internal Accounting Controls and Auditing Matters

Each Bank and the Funding Corporation have adopted complaint procedures for accounting, financial reporting, internal accounting controls, or auditing matters. These procedures allow individuals to submit confidential, anonymous concerns regarding accounting, financial reporting, internal accounting controls, or auditing matters. Employees may submit such complaints or concerns without the fear of reprisal, retaliation or adverse action being taken against any employee who, in good faith, reports or assists in the investigation of a violation or suspected violation, or who makes an inquiry about the appropriateness of an anticipated or actual course of action. Any concerns or inquiries are addressed in accordance with these procedures.

Employees

The number of personnel employed by the System on a full-time equivalent basis was 14,140 at December 31, 2016, up from 13,881 at December 31, 2015 and 13,743 at December 31, 2014.

Properties

AgFirst owns its corporate offices in Columbia, South Carolina. The other three Banks each lease their respective corporate offices. CoBank owns an office building in Wichita, Kansas. Certain Banks lease other offices throughout the country and, in the case of CoBank, internationally. The Associations own or lease various offices in locations throughout the United States and the Commonwealth of Puerto Rico. The Funding Corporation leases office space in Jersey City, New Jersey.

As authorized by the Farm Credit Act, the Farm Credit Administration occupies buildings and uses land owned and leased by the Farm Credit System Building Association, an entity jointly owned by the Banks. The headquarters for the Farm Credit Administration is located in McLean, Virginia.

FEDERAL REGULATION AND SUPERVISION OF THE FARM CREDIT SYSTEM

The following summaries of certain provisions of the Farm Credit Act, the Farm Credit Administration regulations and the Farm Credit System Insurance Corporation (Insurance Corporation) regulations should not be viewed as complete and are qualified in their entirety by reference to the provisions of the Farm Credit Act and these regulations.

Farm Credit Administration

The Farm Credit Administration, an independent federal regulatory agency, has jurisdiction over System institutions. A three-member full-time board appointed by the President of the United States with the advice and consent of the Senate manages the Farm Credit Administration.

The Farm Credit Administration examines each System institution not less than once during each 18-month period. The examinations may include analyses of credit and collateral quality, capitalization, earnings, interest rate risk, liquidity, the effectiveness of management, and the application of policies in carrying out the Farm Credit Act, in adhering to the Farm Credit Administration regulations, and in supporting eligible borrowers.

Further, the Farm Credit Act authorizes the Farm Credit Administration to take specified enforcement actions to ensure the safe and sound operations of System institutions and their compliance with the Farm Credit Act and Farm Credit Administration regulations. These enforcement powers include the power to:

- issue cease and desist orders,
- suspend or remove a director or an officer of a System institution, and
- impose specified civil money penalties for certain violations of the Farm Credit Act, Farm Credit Administration regulations or certain orders of the Farm Credit Administration.

In addition, Farm Credit Administration regulations provide that if the Farm Credit Administration determines, after consultation with the Funding Corporation, that a financial, economic, agricultural or national defense crisis exists that could impede the normal access of the Banks to the capital markets, the Farm Credit Administration Board shall, in its sole discretion, adopt a resolution that:

- increases the amount of eligible investments that a Bank is authorized to hold, or,
- modifies or waives the liquidity reserve requirement.

Farm Credit Administration Regulations

The Farm Credit Act authorizes, and in some instances requires, the Farm Credit Administration to issue regulations governing various operations of System institutions and subjects certain actions by System institutions to the approval of the Farm Credit Administration. These regulations and approval requirements include the following areas:

Issuances of Systemwide Debt Securities

Under the Farm Credit Act, determinations by the Funding Corporation as to the amounts, maturities, rates of interest, terms, and conditions of participation by the Banks in each issuance of Systemwide Debt Securities are subject to Farm Credit Administration approval.

Lending Objective

In accordance with the Farm Credit Administration regulations, the lending objective of System institutions is to provide full credit, to the extent of creditworthiness, to borrowers whose primary business is farming, ranching, or producing or harvesting aquatic products; conservative credit to part-time farmers and to rural homeowners; and more restricted credit for other credit requirements as needed to ensure a sound credit package or to accommodate a borrower’s needs as long as the total credit results in being primarily an agricultural loan. System institutions are specifically prohibited from extending credit where investment in agricultural assets is primarily for speculative purposes.

Consistent with our mission of supporting rural communities and agriculture, we also make loans to agricultural cooperatives, to finance rural power, communication and water infrastructures, to support agricultural exports and to finance other eligible entities.

Borrower Protections

The Farm Credit Act or the Farm Credit Administration regulations provide the following protections to most System institution borrowers:

- prior to loan closing, System institutions must provide borrowers with extensive disclosure-related information and copies of appraisals, if any,
- System institutions must provide borrowers with access to a Credit Review Committee hearing on an adverse action taken on a loan application or a request for loan restructuring, if requested,
- borrowers have the right of first refusal to lease or repurchase any real estate acquired from them by a System lender, and
- System institutions must protect the nonpublic personal information of their borrowers.

Bank Collateral Requirements

As a condition of a Bank's participation in the issuance of Systemwide Debt Securities, the Bank must have, and at all times thereafter maintain, free from any lien or other pledge, specified eligible assets (referred to in the Farm Credit Act as "collateral") at least equal in value to the total amount of outstanding debt securities of the Bank that are subject to the collateral requirement. These securities include Systemwide Debt Securities for which the Bank is primarily liable and investment bonds or other debt securities that the Bank has issued individually, except for subordinated debt. The collateral must consist of notes and other obligations representing loans or real or personal property acquired in connection with loans made under the authority of the Farm Credit Act (valued in accordance with Farm Credit Administration regulations and directives), obligations of the United States or any agency thereof direct or fully guaranteed, other Farm Credit Administration-approved Bank assets, including eligible marketable securities, or cash. These collateral requirements do not provide holders of Systemwide Debt Securities with a security interest in any assets of the Banks. The Banks may in the future issue Systemwide Debt Securities that are secured by specific assets.

Farm Credit Administration regulations require the Banks to maintain a net collateral ratio of at least 103% (as discussed in "Capital Adequacy" below). The net collateral ratio is net collateral (primarily loans and investments) divided by total liabilities less subordinated debt, subject to certain limits. The net collateral ratio is much more restrictive than the debt issuance collateral requirement. Therefore, if a minimum net collateral ratio is met, the debt issuance collateral requirement is automatically met. However, as a result of having subordinated debt outstanding, CoBank is currently required by the Farm Credit Administration to maintain a minimum net collateral ratio of 104%.

Effective January 1, 2017, the revised Farm Credit Administration capital regulations replaced the existing net collateral ratio with a Tier 1 Leverage ratio as discussed in the "Regulatory Matters" section. In addition, the Associations are subject to the Tier 1 Leverage ratio.

Capital Adequacy

Farm Credit Administration regulations require that the Banks and Associations achieve and maintain a permanent capital level of at least 7% of risk-adjusted assets. Risk-adjusted assets mean the total dollar amount of the System institution's assets adjusted by an appropriate credit conversion factor as defined by regulation. In addition to the collateral requirements discussed above, these regulations require that all Banks and Associations achieve and maintain a total surplus level of at least 7% of risk-adjusted assets and a core surplus level of at least 3.5% of risk-adjusted assets.

Also, each System institution is required to adopt a written capital adequacy plan. The plan must include capital targets that are necessary to achieve the institution's capital adequacy goals as well as maintain the minimum permanent capital, total surplus and core surplus standards.

Effective January 1, 2017, the revised Farm Credit Administration capital regulations replaced the existing core surplus and total surplus requirements with Common Equity Tier 1, Tier 1 and Total Capital risk based capital ratio requirements as discussed in the "Regulatory Matters" section. The Permanent Capital Ratio continues to remain in effect.

Accounting Requirements

Farm Credit Administration regulations require that each System institution prepare all financial statements in accordance with accounting principles generally accepted in the United States. The financial statements must be audited by qualified independent auditors on an annual basis.

Internal Controls

Farm Credit Administration regulations require that each System institution adopt an internal control policy that provides adequate direction to the institution in establishing effective control over and accountability for operations, programs, and resources.

Disclosure Obligations

The Banks, the Associations and the Funding Corporation must prepare and file with the Farm Credit Administration quarterly and annual reports that comply with Farm Credit Administration regulations:

- Each Bank and Association must prepare and publish its annual report on its website and submit a copy to the Farm Credit Administration within 75 days of the end of its fiscal year. In addition, each Bank and Association must prepare and provide to its shareholders an annual report within 90 days of the end of its fiscal year. The annual report must include, among other things, a description of the System institution's business, properties, capital structure, risk exposures, loan portfolio and financial performance. Each Bank and Association must prepare a quarterly report within 40 days after the end of each fiscal quarter. The quarterly reports update and supplement the last annual report, as necessary.

- The Funding Corporation must prepare and disseminate a System annual information statement for holders of Systemwide Debt Securities and other users of the annual information statement within 75 days of the end of each fiscal year and file a copy with the Farm Credit Administration. The annual information statement must include, among other things, a description of the System's business, properties, capital structure, risk exposures, loan portfolio and financial performance. The Funding Corporation must also prepare a quarterly information statement within 45 days after the end of each fiscal quarter. The quarterly information statements update and supplement the System's latest annual information statement, as necessary.

- The Banks and the Funding Corporation are responsible for disclosure of information concerning the System to investors in Systemwide Debt Securities. The Banks are required to provide specified information to the Funding Corporation so that it can prepare the System information statements. Further, the Funding Corporation is required to establish a system of internal controls sufficient to reasonably ensure that any information it releases to investors or the general public is true and accurate, and that there are no omissions of material information.

- The appropriate officers and a board member from each Bank, Association and the Funding Corporation must certify that the information contained in the quarterly and annual reports or information statements they prepare and file with the Farm Credit Administration is true, accurate and complete to the best of their knowledge and belief.

Withdrawal from the System

The Farm Credit Act permits a Bank or an Association to withdraw from the System to become chartered by a federal or state authority as a bank, savings association or other financial institution if certain restrictive requirements are met, including:

- adequate provision for the payment of all of the institution's obligations to other System entities,

- if a Bank, adequate provision for the repayment of its Systemwide Debt Securities and related interest,

- approval of the Farm Credit Administration Board,

- approval by the institution's stockholders, and

- payment by the institution to the Insurance Fund of an amount by which its total capital exceeds 6% of its assets.

Appointment of Conservator or Receiver

The Farm Credit Administration also has the exclusive authority to appoint a conservator or receiver for any System institution under circumstances specified in the Farm Credit Act and has promulgated regulations governing receiverships and conservatorships. The Farm Credit Act provides that the Insurance Corporation will serve as receiver or conservator of any System institution placed in receivership or conservatorship by the Farm Credit Administration and authorizes the Insurance Corporation to issue certain rules and regulations relating to its statutory authorities.

Farm Credit System Insurance Corporation

The Insurance Corporation is an independent U.S. government-controlled corporation and is not under the control of any System institution. The Insurance Corporation's primary purpose is to insure the timely payment of principal and interest on Systemwide Debt Securities. It also carries out various other responsibilities. A board of directors consisting of the Farm Credit Administration Board directs the Insurance Corporation. The chairman of the Insurance Corporation's board of directors must be someone other than the current chairman of the Farm Credit Administration Board.

Uses of the Farm Credit Insurance Fund

The Insurance Corporation is required to expend funds in the Insurance Fund, which can only be used for the benefit of the System, to insure the timely payment of principal and interest on Systemwide Debt Securities.

Further, subject to the provisions of the Farm Credit Act, the Insurance Corporation, in its sole discretion, is also authorized to expend funds in the Insurance Fund to pay its operating expenses, to assist a financially stressed Bank or Association, and to assist qualified merging institutions. The Insurance Corporation cannot provide this discretionary assistance to an institution unless the means of providing this assistance is the least costly of all possible alternatives available to the Insurance Corporation.

The Insurance Corporation may also, in its sole discretion, make loans on the security of, or may purchase, and liquidate or sell, any part of the assets of any Bank or Association that is placed in receivership because of the inability of the institution to pay the principal or interest on any of its notes, bonds, debentures, or other obligations in a timely manner.

Funding for the Farm Credit Insurance Fund

The Insurance Corporation's primary asset is the Insurance Fund and the primary sources of funds for the Insurance Fund are:

- the premiums paid by the Banks, and
- earnings on assets in the Insurance Fund.

The premiums are based on each Bank's pro rata share of adjusted outstanding insured obligations, as reduced by loans and investments guaranteed by federal or state governments, with 20 basis points being the statutory maximum the Banks may be assessed. Up to an additional 10 basis points may be assessed on nonaccrual loans or investments that are other-than-temporarily impaired. The Insurance Corporation conducts a semi-annual review of insurance premium levels and adjusts the premium levels based on certain criteria. Furthermore, the Insurance Corporation, in its sole discretion, may reduce the annual premiums due from each Bank. Each Bank is authorized to assess its affiliated Associations and other financing institutions in order to pay the premiums.

Premiums are collected to maintain the Insurance Fund at the "secure base amount," which is defined in the Farm Credit Act as 2% of the aggregate outstanding insured obligations (adjusted to reflect the System's reduced risk on loans and investments guaranteed by federal or state governments) or another percentage of the aggregate outstanding insured obligations as the Insurance Corporation in its sole discretion determines to be actuarially sound. The Insurance Corporation has adopted a Policy Statement addressing the periodic determination of the secure base amount that is currently set at the 2% level.

When the Insurance Fund is at or above the secure base amount, the Insurance Corporation is required to reduce premiums, as necessary, to maintain the Insurance Fund at this level. In addition, the Insurance Corporation is required to establish Allocated Insurance Reserves Accounts for each Bank and an Allocated Insurance Reserves Account for former Farm Credit System Financial Assistance Corporation stockholders under certain circumstances. The Insurance Corporation is statutorily required to allocate excess Insurance Fund balances above the secure base amount into these accounts. These reserve accounts remain part of the Insurance Fund, and, therefore, may be used for statutorily authorized Insurance Corporation purposes. The Insurance Corporation may also distribute all or a portion of these reserve accounts to the Banks.

For additional information with respect to the Insurance Fund, see "Description of Systemwide Debt Securities — Repayment Protections" and Note 7 to the accompanying combined financial statements.

DESCRIPTION OF SYSTEMWIDE DEBT SECURITIES

General

The System obtains funds for its lending operations primarily from the sale of Systemwide Debt Securities. Each issuance of Systemwide Debt Securities must be approved by the Farm Credit Administration and each Bank's participation is subject to: (1) the availability of specified eligible assets (referred to in the Farm Credit Act as "collateral" as previously described), (2) compliance with the conditions of participation as prescribed in the Second Amended and Restated Market Access Agreement, and (3) determinations by the Funding Corporation of the amounts, maturities, rates of interest, and terms of each issuance. Systemwide Debt Securities are issued pursuant to authorizing resolutions adopted by the boards of directors of each Bank and under the authority of the Farm Credit Act and the Farm Credit Administration regulations. The following summary descriptions of Systemwide Debt Securities should not be viewed as complete and are qualified in their entirety by reference to the offering circulars pertaining to the particular types of debt securities, the provisions of the Farm Credit Act and the Farm Credit Administration regulations.

Systemwide Debt Securities are the general unsecured joint and several obligations of the Banks. Systemwide Debt Securities are not obligations of or guaranteed by the United States government. In addition, Systemwide Debt Securities are not the direct obligations of the Associations and, as a result, the capital of the Associations may not be available to support principal or interest payments on Systemwide Debt Securities. Systemwide Debt Securities are not required to be registered and have not been registered under the Securities Act of 1933. In addition, the Banks are not required to file and do not file periodic reports under the Securities Exchange Act of 1934. Systemwide Debt Securities have not been recommended by any federal or state securities commission or regulatory authority. Furthermore, these authorities have not confirmed the accuracy or determined the adequacy of any offering material. For additional financial information with respect to the Banks, see Note 21 to the accompanying combined financial statements.

Each issuance of Systemwide Debt Securities ranks equally, in accordance with the Farm Credit Administration regulations, with the System's other unsecured Systemwide Debt Securities. Systemwide Debt Securities are not issued under an indenture and no trustee is provided with respect to these securities. Systemwide Debt Securities are not subject to acceleration prior to maturity upon the occurrence of any default or similar event.

The System may issue the types of Systemwide Debt Securities listed on page 1 of this annual information statement. For a discussion of the various risks, tax and other considerations, and terms and conditions related to each of these types of securities, see the discussions in the offering circulars listed on page 1 of this annual information statement, each of which may be amended or supplemented from time to time.

Use of Proceeds

Net proceeds from sales of Systemwide Debt Securities are used by the Banks to fund their loan and investment portfolios (which include loans to their affiliated Associations), to fund operations, to meet maturing debt obligations, and for other corporate purposes. The Banks anticipate that additional financing, including financing through various types of debt securities, will be required from time to time. The amount and nature of the financings depend on a number of factors, including the volume of the Banks' maturing debt obligations, the volume of loans made by and repaid to System institutions, and general market conditions.

Repayment Protections

General

While the repayment of Systemwide Debt Securities is the direct joint and several obligation of the Banks, there are several sources of funds in the System for the payment of interest and principal due on the securities. The underlying source of funds for the repayment of Systemwide Debt Securities is the System's borrowers, with each borrower having certain minimum levels of net worth and, in most cases, collateral posted in connection with loans made to the borrower. These borrowers make payments on their loans to the lending Bank or Association. The lending Associations in turn make payments on their wholesale loans to their affiliated lending Bank. Both the Banks, which ultimately repay Systemwide Debt Securities, and the Associations have capital as further protection and sources of support for the repayment of their outstanding debt. Each Bank's ability to participate in a particular issue of Systemwide Debt Securities is regulated and monitored by the Farm Credit Administration. Furthermore, the Banks and the Funding Corporation have entered into the Second Amended and Restated Market Access Agreement that sets forth certain conditions of participation for the Banks, as described below.

Under each Bank's bylaws, the Bank is authorized under certain circumstances to require its affiliated Associations and certain other equity holders to purchase additional Bank equities. In most cases, the Banks are limited as to the amounts of these purchases that may be required, generally with reference to a percentage of the Association's or other equity holder's direct loan from the Bank. However, the Banks also generally possess indirect access to certain financial resources of their affiliated Associations through loan-pricing provisions and through Bank-influenced District operating and financing policies.

If a Bank participated in the issuance of a Systemwide Debt Security and was unable to repay its portion of that security, the Insurance Fund would be required to make that payment. In the event the assets in the Insurance Fund were exhausted, the provisions of joint and several liability of all the Banks would be triggered, which means the financial resources of the other Banks would be called upon to repay the defaulting Bank's portion of the debt issuance.

Net Collateral Ratio

Farm Credit Administration regulations required each Bank to maintain a minimum net collateral ratio through December 31, 2016. See "Federal Regulation and Supervision of the Farm Credit System — Farm Credit Administration Regulations — Bank Collateral Requirements" above.

Capital Adequacy

Farm Credit Administration regulations require that each Bank and Association achieve and maintain permanent capital and certain surplus to assets ratios. In addition, the Banks are required to develop a capital adequacy plan, as described above in "Federal Regulation and Supervision of the Farm Credit System — Farm Credit Administration Regulations — Capital Adequacy."

Agreements Among Certain System Institutions

In order to provide for mutual protection among the Banks with respect to their debt obligations, the Banks have voluntarily entered into integrated agreements that contain certain financial covenants. These integrated agreements are the Second Amended and Restated Market Access Agreement and the Amended and Restated Contractual Interbank Performance Agreement.

Second Amended and Restated Market Access Agreement (MAA) — The Banks and the Funding Corporation have entered into the MAA. The MAA is designed to provide for the identification and resolution of individual Bank financial problems in a timely manner. The MAA also discharges the Funding Corporation's statutory responsibility for determining conditions for each Bank's participation in each issuance of Systemwide Debt Securities. The MAA establishes criteria and procedures for the Banks that provide operational oversight and control over a Bank's access to System funding if the creditworthiness of the Bank declines below certain agreed-upon levels.

If a Bank fails to meet the performance criteria, it will be placed into one of three categories. Each category gives the other System Banks progressively more control over a Bank that has declining financial performance under the MAA performance criteria. A "Category I" Bank is subject to additional monitoring and reporting requirements; a "Category II" Bank's ability to participate in issuances of Systemwide Debt Securities may be limited to refinancing maturing debt obligations; and a "Category III" Bank may not be permitted to participate in issuances of Systemwide Debt Securities. No limitations on the participation in the issuances of Systemwide Debt Securities are associated with being in "Category I." A Bank exits these categories by returning to compliance with the agreed-upon performance criteria.

Under the MAA, once a Bank is placed in "Category I," a committee of representatives from the Banks and the Funding Corporation (Committee) is formed within seven days after receiving notice of non-compliance by a Bank. Within 30 days of receiving a notice, the Bank in "Category I" is required to provide to the Committee certain information including: (1) a detailed explanation of the causes of the Bank being in "Category I," (2) an action plan to improve the Bank's financial situation so that it is no longer in "Category I," (3) a timetable for achieving that result, and (4) certain financial information, such as a business plan and external auditor reports. In addition, periodic updates are provided to the Committee regarding certain Bank financial information and credit quality indicators as well as certain regulatory information.

As a result of the changes to regulatory capital ratio requirements, the Banks and the Funding Corporation executed the Third Amended and Restated MAA, effective January 1, 2017. As a result, the MAA criteria have been adjusted to reflect these changes. For additional discussion of the criteria and standards under the MAA, and the resulting categories and restrictions if the standards are not met, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management — Structural Risk Management." A copy of the Third Amended and Restated Market Access Agreement is available on the Funding Corporation's website located at www.farmcreditfunding.com.

Amended and Restated Contractual Interbank Performance Agreement (CIPA) — The Banks and the Funding Corporation have also entered into the CIPA. Under provisions of the CIPA, a quarterly CIPA score is calculated that measures the financial condition and performance of each District using various ratios that take into account the District's and Bank's capital, asset quality, earnings, interest-rate risk and liquidity. The rolling average of the last four quarterly CIPA scores is then compared against the agreed-upon standard of financial condition and performance in the CIPA that each District must achieve and maintain. The measurement standard established under the CIPA is intended to provide an early warning mechanism to assist in monitoring the financial condition of each District. The performance standard under the CIPA is based on the average CIPA score over a four-quarter period. The CIPA score is one of the performance criteria used under the MAA. A copy of a summary of the Amended and Restated Contractual Interbank Performance Agreement is available on the Funding Corporation's website located at www.farmcreditfunding.com.

Farm Credit Insurance Fund

The Insurance Corporation insures the timely payment of principal and interest on Systemwide Debt Securities. The Insurance Corporation maintains the Insurance Fund for this purpose and for certain other purposes. In the event a Bank is unable to timely pay principal or interest on any insured debt obligation for which that Bank is primarily liable, the Insurance Corporation must expend amounts in the Insurance Fund to the extent available to insure the timely payment of principal and interest on the debt obligation. The provisions of the Farm Credit Act providing for joint and several liability of the Banks on the debt obligation cannot be invoked until the Insurance Fund is exhausted. However, because of other mandatory and discretionary uses of the Insurance Fund, there is no assurance that there will be sufficient funds to pay the principal or interest on the insured debt obligation. The insurance provided through use of the Insurance Fund is not an obligation of and is not a guarantee by the U.S. government.

The System does not have a guaranteed line of credit from the U.S. Treasury or the Federal Reserve. However, the Insurance Corporation has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation. Under its existing statutory authority, the Insurance Corporation may use these funds to provide assistance to the System Banks in exigent market circumstances which threaten the Banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and terminates on September 30, 2017, unless otherwise renewed. The decision whether to seek funds from the Federal Financing Bank is in the discretion of the Insurance Corporation, and each funding obligation of the Federal Financing Bank is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by the System.

Joint and Several Liability

The Banks are jointly and severally liable for the payment of principal and interest on Systemwide Debt Securities. If a Bank is unable to pay the principal or interest on a Systemwide Debt Security and if the amounts in the Insurance Fund have been exhausted, the Farm Credit Administration is required to make calls on all non-defaulting Banks to satisfy the liability. These calls would be in the proportion that each non-defaulting Bank's "available collateral," which refers to the collateral in excess of the aggregate of the Bank's "collateralized" obligations, bears to the aggregate available collateral of all non-defaulting Banks. If these calls were not sufficient to satisfy the liability, then a further call would be made in proportion to each non-defaulting Bank's remaining assets. In making a call on non-defaulting Banks with respect to a Systemwide Debt Security issued on behalf of a defaulting Bank, the Farm Credit Administration is required to appoint the Insurance Corporation as the receiver for the defaulting Bank. The receiver would be required to expeditiously liquidate the Bank.

Status in Liquidation

Farm Credit Administration regulations provide that in the event a Bank is placed in liquidation, holders of Systemwide Debt Securities have claims against the Bank's assets, whether or not the holders file individual claims. The claims of these holders are junior to claims related to costs incurred by the receiver in connection with the administration of the receivership, claims for taxes, claims of secured creditors, and claims of holders of bonds, including investment bonds, issued by the Bank individually, to the extent the bonds are collateralized in accordance with the requirements of the Farm Credit Act. Further, claims of holders of Systemwide Debt Securities are senior to all claims of general creditors. If particular Systemwide Debt Securities were offered on a secured basis, the holders of these obligations would have the priority accorded secured creditors of the liquidating Bank. To date, the Banks have not issued secured Systemwide Debt Securities.

Contingency Funding Program

The Banks and the Funding Corporation have established a Contingency Funding Program to provide for contingency financing mechanisms and procedures to address potential disruptions in the System's communications, operations and payments systems and to cover events that threaten continuous market access by the Banks or the Funding Corporation's normal operations. Under this program, the Funding Corporation has the option to finance maturing Systemwide Debt Securities through the issuance of Systemwide discount notes either directly to institutional investors or through the selling group. In addition, the Funding Corporation, in consultation with the Banks, may also issue Systemwide Bonds directly to institutional investors. The Funding Corporation, on behalf of the Banks, may also incur other obligations, such as Federal funds purchased, that would be the joint and several obligations of the Banks and would be insured by the Insurance Corporation to the extent funds are available in the Insurance Fund.

RISK FACTORS

In the course of conducting our business operations, the System is exposed to a variety of risks, some of which are inherent in the financial services industry and others of which are more specific to its own business. The following discussion summarizes some of the more important risks that the System faces. This discussion is not exhaustive and there may be other risks that the System faces that are not described below. The risks described below, if realized, could have a significant negative effect on the System's business, financial condition, and results of operations, and, among other things, could result in the Banks' inability to pay principal and interest on Systemwide Debt Securities on a timely basis.

The System's business is directly affected by the agricultural, rural and general economies.

The System's financial condition is directly impacted by factors affecting the agricultural, rural and general U.S. and global economies, since these factors impact the demand for loans and financial services offered by the System and the ability of System borrowers to make payments on loans. These factors may include:

- adverse weather events, including droughts and floods, food safety, disease and other unfavorable conditions that periodically occur and impact the agricultural productivity and income of System borrowers,
- volatile prices of agricultural commodities,
- changes in production expenses, particularly feed, fuel and fertilizer,
- changes in demand for and supply of U.S. agricultural products in a global marketplace,
- changes in farmland and rural real estate values,
- irrigation water availability and cost, and environmental standards,
- availability and cost of agricultural workers,
- political, legal, regulatory, financial markets and economic conditions and developments in the United States and abroad that can affect such things as the price of commodities or products used or sold by System borrowers, including the volatility thereof, as well as changes in the relative value of the U.S. dollar, and
- changes in the general U.S. economy that can affect the availability of off-farm sources of income and prices of real estate.

Therefore, recessions or downturns or other factors negatively impacting the agricultural, rural and general U.S. and global economies could impair the ability of System borrowers to repay loans. This, in turn, could increase the System's nonperforming assets, decrease the value of the System's loan portfolio, reduce the System's loan origination volume, and decrease the value of collateral securing some of the System's loans, which could have a significant adverse impact on the System's financial condition and results of operations.

Our business may be adversely affected by the cost and availability of funding in the debt markets.

Our ability to fund our operations, meet our financial obligations, including unfunded commitments to extend credit, and generate income depends on our ability to issue Systemwide Debt Securities in the debt markets on a regular basis with select maturities and structures and at attractive rates. Our ability to access the debt markets may be limited and our funding costs may increase due to circumstances that we may be unable to control, such as a general disruption in the U.S. and global financial markets, negative views about government-sponsored enterprises or the financial services industry, the willingness of domestic and foreign investors to purchase our debt or a downgrade in our credit ratings. The System's financial condition and results of operations would be adversely affected if funding becomes more expensive or our ability to access the debt market becomes limited.

In addition to issuances of Systemwide Debt Securities, System institutions have accessed other third party capital to support adequate regulatory capital levels and loan growth. Issuances include both preferred stock and subordinated debt. These third party capital sources have supplemented the System's issuances of Systemwide Debt Securities and enhanced the System's capital position. To the extent that these third party capital sources are not available or the cost of issuing such capital is too high, the System's overall growth and capital position may be reduced.

Uncertainty about the future of government-sponsored enterprises could have an adverse impact on the System's ability to issue debt at favorable rates and terms.

The System's government-sponsored enterprise status has been an important factor in its ability to continually access the debt capital markets. In addition, the System's funding costs historically have been below that of similar non-government-sponsored entities. However, as a direct result of the financial difficulties experienced by the housing related government-sponsored enterprises, with both Fannie Mae and Freddie Mac having been placed into conservatorship by the U.S. government, housing related government-sponsored enterprise status and reform has been, and will continue to be, a topic of debate by Congress and the U.S. Administration. While the status and reform debate has not to date specifically related to the System, a potential risk exists that the System, as a government-sponsored enterprise, may directly or indirectly be impacted by the decisions made as Congress addresses these and other government-sponsored enterprises. Any change in the System's status as a government-sponsored enterprise or the general perception by investors of government-sponsored enterprise status could have a significant adverse impact on the System's ability to issue debt at favorable rates and terms.

We face significant competition in connection with the issuance of Systemwide Debt Securities.

We compete for low-cost debt funding with the U.S. Treasury, other government-sponsored enterprises, including Fannie Mae, Freddie Mac and the Federal Home Loan Banks, and other highly rated institutions and companies. Competition for debt funding from these entities can vary with changes in economic, financial market and regulatory environments. In addition, any change in the perceptions of government-sponsored enterprise status may intensify competition with other highly rated institutions and companies in connection with the issuance of Systemwide Debt Securities. Increased competition for low-cost debt funding of highly rated institutions may result in a higher cost to finance our business, which could negatively affect our financial results. An inability to issue Systemwide Debt Securities at favorable rates in amounts sufficient to fund our business activities and meet our obligations could have an adverse effect on our liquidity, financial condition and results of operations.

A decrease in our credit rating or the U.S. government's credit rating could have an adverse effect on our ability to issue Systemwide Debt Securities, including the terms of such issuances.

The System is subject to periodic review by credit rating agencies. Any event that could have an adverse impact on the System's financial condition or results of operations may cause the rating agencies to downgrade, place on negative watch or change their outlook on the System's credit ratings. Also, changes in the credit ratings or credit ratings outlook of the U.S. government may influence changes in the System's credit ratings and credit ratings outlook given its status as a government-sponsored enterprise.

Any downgrades in credit ratings and outlook could result in higher funding costs or disruptions in the System's access to the capital markets. To the extent that the System cannot access funding when needed on acceptable terms or is unable to effectively manage its cost of funds, its financial condition and results of operations could be negatively affected.

Volatility in the agricultural commodities market and in the cost of farm inputs can result in higher risk profiles for certain System borrowers.

Volatility in commodities prices, coupled with fluctuations in production expenses (including interest rates), may have an adverse impact on the cash flow and profitability of certain System borrowers, which, in turn, may negatively affect their ability to repay their loans. While certain borrowers are negatively impacted by these conditions, other System borrowers may benefit. For example, increased prices for grains will result in higher risk profiles for livestock producers, processors and marketers of grains and oilseeds, and borrowers that purchase corn or other grains for use in their products. However, grain farmers may benefit from higher prices. Volatility in the agricultural commodities market and the cost of farm inputs may adversely impact the credit quality of the System's loan portfolio and, as a result, negatively affect the System's operating results.

In an environment of less favorable economic conditions in agriculture, and without sufficient government support programs, including crop insurance, the System's financial performance and credit quality measures likely would be impacted negatively.

From 2010 to 2014, the overall U.S. farm economy experienced a sustained period of favorable conditions that benefitted from generally strong demand for U.S. agricultural products. However, since 2014, the agricultural environment has been more challenging with lower commodity prices, as well as lower net farm income. Production agriculture remains a cyclical business that is heavily influenced by the demand for U.S. agricultural products and by commodity prices. Factors that could affect demand and prices for commodities include a change in the U.S. government's support programs for agriculture, changes to trade agreements, deteriorating economic conditions internationally or an increase in the U.S. dollar's value, any of which would reduce agricultural exports. In an environment of less favorable economic conditions in agriculture, and changes to direct government support programs, including crop insurance, the System's financial performance and credit quality measures could be negatively impacted.

As regulated entities, the Banks and Associations are subject to certain capital and other requirements which may limit the operations and financial performance of the System.

The Banks and Associations are subject to the supervision of, and regulation by, the Farm Credit Administration, including with respect to complying with certain capital and other requirements. The Farm Credit Administration periodically updates and revises these requirements. In this regard, revised capital requirements became effective January 1, 2017, that are more consistent with the Basel Accord (Basel III) framework and the standardized approach that U.S. regulators have adopted with respect to the capital requirements for banks. In addition, the Farm Credit Administration intends to complete a study by the end of 2017 to determine whether to align its liquidity requirements with those requirements of the U.S. banking regulators and Basel III.

Compliance with capital requirements or proposed and adopted liquidity or other requirements, may limit the System's business activities and could adversely affect its financial performance. (See "Regulatory Matters" for a discussion on the revised capital requirements.)

Changes in the laws or regulations that govern the System could have a material impact on the System or its operations.

System institutions are created and extensively governed by federal statutes and regulated by the Farm Credit Administration. Any change in the laws or regulations that govern the System's business, affect government-sponsored enterprises or affect financial institutions in general, could have a material impact on the System and its operations. Laws and regulations may change from time to time, and the interpretations of the relevant laws and regulations also are subject to change.

Domestic and foreign governmental policies and regulations affecting the agricultural sector and related industries could adversely affect the System's financial condition and results of operations.

Agricultural production and trade flows can be impacted by domestic and foreign governmental policies and regulations. Policies and regulations affecting the agricultural industry, such as taxes, tariffs, duties, subsidies, immigration, crop insurance and import and export restrictions on agricultural commodities and commodity products, can influence industry profitability, the planting of certain crops, or grazing of certain types of livestock, versus other uses of agricultural resources, whether unprocessed or processed commodity products are traded and the volume and types of imports and exports. In addition, international trade disputes can adversely affect agricultural commodity trade flows by limiting or disrupting trade between countries or regions. Future domestic and foreign governmental policies and regulations could adversely affect the supply, demand for and prices of commodities and agricultural products, restrict the ability of the System's borrowers to do business in existing and target markets and could cause a deterioration in their financial condition and results of operations, which could in turn adversely affect the System's financial condition and results of operations.

Changes in U.S. fiscal or spending policies may impair the ability of certain System borrowers to repay their loans to us, which in turn could adversely impact us.

Certain System borrowers benefit from U.S. government support for the agricultural sector, including crop insurance programs. Congressional efforts to decrease the U.S. budget deficit likely will result in continued pressure to reduce federal spending in the near term, including funds made available for farm programs. Adverse changes in the agricultural spending policies or budget priorities of the U.S. government in light of the U.S. budget deficit or otherwise may affect the financial condition of some of the System's borrowers and impair their ability to repay their loans to us. The inability of borrowers to repay their loans to us could increase our non-performing assets, decrease the value of our loan portfolio, reduce our loan origination volume and otherwise harm our business.

An unfavorable change in U.S. tax laws or an adverse interpretation of existing tax laws could negatively impact the System's financial results.

Certain System institutions are statutorily exempt from federal taxes. Other System institutions operate as non-exempt cooperatives. As such, they are eligible, under Subchapter T of the Internal Revenue Code, to deduct or exclude from taxable income amounts determined to be qualified patronage dividends. A change in U.S. tax law or an adverse interpretation of existing tax laws in a manner that reduces or eliminates these tax benefits or that is different from the System's application of such laws would negatively impact the System's results of operations.

A failure in our operational systems or infrastructure, or those of third parties, could impair our liquidity, disrupt our business, damage our reputation and cause losses.

Shortcomings or failures in our internal processes, people or systems could lead to impairment of our liquidity, financial loss, disruption of our business, liability to customers, legislative or regulatory intervention or reputational damage. For example, our operations rely on the secure processing, storage and transmission of confidential and other information in our computer systems and networks. Information security risks for large institutions like us have significantly increased in recent years and from time to time we likely will be the target of attempted cyber attacks and other information security breaches. To date, we have not experienced any material losses relating to cyber attacks or other information security breaches, but we could suffer such losses in the future. If one or more of such events occur, this potentially could jeopardize confidential and other information, including nonpublic personal information and sensitive business data, processed and stored in, and transmitted through, our computer systems and networks, or otherwise cause interruptions or malfunctions in our operations or the operations of our customers or counterparties. This could result in significant losses, reputational damage, litigation, regulatory fines or penalties, or otherwise adversely affect our business, financial condition or results of operations. We maintain insurance coverage relating to cybersecurity risks, and we may still be required to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities or other exposures. Despite having insurance coverage, we may be subject to litigation and financial losses.

Third parties with which we do business may also be sources of cybersecurity or other technological risks. We outsource certain functions and these relationships allow for the storage and processing of our information, as well as customer, counterparty and borrower information. While we engage in actions to reduce our exposure resulting from outsourcing, such as performing onsite security control assessments and limiting third-party access to the lowest privileged level necessary to perform job functions, ongoing threats may result in unauthorized access, loss or destruction of data or other cybersecurity incidents with increased costs and consequences to us such as those described above.

The System faces risks from unpredictable catastrophic events.

We are exposed to the risk that a catastrophic event, such as a terrorist event or natural disaster, could result in a significant business disruption and an inability to fund the System or process transactions through normal business processes. Any measures we take to mitigate this risk may not be sufficient to respond to the full range of catastrophic events that may occur and we may not have sufficient insurance coverage for some of these catastrophic events. The impact of such events on the overall economy may also adversely affect our financial condition and results of operations.

An unfavorable change in our reputation could adversely affect our business and financial results.

An unfavorable change in our reputation caused by negative public opinion could adversely affect our ability to obtain financing, impede our ability to hire and retain qualified personnel, hinder our business prospects, or expose us to greater regulatory scrutiny or adverse regulatory or legislative changes. Perceptions regarding the practices of our competitors, counterparties, and vendors, or the financial services industry as a whole, may also adversely affect our reputation. Damage to the reputation of third parties with whom we have important relationships may also impair market confidence in our business operations.

The Banks and Associations are subject to credit risk.

The Banks and Associations are subject to credit risk in the course of their lending, investing and hedging activities. Credit risk is the risk that arises from the unwillingness or inability of borrowers, debt issuers or counterparties, including guarantors (such as Farmer Mac) and third-party providers of other credit enhancements (such as bond insurers), to meet their contractual obligations to us.

Some of our counterparties may become subject to serious liquidity problems affecting, either temporarily or permanently, their businesses, which may adversely affect their ability to meet their obligations to us. Challenging market conditions could increase the likelihood that we will have disputes with our counterparties concerning their obligations to us, especially with respect to counterparties that have experienced financial strain or have large exposures to us. A default by a counterparty with significant obligations to us could adversely affect our ability to conduct our operations efficiently, which in turn could adversely affect our results of operations or our financial condition.

In addition, defaults by one or more financial institutions which are party to a derivative or other financial instrument transaction could lead to market-wide disruptions, which could lead to further defaults that could adversely affect the Banks. It may be difficult for the Banks to find derivative and other financial instrument transaction counterparties in such a market.

The Banks and Associations are subject to liquidity risk with respect to their investments.

The Banks and Associations are subject to liquidity risk in the course of their investing activities. Moreover, if the market for the Banks' and Associations' investments becomes less liquid, the underlying credit fundamentals deteriorate or the investments decline in value, it may make it more difficult for such investments to be sold if the need arises. In addition, because of the inherent uncertainty of determining the fair value of investments that do not have a readily available market value, the fair value of the Banks' and Associations' investments may differ significantly from the values that would have been used had a ready market existed for the investments. Ultimately, these factors could lead to further write-downs in the value of investments and impairment of assets that, if significant, could have adverse effects on our business, financial condition and liquidity.

The earnings of the Banks and Associations are significantly affected by the monetary policies of the Board of Governors of the Federal Reserve System.

The Board of Governors of the Federal Reserve System regulates the supply of money and credit in the United States. Its policies influence the Banks' and the Associations' cost of funds for lending and investing and the return they earn on their loans and investments, both of which impact their net interest margins, and can materially affect the value of the loans and investments they hold. Federal Reserve Board policies also can affect System borrowers, potentially increasing the risk that they may fail to repay their loans. Changes in Federal Reserve Board policies are beyond the System's control and are difficult to predict or anticipate.

The financial services industry is highly competitive.

The System operates in a competitive marketplace in which there is competition from banks and non-bank lenders. In order to remain a viable competitor in the U.S. farm credit market, System institutions must provide effective loan products, undertake significant marketing efforts, use competitive pricing programs and maintain operating efficiency. In addition, the ability to access and use technology is an increasingly important competitive factor in the financial services industry. As a result, more traditional financial services companies, such as the System, are facing the risk of increased competition from products and services offered by non-bank financial technology companies. These and other competitive market pressures could result in reduced interest rate spreads and loan originations, and in some cases, less favorable loan structures and terms for the System.

The Banks and Associations are subject to interest rate risk.

The Banks and Associations, in the course of their borrowing, lending and investment activities, are subject to interest rate risk. Interest rate risk is the risk that changes in interest rates may adversely affect the institution's operating results and financial condition. This risk arises from differences in the timing between the contractual maturities, cash flows and the repricing characteristics of the institution's assets and the financing obtained to fund those assets. The Banks and Associations are responsible for developing institution-specific asset/liability management policies and strategies to manage interest rate risk and monitoring them on a regular basis. Interest rate risk can produce variability in earnings and ultimately the long-term capital position of the System.

Each Bank uses derivative financial instruments as a tool to hedge against interest rate and liquidity risks and to lower the overall cost of funds.

Each Bank uses derivative financial instruments to minimize the financial effects on its business of changes in interest rates or for liquidity purposes and must determine the nature and quantity of these hedging transactions. The effectiveness of the hedging transactions depends upon management's ability to determine the appropriate hedging position, taking into consideration the Bank's assets, liabilities and prevailing and anticipated market conditions. In addition, the usefulness of the Bank's hedging strategy depends on the availability in the market of cost-effective hedging instruments and the ability to enter into hedging transactions with high quality counterparties. If a Bank is unable to manage its hedging position properly it will negatively impact the Bank's financial condition and results of operations. A Bank faces the risk that its derivatives counterparties may not meet their payment and other obligations in hedging transactions. To the extent a Bank clears derivatives, it would also face the risk of operational failure of any of the clearing members, exchanges, clearinghouses, or other financial intermediaries it uses to facilitate such hedging transactions. If a derivatives counterparty clearing member or clearinghouse were to fail, the Bank could experience losses related to any collateral it had posted with such derivatives counterparty clearing member or clearinghouse to cover initial or variation margin. The Bank could also be exposed to replacement risk or unhedged market exposure if it is unable to replace the transaction.

The System's loans and investment securities are subject to prepayment risk and interest rate fluctuations that may adversely affect its results of operations and financial condition.

During periods of declining interest rates, the borrower under a loan or the issuer of an investment security may exercise its option to prepay principal earlier than scheduled, forcing the System to reinvest the proceeds from such prepayment in lower yielding loans or securities, which may result in a decline in the System's earnings. A range of prepayment options exists on the System's fixed and floating-rate loans. These options range from loans with "make-whole" prepayment fee provisions (i.e., the borrower pays an additional amount when the loan is prepaid to cover the loss from the residual higher-cost funding that can occur as a result of the prepayment) to loans that may be prepaid without any prepayment fee provisions. A borrower may choose to prepay a loan if, for example, the borrower can refinance the loan at a lower cost due to declining interest rates or an improvement in the credit standing of the borrower. Similar prepayment risks exist with respect to the System's investments, including its mortgage- and asset-backed securities. In addition, the market price of such investments will change in response to changes in interest rates and other factors. During periods of declining interest rates, the market price of fixed-rate debt investments generally rises. Conversely, during periods of rising interest rates, the market price of such investments generally declines. The magnitude of these fluctuations in the market price of debt investments is generally greater for securities with longer maturities.

Each Bank and Association depends on the accuracy and completeness of information about its customers and counterparties.

In deciding whether to extend credit or enter into transactions with customers and counterparties, the Banks and Associations may rely on information furnished to them by or on behalf of customers and counterparties, including financial statements and other financial information. The Banks and Associations also may rely on representations of customers and counterparties as to the accuracy and completeness of that information and, with respect to financial statements, on reports of independent auditors. If the financial or other information provided to them is incorrect, the Banks and Associations could suffer credit losses or other consequences.

The Banks and Associations may lend only to qualified borrowers in the agricultural and rural sectors and certain related entities and are subject to geographic lending restrictions.

Unlike commercial banks and other financial institutions that lend to both the agricultural sector and other sectors of the economy, the Banks and

Associations are restricted solely to making loans and providing financial services to qualified, eligible borrowers in the agricultural and rural sectors and to certain related entities. In addition, certain Banks and Associations are subject to particular geographic lending restrictions. As a result, the Banks and Associations have more limited flexibility in attempting to diversify their loan portfolios as compared to many commercial banks and other financial institutions. Concentration of risk in industries, geographies and individual borrowers may limit the ability to offset adverse performance in one sector against positive performance in another sector like most diversified financial institutions.

The System's accounting policies and methods are key to how it reports its financial condition and results of operations, and they may require System institutions' managements to make estimates about matters that are inherently uncertain.

The System's accounting policies, methods and estimates are fundamental to how it records and reports its financial condition and results of operations. System institutions' managements must exercise judgment in selecting and applying many of these accounting policies, methodologies, and estimates so that they not only comply with generally accepted accounting principles and reflect best practices but also reflect managements' judgments as to the most appropriate manner in which to record and report the financial condition and results of operations. Inappropriate policies, methods and estimates, or the misapplication of accounting policies, methods or estimates could adversely affect the financial condition or results of operations of the System.

From time to time, the Financial Accounting Standards Board changes the financial accounting standards that govern the preparation of our financial statements. These changes are beyond our control, can be difficult to predict and could negatively impact how we report our financial condition and results of operations. We could be required to apply a new or revised standard retrospectively, which may result in the revision of prior period financial statements by material amounts. The implementation of new or revised accounting standards also could adversely affect a Bank's capital position and subject it to increased oversight by the Farm Credit Administration or limit its ability to participate in the issuance of Systemwide Debt Securities. See "Federal Regulation and Supervision of the Farm Credit System — Farm Credit Administration Regulations — Bank Collateral Requirements" and "— Capital Adequacy" and "Description of Systemwide Debt Securities — Prepayment Protections — Agreements Among Certain System Institutions."

The determination of the amount of allowance for loan losses and impairments taken on our assets is highly subjective and these estimates could materially impact our results of operations or financial condition.

The determination of the amount of loss allowances and asset impairments varies by asset type and is based upon the periodic evaluation and assessment of known and inherent risks associated with the respective asset class by System institutions' managements. Such evaluations and assessments are revised as conditions change and new information becomes available. The managements of System institutions update their evaluations regularly and reflect changes in allowances and impairments in operations as such evaluations are revised. There can be no assurance that the managements of System institutions have accurately assessed the level of impairments taken and allowances reflected in the System's financial statements. Furthermore, additional impairments may need to be taken or allowances provided in the future. Historical trends may not be indicative of future impairments or allowances.

Our risk management framework may not be effective in mitigating risk and reducing the potential for significant losses.

Our risk management framework is designed to manage risk and minimize loss to us. We seek to identify, measure, monitor, report and control our exposure to the types of risk to which we are subject, including credit, market, liquidity, operational and reputational risks, among others. While we employ a broad and diversified set of risk monitoring and mitigation techniques, those techniques are inherently limited because they cannot anticipate the existence or future development of currently unanticipated or unknown risks. For example, increases in the overall complexity of our operations, among other developments, have resulted in the creation of a variety of previously unanticipated or unknown risks, highlighting the intrinsic limitations of our risk monitoring and mitigation techniques. As such, we may incur future losses due to the development of such previously unanticipated or unknown risks.

Also, because System institutions are not commonly owned or controlled, each System institution is responsible for its own risk management. Moreover, there is no formal process or procedure in place to mandate Systemwide risk mitigation actions, including, but not limited to, reducing concentration, interest rate and counterparty credit risk across the System. As a result, the System's risk management framework may not be effective in mitigating risk and reducing the potential for significant losses due this inability to mandate risk mitigation actions across the System.

A failure or circumvention of our controls and procedures could have an adverse effect on our business, results of operations and financial condition.

Each System entity regularly reviews and updates its internal controls, disclosure controls and procedures, and corporate governance policies and procedures. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote. In addition, while we continue to evaluate our internal controls, we cannot be certain that these measures will ensure that we implement and maintain adequate controls over our financial processes and reporting in the future. Any failure or circumvention of a System institution's controls and procedures or failure to comply with regulations related to controls and procedures could have an adverse effect on the System's business, results of operations and financial condition. Also, because System institutions are not commonly owned or controlled, as mentioned above, each System institution is responsible for its own controls and procedures. As a result, the System's control framework, no matter how well designed and operated, does not provide absolute assurance that the objectives of the control systems are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud or errors can be detected.

Our structure may impact our ability to issue combined financial statements within regulatory timeframes.

The structure of the System, as a federally chartered network of interdependent, cooperatively owned lending institutions, may present challenges to timely financial reporting and the assessment of internal control over financial reporting. Our decentralized reporting structure impacts how the Banks and Associations meet their regulatory disclosure obligations including, together with the Funding Corporation, the responsibility to produce the System's combined financial statements and to assure that there are adequate disclosure controls and procedures and internal control over financial reporting in connection with such production. To facilitate compliance with these regulatory mandates, the Banks have agreed to disclosure policies and procedures. Since no single System institution has the corporate or direct regulatory authority to compel any other System institution to disclose information or to establish and maintain disclosure controls and procedures or internal control over financial reporting, production of the System's combined financial statements and the establishment of adequate controls is dependent on System institutions themselves satisfying their regulatory obligations and the Banks' compliance with the agreed upon disclosure policies and procedures. Failure by any System institution to provide required information for financial reporting, or to have adequate disclosure controls or procedures or internal control over financial reporting, as required by regulation or as agreed to under the disclosure policies and procedures may delay the timely publication of the System's combined financial statements.

Our business may be directly and indirectly affected by unfavorable weather conditions or natural disasters that reduce agricultural production and the ability of System borrowers to make payments on our loans.

Adverse weather conditions, particularly during the planting and early growing season, can significantly affect agricultural production, with the timing and quantity of rainfall being two of the most important factors in agricultural production. Insufficient levels of rain prevent farmers from planting new crops and may cause growing crops to die or result in lower yields. Excessive rain or flooding can prevent planting from occurring at optimal times, and may cause crop loss through increased disease or mold growth. Temperatures outside normal ranges can also cause crop failure or decreased yields, and may also affect disease incidence. Temperature affects the rate of growth, crop maturity and crop quality. Natural calamities such as regional floods, hurricanes or other storms, and droughts can have significant negative effects on agricultural and livestock production. The resulting negative impact on farm income can strongly affect the ability for System borrowers to make payments on our loans.

Our ability to attract and retain qualified employees is critical to our success and failure to do so could adversely affect our results of operations and competitive position.

Our success depends on our ability to recruit and retain key executive officers and other skilled professional employees. We compete against other financial institutions for highly skilled executive officers and professional employees. Many of these financial institutions offer wage and benefit packages that exceed our wage and benefit packages. As a result, in the future, we may have to significantly increase wages and benefits in order to attract and retain qualified personnel. The inability to attract and retain an appropriately qualified workforce could adversely affect our financial condition and results of operations and internal control over financial reporting.

OTHER BUSINESS MATTERS

Related Party Transactions

In the ordinary course of business, the Banks and Associations may enter into loan transactions with their officers and directors and non-System organizations with which such persons may be associated. These loans are subject to special approval requirements contained in Farm Credit Administration regulations and are, in the view of the System institutions' management, made on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with unrelated borrowers. As of December 31, 2016 and 2015, all related party loans were made in accordance with established policies and the same terms as those prevailing at the time for comparable transactions, except for one loan to a company affiliated with a System institution director, which was $1.8 million and $2.0 million at December 31, 2016 and 2015. The interest rate on this loan was marginally lower than the rate on similar loans to unrelated borrowers.

Total loans outstanding to related parties were $2.4 billion and $2.1 billion at December 31, 2016 and 2015. During 2016 and 2015, $3.3 billion and $2.7 billion of new loans were made to such persons and repayments totaled $3.0 billion and $2.8 billion. In the opinions of Bank and Association managements, all such loans outstanding at December 31, 2016 and 2015 did not involve more than a normal risk of collectability, except for a loan to one Association director totaling $1.0 million in 2016 and loans to two Association directors totaling $10.2 million in 2015.

Legal Proceedings

On June 13, 2016, a lawsuit was commenced by the filing of a complaint in the United States District Court Southern District of New York against CoBank by a number of investors who held CoBank's 7.875% Subordinated Notes due in 2018. For additional information, see Note 19 of the accompanying condensed combined financial statements.

On November 4, 2016, an alleged class action complaint was filed in the Supreme Court of the State of New York against AgriBank by a purported beneficial owner of AgriBank's 9.125% subordinated notes due in 2019. For additional information, see Note 19 of the accompanying condensed combined financial statements.

At December 31, 2016, various other lawsuits were pending or threatened against System institutions. In the opinion of management, based on information currently available and taking into account the advice of legal counsel, the ultimate liability, if any, of pending legal actions will not have a material adverse impact on the System's combined results of operations or financial condition.

Changes in and Disagreements with Auditors of the Combined Financial Statements of the Farm Credit System

During the fiscal year ended December 31, 2016 and through the date of this annual information statement, there have been no changes in or disagreements with the independent auditors of the combined financial statements of the System.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Management's discussion and analysis provides a narrative on the System's financial performance and condition that should be read in conjunction with the accompanying financial statements. It includes the following sections:

- Basis of Presentation
- Forward-Looking Information
- Critical Accounting Policies
- 2016 Overview
- Agricultural Outlook
- System Organizational and Structural Matters
- Results of Operations
- Fourth Quarter 2016 Results of Operations
- Risk Management
- Regulatory Matters
- Recently Adopted or Issued Accounting Pronouncements

Basis of Presentation

The System is a federally chartered network of interdependent, borrower-owned lending institutions (Banks and Associations) and affiliated service organizations. Through our three Farm Credit Banks, one Agricultural Credit Bank and 73 Associations (as of January 1, 2017), we support rural communities and agriculture with reliable, consistent credit and financial services nationwide to farmers, ranchers, producers or harvesters of aquatic products, their cooperatives and farm-related businesses. We also make loans to finance the processing and marketing activities of these borrowers and make loans or provide credit enhancements to other banks to support the export of U.S. agricultural commodities or supplies. In addition, we make loans to rural homeowners, rural infrastructure providers and other eligible borrowers.

The combined financial statements and related financial information contained in this annual information statement present the combined assets, liabilities, capital, income and expenses of the Banks, the Associations, the Federal Farm Credit Banks Funding Corporation and the Farm Credit Insurance Fund and reflect the investments in and allocated earnings of certain service organizations owned by the Banks or Associations. All significant intra-System transactions and balances have been eliminated in combination. (See Note 1 to the accompanying combined financial statements for additional information on organization, operations and principles of combination and the Supplemental Combining Information on pages F-72 through F-79.) This annual information statement has been prepared under the oversight of the System Audit Committee.

Our financial statements are presented on a combined basis due to the financial and operational interdependence of the System entities as discussed in the "Business" section of this annual information statement. While this annual information statement reports on the combined financial condition and results of operations of the Banks, Associations and other System entities specified above, only the Banks are jointly and severally liable for the payments on Systemwide Debt Securities. Each Bank is primarily liable for the payment of principal and interest on Systemwide Debt Securities issued to fund its operations. (See Notes 12 and 21 to the accompanying combined financial statements for information about the capital of the Banks and the Supplemental Combining Information on pages F-72 through F-74 for information related to the financial condition of the combined Banks.) Because the Associations are not directly liable for the payment of principal or interest on Systemwide Debt Securities, their capital may not be available to support those payments. Under the Farm Credit Act, the timely payment of the principal and interest on Systemwide Debt Securities is insured by the Insurance Corporation to the extent funds are available in the Insurance Fund. (See Note 7 to the accompanying combined financial statements.)

Forward-Looking Information

Certain sections of this annual information statement contain forward-looking statements concerning financial information and statements about future economic performance and events, plans and objectives and assumptions underlying these projections and statements. These projections and statements are not based on historical facts but instead represent our current assumptions and expectations regarding our business, the economy and other future conditions. However, actual results and developments may differ materially from our expectations and predictions due to a number of risks and uncertainties, many of which are beyond our control. Forward-looking statements can be identified by words such as "anticipates," "believes," "could," "estimates," "may," "should," "will," or other variations of these terms that are intended to reference future periods.

These statements are not guarantees of future performance and involve certain risks and uncertainties and actual results may differ from those in the forward-looking statements as a result of various factors. These risks and uncertainties include, but are not limited to:

- political (including trade policies), legal, regulatory, financial markets and economic conditions and developments in the United States and abroad;
- economic fluctuations in the agricultural, rural infrastructure, international, and farm-related business sectors;
- weather-related, disease, and other adverse climatic or biological conditions that periodically occur that impact agricultural productivity and income;
- changes in U.S. government support of the agricultural industry and the System as a government-sponsored enterprise, as well as investor and rating agency reactions to events involving the U.S. government, other government-sponsored enterprises and other financial institutions;
- actions taken by the Federal Reserve System in implementing monetary policy;
- credit, interest rate and liquidity risk inherent in our lending activities;
- changes in our assumptions for determining the allowance for loan losses, other-than-temporary impairment and fair value measurements; and
- industry outlooks for agricultural conditions.

Critical Accounting Policies

The System's financial statements are reported in conformity with accounting principles generally accepted in the United States of America. Our significant accounting policies are critical to the understanding of our results of operations and financial condition because some accounting policies require us to make complex or subjective judgments and estimates that may affect the reported amounts of certain assets or liabilities. We consider these policies as critical because managements of System institutions have to make judgments about matters that are inherently uncertain. For a complete discussion of the System's significant accounting policies, see Note 2 to the accompanying combined financial statements. The following is a summary of certain of our most significant critical accounting policies.

- Allowance for loan losses — The allowance for loan losses is each Bank and Association management's best estimate of the amount of probable losses existing and inherent in its loan portfolio. The allowance for loan losses is increased through provisions for loan losses and loan recoveries and is decreased through loan loss reversals and loan charge-offs. Each Bank and Association determines its allowance for loan losses based on periodic evaluation of its loan portfolio, which generally considers recent historical charge-off experience adjusted for relevant factors. These factors include types of loans, credit quality, specific industry conditions, collateral value, weather-related conditions, general economic and political conditions, and changes in the character, composition, and performance of the portfolio, among other factors.

  Significant individual loans are evaluated based on the borrower's overall financial condition, resources, and payment record; the prospects for support from any financially responsible guarantor; and, if appropriate, the estimated net realizable value of any collateral. The allowance for loan losses attributable to these loans is established by a process that estimates the probable loss inherent in the loans, taking into account various historical and projected factors, internal risk ratings, regulatory oversight, and geographic, industry and other factors.

  Management of each Bank and Association also applies judgment to adjust various loss factors, taking into consideration model imprecision, external factors and economic events that have not yet been reflected in the loss factors.

  Banks and Associations may establish a reserve for unfunded commitments that provides for potential losses related to unfunded commitments and is maintained at a level that is considered the best estimate of the amount required to absorb probable losses related to these unfunded commitments. The reserve is determined using a similar methodology as used for the allowance for loan losses taking into account the probability of funding the commitment. The reserve for unfunded commitments is recorded as a liability in the Combined Statement of Condition.

Changes in the factors considered by the management of each Bank and Association in the evaluation of losses in its loan portfolio and unfunded commitments could result in a change in the allowance for loan losses or reserve for unfunded commitments and could have a direct impact on the provision for loan losses and the results of operations.

- Valuation methodologies — Managements of the Banks and Associations use market prices when estimating fair values for certain assets and liabilities for which an observable liquid market exists. However, they apply various valuation methodologies to assets and liabilities that often involve a significant degree of judgment, particularly when liquid markets do not exist for the particular items being valued. Examples of these items include impaired loans and investments, pension and other postretirement benefit obligations, and certain derivative and other financial instruments. These valuations require the use of various assumptions, including, among others, discount rates, rates of return on assets, repayment rates, cash flows, default rates, costs of servicing and liquidation values. The use of different assumptions could produce significantly different results, which could have material positive or negative effects on the System's results of operations.
- Pensions — The Banks and substantially all Associations sponsor defined benefit retirement plans, although most plans are closed to new participants. These plans are non-contributory and benefits are based on salary and years of service. In addition, the Banks and Associations sponsor defined contribution retirement savings plans. Pension expense for all plans is recorded as part of salaries and employee benefits. Pension expense is determined by using Aon Hewitt Associates LLC actuarial valuations based on certain assumptions, including expected long-term rates of return on plan assets and discount rates. The expected return on plan assets for the year is calculated based on the composition of assets at the beginning of the year and the expected long-term rate of return on that portfolio of assets. The discount rate is used to determine the present value of our future benefit obligations.

2016 Overview

General

The System's loan portfolio increased 5.5% to $248.768 billion at December 31, 2016, as compared with $235.890 billion at December 31, 2015. The increase in 2016 was primarily attributable to increased demand for real estate mortgage, agribusiness and rural infrastructure loans. Real estate mortgage loans increased primarily due to continued demand for cropland. The increase in agribusiness loans was primarily due to higher levels of seasonal financing at many grain cooperatives and increased lending to food and agribusiness companies, as well as new loan growth in and advances on existing processing and marketing loans. Rural infrastructure loans increased due to increased lending activity in the electric distribution and power supply sectors.

The System's combined net income was $4.848 billion for 2016, $4.688 billion for 2015 and $4.724 billion for 2014. The increase in 2016 net income resulted from an increase in net interest income of $432 million and a decrease in the provision for income taxes of $22 million, partially offset by increases in the provision for loan losses of $160 million and noninterest expense of $99 million and a decrease in noninterest income of $35 million. The increase in net interest income for 2016 resulted primarily from a higher level of average earning assets, partially offset by a lower net interest spread. Average earning assets, primarily loans, grew $24.688 billion or 9.0% to $299.550 billion for 2016, as compared with the prior year.

Net interest income in excess of operating expenses increased $327 million to $4.652 billion for 2016, as compared with $4.325 billion for 2015.

The System's nonperforming loans totaled $1.962 billion at December 31, 2016, as compared with $1.629 billion at December 31, 2015, representing 0.79% and 0.69% of total loans outstanding for the corresponding periods. The increase in non-performing loans was primarily due to reduced net farm income in certain agriculture production sectors and deterioration in the credit quality of a limited number of agribusiness borrowers. The System's capital to assets ratio was 16.4% at December 31, 2016, as compared with 16.1% at December 31, 2015.

Funding

The System continues to have reliable access to the debt capital markets to support its mission of providing credit and financial services to agriculture, rural infrastructure and rural communities. During 2016, investor demand for Systemwide Debt Securities remained favorable across all products. Given the prevailing low interest rate environment, the Banks continued to refinance callable bonds when advantageous in order to lower their long-term cost of funds.

The System is a government-sponsored enterprise that continues to benefit from broad access to domestic and global capital markets. This access provides us with a dependable source of competitively priced debt which is critical for supporting our mission of providing credit to agriculture and rural America.

Agricultural Outlook

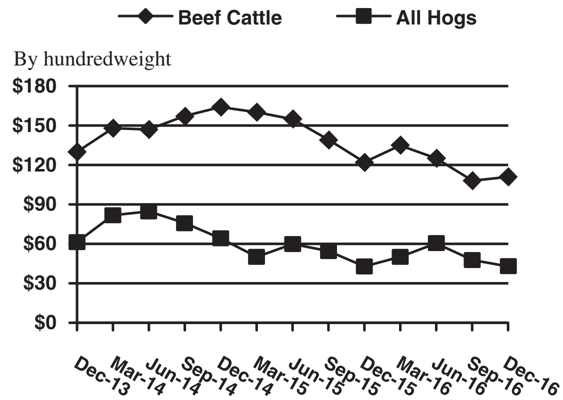
USDA Information

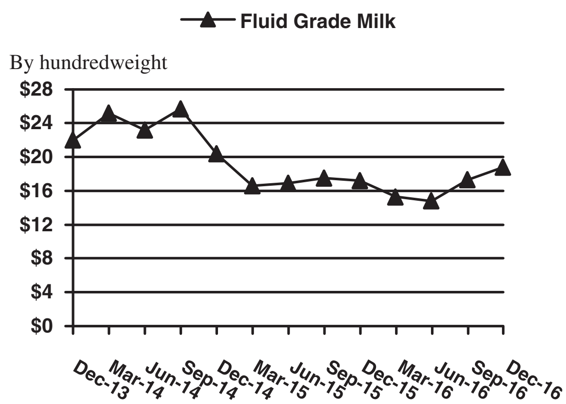
We utilize the United States Department of Agriculture (USDA) analysis to provide a general understanding of the U.S. agricultural economic outlook; however, this outlook does not take into account all aspects of our business. References to USDA information in this section refer to the U.S. agricultural market data and not System data.

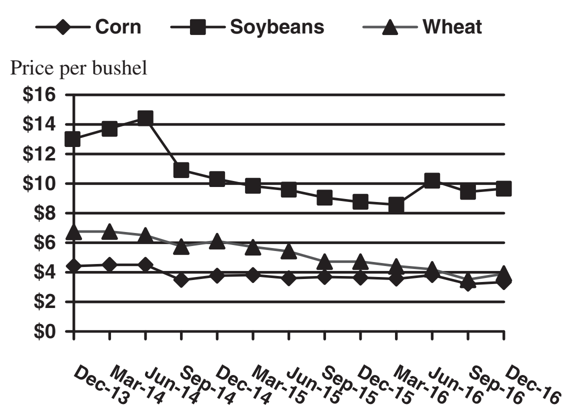
The USDA forecast (February 7, 2017) estimates farmers' net cash income (a measure of the cash income after payment of business expenses) for 2016 at $91.9 billion, down $12.8 billion from 2015 and down $11.3 billion from its 10-year average of $103.2 billion. The decline in net cash income in 2016 was primarily due to decreases in livestock receipts of $21.7 billion and cash farm-related income of $3.7 billion, partially offset by an increase in crop cash receipts of $2.0 billion and a decrease in cash expenses of $8.3 billion.

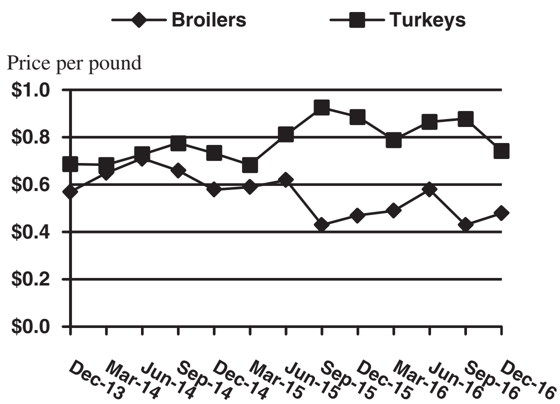
The USDA's February 2017 outlook for the farm economy, as a whole, forecasts 2017 farmers' net cash income to increase to $93.5 billion, a $1.6 billion increase from 2016 but $9.7 billion below the 10-year average. The forecasted increase in farmers' net cash income for 2017 is primarily due to an expected increase in cash farm-related income of $3.7 billion, partially offset by a decrease in crop receipts of $1.0 billion and an increase in cash expenses of $700 million.

The following charts set forth the commodity prices utilizing the average monthly price for the last month of each quarter by hundredweight for beef cattle, hogs and milk, per bushel for corn, soybeans and wheat and by pound for poultry on certain dates during the period from December 31, 2013 to December 31, 2016:









The USDA's income outlook varies depending on farm size and commodity specialties. About 99% of U.S. farms are family farms accounting for 89% of the value of agricultural production. The remaining 1% are nonfamily farms (farms where the principal operator or individuals related to the operator do not own a majority of the business) that produce the remaining 11% of agricultural output. Small family farms (gross cash farm income (GCFI) less than $350,000) represent about 90% of all U.S. farms, hold 57% of farm assets and account for 24% of the value of production. Approximately 65% of production occurs on the 9% of family farms classified as midsize (GCFI between $350,000 and $999,999) or large-scale (GCFI of $1,000,000 or more).

According to the USDA February 2017 forecast, farm sector equity (assets minus debt) is expected to decline 2.1% in 2017 to $2.44 trillion, the third consecutive year of declining equity after a record $2.60 trillion in 2014. Farm sector debt is expected to rise 5.2% to $395 billion in 2017, while a 1.1% decline is anticipated in the market value of farm sector assets to $2.84 trillion. Farm real estate accounts for about 84% of farm sector assets and the 2017 forecast anticipates a slight decline in real estate values. This reflects falling farm profit margins, increased interest rates, and more restrictive debt terms.

Two measures of the financial health of the agricultural sector used by the USDA are the farm sector's debt-to-asset and debt-to-equity ratios. As a result of the decline in farm assets and continued increase in farm debt, these ratios are forecast to rise in 2017 to 13.9% and 16.2% from 13.1% and 15.1% in 2016. The debt-to-asset ratio has increased for the fifth straight year but is still well below the all-time highs of over 20% experienced during the 1980s.

As estimated by the USDA in February 2017, the System's market share of farm business debt (defined as debt incurred by those involved in on-farm agricultural production) increased to 40.6% at December 31, 2015 (the latest available data), as compared with 39.6% at December 31, 2014.

Other Information

Production agriculture is a cyclical business that is heavily influenced by commodity prices, weather and various other factors. During the period 2010 through 2014, agriculture generally experienced favorable economic conditions driven by high commodity and livestock prices and increased farmland values during this period. However, since 2014, the agricultural environment has been more challenging with lower commodity prices. Grain and oilseed prices have declined sharply due to record levels of corn and soybean production in 2014 through 2016. This decline has slowed, or in some cases, reversed the growth in farmland values and compressed producer margins. Appreciation in the U.S. dollar has also reduced the competitiveness of U.S. agricultural exports. While U.S. agriculture faces realignments in commodity prices and farmland values, the generally strong financial positions of U.S. crop producers before 2014, is affording them time to transition their operations to a lower price and margin environment. Producers who are able to realize cost and marketing efficiencies are most likely to weather the current low price environment. Optimal input usage, adoption of cost-saving technologies, and effective utilization of hedging and other price risk management strategies are all critical in yielding positive net income for producers. This transition has involved loan repayment challenges for producers who do not or are unable to sufficiently adjust their operations to the environment.

Crop producers may benefit from payments under the government support programs included in the 2014 Farm Bill, which may lessen the impact of the lower price environment. Meanwhile, the livestock and dairy sectors have benefitted from lower feed costs but are experiencing compressed margins due to supply/demand changes.

In an environment of less favorable conditions in agriculture, the System's financial performance and credit quality measures would likely be negatively impacted. Any negative impact from these less favorable conditions may be partially mitigated by geographic and commodity diversification across the System and the influence of off-farm income sources supporting agricultural-related debt. However, due to the geographic territories served by Banks and Associations, most System institutions have higher geographic, borrower and commodity concentrations than does the System as a whole.

System Organizational and Structural Matters

The following table summarizes the structural changes of the System over the past five years:

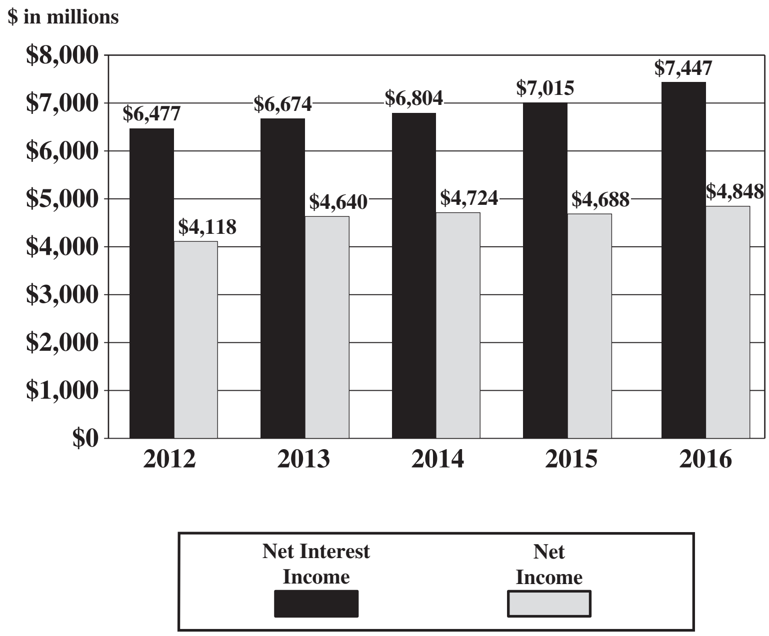
	Banks	Associations	Total
Entities at January 1, 2012	4	83	87
Net changes through January 1, 2016	–	(9)	(9)
Entities at January 1, 2016	4	74	78
Net changes through January 1, 2017	–	(1)	(1)
Entities at January 1, 2017	4	73	77

Over the past several years, the number of Associations has declined as a result of mergers with other Associations.

(For additional information regarding mergers, see Notes 11 and 22 to the accompanying combined financial statements.)

Results of Operations

The following chart illustrates the System's net interest income and net income for the past five years:



Earnings Analysis

Changes in the key components impacting the System's results of operations over the past three years are summarized below:

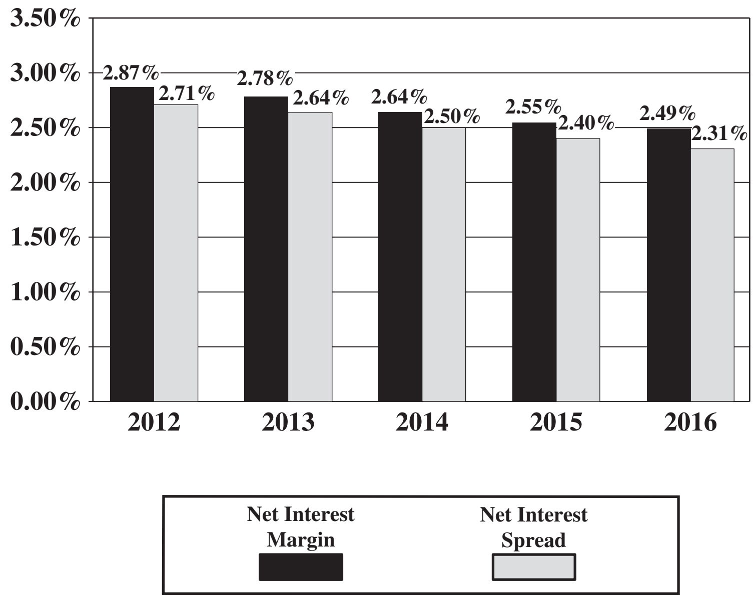
	2016 vs. 2015	2015 vs. 2014
	(in millions)	
Increase (decrease) in net income due to:		
Interest income	$1,053	$ 476
Interest expense	(621)	(265)
Net interest income	432	211
Provision for loan losses	(160)	(66)
Noninterest income	(35)	(31)
Noninterest expense	(99)	(174)
Provision for income taxes	22	24
Net change in net income	$ 160	$ (36)

Net Interest Income

Net interest income was $7.447 billion in 2016, $7.015 billion in 2015 and $6.804 billion in 2014. Net interest income is the difference between interest income and interest expense. Net interest income is the principal source of earnings for the System and is impacted by volume, yields on assets and cost of debt. The effects of changes in volume and interest rates on net interest income over the past three years are presented in the following table. The table distinguishes between the changes in interest income and interest expense related to average outstanding balances and the levels of average interest rates. The change in the benefit derived from funding earning assets with interest-free funds (principally capital) is reflected solely as an increase in volume.

	2016 vs. 2015 Increase (decrease) due to			2015 vs. 2014 Increase (decrease) due to		
	Volume	Rate	Total	Volume	Rate	Total
	(in millions)					
Interest income:						
Loans	$759	$ 149	$ 908	$615	$(160)	$455
Investments	77	68	145	24	(3)	21
Total interest income	836	217	1,053	639	(163)	476
Interest expense	217	404	621	152	113	265
Changes in net interest income	$619	$(187)	$ 432	$487	$(276)	$211

The following chart illustrates the System's net interest margin and net interest spread trends for the past five years:



The following table presents interest rate spreads, components of interest rate spreads, the details of the changes in interest rates earned and paid, and the impact of those changes on interest rate spreads for the past three years:

	2016			2015			2014		
	Average Balance	Interest	Rate	Average Balance	Interest	Rate	Average Balance	Interest	Rate
	($ in millions)								
Assets									
Real estate mortgage loans	$110,038	$ 4,877	4.43%	$101,524	$4,507	4.44%	$ 94,366	$4,245	4.50%
Production and intermediate-term loans	47,149	1,862	3.95	45,770	1,706	3.73	43,386	1,682	3.88
Agribusiness loans	39,088	1,235	3.16	34,538	1,049	3.04	31,650	981	3.10
Rural infrastructure loans	26,898	1,016	3.78	23,340	874	3.74	20,470	788	3.85
Rural residential real estate loans	7,024	309	4.40	6,843	301	4.40	6,600	297	4.50
Agricultural export finance loans	5,318	79	1.49	4,717	46	0.98	4,830	43	0.89
Lease receivables	3,376	123	3.64	3,049	113	3.71	2,726	109	4.00
Loans to other financing institutions	832	13	1.56	868	10	1.15	790	9	1.14
Nonaccrual loans	1,454	77	5.30	1,384	77	5.56	1,549	74	4.78
Total loans	241,177	9,591	3.98	222,033	8,683	3.91	206,367	8,228	3.99
Federal funds sold, investments and other interest-earning assets	58,373	840	1.44	52,829	695	1.32	51,019	674	1.32
Total earning assets	299,550	10,431	3.48	274,862	9,378	3.41	257,386	8,902	3.46
Allowance for loan losses	(1,385)			(1,246)			(1,203)		
Other noninterest-earning assets	12,592			12,781			11,323		
Total assets	$310,757			$286,397			$267,506		
Liabilities and Capital									
Systemwide bonds and medium-term notes	$217,417	$ 2,759	1.27%	$204,541	$2,206	1.08%	$190,457	$1,966	1.03%
Systemwide discount notes	32,160	163	0.51	23,185	49	0.21	22,480	28	0.12
Subordinated debt and other interest-bearing liabilities	4,637	62	1.34	6,188	108	1.75	5,634	104	1.85
Total interest-bearing liabilities	254,214	2,984	1.17	233,914	2,363	1.01	218,571	2,098	0.96
Noninterest-bearing liabilities	5,165			4,966			4,463		
Capital	51,378			47,517			44,472		
Total liabilities and capital	$310,757			$286,397			$267,506		
Net interest spread(1)			2.31			2.40			2.50
Impact of noninterest-bearing sources			0.18			0.15			0.14
Net interest income and margin(2)		$ 7,447	2.49%		$7,015	2.55%		$6,804	2.64%

(1) Net interest spread is the difference between the rate earned on total earning assets and the rate paid on total interest-bearing liabilities.

(2) Net interest margin is net interest income divided by average earning assets.

Earning assets, which are primarily financed through the issuance of Systemwide Debt Securities, consisted of loans (accrual and nonaccrual), Federal funds sold and investments. In addition to these interest-bearing funds, earning assets also are funded with interest-free funds (principally capital). Variations in average volume and the spreads earned on interest-bearing funds and capital determine changes in net interest income.

As illustrated in the preceding tables, the increase in net interest income in 2016, as compared with 2015 resulted primarily from an increase in the level of average earning assets, partially offset by a lower net interest spread. Average earning assets grew $24.688 billion or 9.0% to $299.550 billion for 2016, as compared with the prior year.

The net interest margin decreased six basis points to 2.49% for 2016, as compared with 2.55% for 2015. The decline in the net interest margin resulted from a decrease in the net interest spread of nine basis points to 2.31% for 2016, as compared with 2.40% for 2015. The net interest margin was positively impacted by a three basis point increase in income earned on earning assets funded by noninterest-bearing sources (principally capital).

The decline in the net interest spread for 2016, as compared with 2015 was primarily attributable to an increase in debt costs and lower lending spreads due to competitive pressures. The net interest spread was positively impacted by the Banks' ability to refinance outstanding debt at favorable interest rates. The Banks called debt totaling $57.9 billion in 2016, as compared with $34.4 billion for 2015.

As our product mix changes, interest rates increase and assets prepay or reprice in a manner more consistent with historical experience, the positive impact from calling debt experienced over the past several years will continue to decline.

Interest income recognized on cash-basis nonaccrual loans was $77 million for 2016 and 2015, and $74 million for 2014. Interest income is recognized on cash-basis nonaccrual loans only as interest payments are received and certain other conditions are met. Nonaccrual loans are returned to accrual status after a period of sustained payment performance provided they are current as to principal and interest, any previously charged off amounts have been collected, and the collectibility of the remaining amounts of principal and interest are no longer in doubt.

The increase in net interest income in 2015, as compared with 2014 resulted primarily from an increase in the level of average earning assets. Average earning assets grew $17.476 billion or 6.8% to $274.862 billion for 2015. The net interest margin decreased nine basis points to 2.55% for 2015, as compared with 2.64% for 2014. Negatively impacting the net interest margin was a decrease in the net interest spread of 10 basis points to 2.40% for 2015, as compared with net interest spread of 2.50% for 2014.

The decline in the net interest spread for 2015, as compared with 2014 was primarily attributable to lower lending spreads due to competitive pressures, changing product mix into lower spread lines of business and an increase in debt costs.

Provision for Loan Losses

Each Bank and Association makes its own determination whether an increase in its allowance for loan losses through a provision for loan losses or a decrease in its allowance for loan losses through a loan loss reversal is warranted based on its assessment of the credit risk in its loan portfolio.

The System recognized a provision for loan losses of $266 million for 2016, $106 million in 2015 and $40 million in 2014. The provision for loan losses for 2016 and 2015 consisted of $279 million and $135 million of provisions for loan losses recorded by certain System institutions, partially offset by $13 million and $29 million of loan loss reversals recorded by other System institutions. The provisions for loan losses recognized in 2016 and 2015 primarily reflected industry-specific reserves as a result of continued low grain prices, modest deterioration in credit quality in certain sectors of the loan portfolio and to increased loan volume. The loan loss reversals were reflective of the improvement in the credit quality of certain loans.

The provision for loan losses for 2014 consisted of $105 million of provisions for loan losses recorded by certain System institutions, partially offset by $65 million of loan loss reversals recorded by other System institutions. The provisions for loan losses recognized in 2014 were due to specific credit challenges for a limited number of customers. The loan loss reversals reflected the improving credit quality of certain loans.

Noninterest Income

Noninterest income for each of the three years in the period ended December 31, 2016 is summarized in the following table:

	For the Year Ended December 31,		
	2016	2015	2014
	(in millions)		
Fees for financially related services	$250	$245	$228
Loan-related fee income	243	259	228
Mineral income	48	76	132
Net gains on sales of investments and other assets	47	30	28
Income earned on Insurance Fund assets	46	31	34
Operating lease income	22	36	39
Net other-than-temporary impairment losses included in earnings	(16)	(13)	(2)
Losses on extinguishment of debt	(64)	(50)	(66)
Net gains on derivative and other transactions	22	8	28
Other noninterest income	36	47	51
Total noninterest income	$634	$669	$700

Noninterest income decreased $35 million or 5.2% in 2016 to $634 million, as compared with 2015. The decrease was largely due to decreases in mineral income of $28 million and loan-related fees of $16 million and an increase in losses on extinguishment of debt of $14 million. Partially offsetting these decreases in noninterest income were increases in net gains on sales of investments and other assets of $17 million and income earned on Insurance Fund assets of $15 million. Low oil prices driven by an oversupply of crude oil has negatively impacted mineral income.

Noninterest income decreased $31 million or 4.4% in 2015 to $669 million, as compared with 2014. The decrease was largely due to decreases in mineral income of $56 million and net gains on derivative and other transactions of $20 million and an increase in losses on other-than-temporary impairment of investments of $11 million. Partially offsetting these decreases in noninterest income were increases in loan-related fee income of $31 million and fees for financially related services of $17 million and a decrease in losses on extinguishment of debt of $16 million.

Noninterest Expense

Noninterest expense for each of the three years in the period ended December 31, 2016 is summarized below:

	For the Year Ended December 31,		
	2016	2015	2014
	(in millions)		
Salaries and employee benefits	$1,810	$1,739	$1,637
Occupancy and equipment expense	237	217	200
Purchased services	161	165	150
Other operating expense	587	569	551
Total operating expense	2,795	2,690	2,538
Net (gains) losses on other property owned	(3)	3	(19)
Total noninterest expense	$2,792	$2,693	$2,519

Noninterest expense increased $99 million or 3.7% to $2.792 billion for 2016, as compared with 2015, primarily due to increases in salaries and employee benefits, occupancy and equipment expense and other operating expense. Salaries and employee benefits increased $71 million or 4.1% as a result of annual merit increases and higher staffing levels at certain System institutions. The System employed 14,140 full-time equivalents at December 31, 2016, a 1.9% increase, as compared with 13,881 full-time equivalents at December 31, 2015.

Occupancy and equipment expense increased $20 million or 9.2% for 2016, as compared with 2015, primarily due to increases in facilities and maintenance expenses. Other operating expense increased $18 million or 3.2% for 2016 primarily due to various administrative expenses.

Noninterest expense increased $174 million or 6.9% to $2.693 billion for 2015, as compared with 2014, primarily due to increases in salaries and employee benefits and other operating expense. Employee benefits increased $65 million or 15.8% to $476 million for 2015, as compared with 2014, due to an increase in pension expense resulting from a decrease in the discount rate used to calculate the net periodic benefit cost and updated mortality tables reflecting increases in life expectancy. In addition, employee benefits increased due to rising health care costs and increased staffing levels. Salary expense increased $37 million or 3.0% to $1.263 billion primarily due to annual merit and performance-based compensation increases and, to a lesser extent, higher staffing levels at certain System institutions. The increased staffing levels were generally needed to support business initiatives and growth. The System employed 13,881 full-time equivalents at December 31, 2015, a 1.0% increase, as compared with 13,743 full-time equivalents at December 31, 2014.

Other operating expense increased $18 million or 3.3% to $569 million for 2015, as compared with 2014, primarily due to increases in various administrative expenses. Also contributing to the increase in noninterest expense were net losses on other property owned of $3 million for 2015, as compared with net gains on other property owned of $19 million for 2014.

Operating expense (salaries and employee benefits, occupancy and equipment expense, purchased services and other operating expense) statistics for each of the three years in the period ended December 31, 2016 are set forth below:

	For the Year Ended December 31,		
	2016	2015	2014
	($ in millions)		
Excess of net interest income over operating expense	$4,652	$4,325	$4,266
Operating expense as a percentage of net interest income	37.5%	38.3%	37.3%
Operating expense as a percentage of net interest income and noninterest income	34.6	35.0	33.8
Operating expense as a percentage of average loans	1.16	1.21	1.23
Operating expense as a percentage of average earning assets	0.93	0.98	0.99

Provision for Income Taxes

The System recorded provisions for income taxes of $175 million for 2016, $197 million in 2015 and $221 million in 2014. The effective tax rate decreased to 3.5% for 2016 from 4.0% for 2015, primarily due to decreased earnings at certain taxable System institutions and from a greater amount of patronage declared during 2016.

As discussed in Note 2 to the accompanying combined financial statements, the System is comprised of both taxable and non-taxable entities. Taxable entities are eligible to operate as cooperatives for tax purposes and thus may elect to deduct from taxable income certain amounts allocated to borrowers as patronage distributions in the form of cash, stock or allocated retained earnings.

Fourth Quarter 2016 Results of Operations

The summary results of operations for the fourth quarter is presented below:

	For the Quarter Ended December 31,	
	2016	2015
	(in millions)	
Interest income	$2,693	$2,430
Interest expense	(770)	(632)
Net interest income	1,923	1,798
Provision for loan losses	(48)	(19)
Noninterest income	186	206
Noninterest expense	(763)	(748)
Income before income taxes	1,298	1,237
Provision for income taxes	(39)	(30)
Net income	$1,259	$1,207

Combined net income increased $52 million or 4.3% to $1.259 billion for the fourth quarter of 2016, as compared with $1.207 billion for the fourth quarter of 2015.

Net interest income increased 7.0% to $1.923 billion for the fourth quarter of 2016, as compared with $1.798 billion for the prior year period. The increase primarily resulted from a higher level of average earning assets, largely due to increased loan volume, partially offset by a lower net interest spread. Average earning assets grew $19.618 billion or 6.9% to $304.640 billion for the fourth quarter of 2016, as compared with the same period of the prior year.

The net interest margin was unchanged at 2.52% for the fourth quarter of both 2016 and 2015. Despite being unchanged, the net interest margin was impacted by a three basis point decrease in the net interest spread to 2.34%, as compared with 2.37% with the fourth quarter of 2015, offset by a three basis point increase in income earned on earning assets funded by noninterest-bearing sources (primarily capital). The decrease in the net interest spread resulted primarily from an increase in debt costs and lower lending spreads due to competitive pressures.

The provision for loan losses was $48 million for the fourth quarter of 2016, as compared with $19 million for the same period of the prior year. The fourth quarter of 2016 provision for loan losses was primarily due to increased loan volume and specific credit challenges for a limited number of customers.

Noninterest income was $186 million for the fourth quarter of 2016, as compared with $206 million for the fourth quarter of 2015. The decrease was primarily due to a decrease in loan-related fees of $33 million, partially offset by net gains on derivative and other transactions of $3 million for the fourth quarter of 2016, as compared to net losses of $6 million for the fourth quarter of 2015.

Noninterest expense was $763 million for the fourth quarter of 2016, as compared with $748 million for the fourth quarter of 2015. The increase was primarily due to increases in salaries and employee benefits of $17 million.

The provision for income taxes was $39 million and $30 million for the fourth quarter of 2016 and 2015. The effective tax rate increased to 3.0% for the fourth quarter of 2016, as compared with 2.4% for the fourth quarter of 2015, primarily due to increased earnings at certain taxable System institutions.

Risk Management

Overview

The System is in the business of making agricultural and other loans that require us to take certain risks. Management of risks inherent in our business is essential for our current and long-term financial performance. Prudent and disciplined risk management includes an enterprise risk management structure to identify emerging risks and evaluate risk implications of decisions and actions taken. Each System institution's goal is to mitigate risk, where appropriate, and to properly and effectively identify, measure, price, monitor and report risks in our business activities. Stress testing represents a component of each institution's risk management process. Each System institution is required by regulation to perform stress tests; however, the depth and frequency of these stress tests may vary by institution size and complexity.

The major types of risk for which we have exposure are:

- structural risk — risk inherent in our business and related to our structure (an interdependent network of lending institutions),
- credit risk — risk of loss arising from an obligor's failure to meet the terms of its contract or failure to perform as agreed,
- interest rate risk — risk that changes in interest rates may adversely affect our operating results and financial condition,
- liquidity risk — risk arising from our inability to meet obligations when they come due without incurring unacceptable losses, including our ability to access the debt market,
- operational risk — risk resulting from inadequate or failed internal processes or systems, errors by employees, fraud or external events,
- reputational risk — risk of loss resulting from events, real or perceived, that shape the image of the System or any of its entities, including the impact of investors' perceptions about agriculture, the reliability of System financial information, or the actions of any System institution, and
- political risk — risk of loss of support for the System and agriculture by the federal and state governments.

Structural Risk Management

Structural risk results from the fact that the System is comprised of Banks and Associations that are cooperatively owned, directly or indirectly, by their borrowers. While System institutions are financially and operationally interdependent, they are not commonly owned. Each System institution is responsible for its own risk management and there are no formal processes or procedures in place to mandate Systemwide risk mitigation actions, including, but not limited to, reducing concentration, interest rate and counterparty credit risk across the System. This structure at times requires action by consensus or contractual agreement. Further, there is structural risk in that only the Banks are jointly and severally liable for the payment of principal and interest on Systemwide Debt Securities. Although capital at the Association level reduces a Bank's credit exposure with respect to its wholesale loans to its affiliated Associations, this capital may not be available to support the payment of principal and interest on Systemwide Debt Securities.

In order to monitor the financial strength of each of the Banks and mitigate the risks of non-performance by each Bank of its obligations under the Systemwide Debt Securities, we utilize two integrated intra-System financial performance agreements — the Amended and Restated Contractual Interbank Performance Agreement, or CIPA, and the Second Amended and Restated Market Access Agreement, or MAA. Under provisions of the CIPA, a score (CIPA score) is calculated quarterly to measure the financial condition and performance of each District (a Bank and its affiliated Associations) using various ratios that take into account the District's and Bank's capital, asset quality, earnings, interest-rate risk and liquidity. The CIPA score is then compared against the agreed-upon standard of financial condition and performance that each District must achieve and maintain. The measurement standard established under the CIPA is intended to provide an early-warning mechanism to assist in monitoring the financial condition of each District. The performance standard under the CIPA is based on the average CIPA score over a four-quarter period.

The MAA is designed to provide for the timely identification and resolution of individual Bank financial issues and establishes performance criteria and procedures for the Banks that provide operational oversight and control over a Bank's access to System funding. The performance criteria set forth in the MAA are as follows:

- the defined CIPA scores,
- the net collateral ratio of a Bank, and
- the permanent capital ratio of a Bank.

The Bank net collateral ratio is net collateral (primarily loans and investments) divided by total liabilities less subordinated debt, subject to certain limits, and the Bank permanent capital ratio is primarily the Bank's common stock, preferred stock and subordinated debt, subject to certain limits, and surplus divided by risk-adjusted assets.

If a Bank fails to meet the performance criteria above, it will be placed into one of three categories. Each category gives the other System Banks and the Funding Corporation (collectively, the MAA Committee) progressively more control over a Bank that has declining financial performance under the MAA performance criteria. A "Category I" Bank is subject to additional monitoring and reporting requirements; a "Category II" Bank's ability to participate in issuances of Systemwide Debt Securities may, subject to the discretion of the MAA Committee, be limited to refinancing maturing debt obligations; and a "Category III" Bank may, subject to the discretion of the MAA Committee, not be permitted to participate in issuances of Systemwide Debt Securities. Decisions by the MAA Committee to permit, limit or prohibit a "Category II" or "Category III" Bank to participate in the issuance of Systemwide Debt Securities are subject to oversight and override by the Farm Credit Administration. A Bank exits these categories by returning to compliance with the agreed-upon performance criteria.

The criteria for the net collateral ratio and the permanent capital ratio are:

	Net Collateral Ratio	Permanent Capital Ratio
Category I	<104%*	<8.0%
Category II	<103%	<7.0%
Category III	<102%	<5.0%

* As set forth in the MAA, a Bank may be subject to a higher net collateral ratio set by the Farm Credit Administration.

(See Note 21 for each Bank's net collateral and permanent capital ratios.)

During the three years ended December 31, 2016, all Banks met the agreed-upon standards of financial condition and performance (including those defined in the CIPA) as required by the MAA.

Periodically, the CIPA model and the MAA performance criteria are reviewed to take into consideration current performance standards in the financial services industry or regulatory changes. As a result of the changes to regulatory capital ratio requirements, the Third Amended and Restated MAA was executed by the Banks and the Funding Corporation effective January 1, 2017. As a result, the MAA criteria have been adjusted as follows:

	Tier 1 Leverage Ratio	Total Capital Ratio
Category I	<5.0%	<10.5%
Category II	<4.0%	<8.0%
Category III	<3.0%	<7.0%

Credit Risk Management

Credit risk arises from the potential inability of an obligor to meet its payment obligation and exists in our outstanding loans, letters of credit, unfunded loan commitments, investment portfolios and derivative counterparty credit exposures. (See page 70 for a discussion regarding derivative counterparty exposure) System institutions manage credit risk associated with their retail lending activities through an analysis of the credit risk profile of an individual borrower. Each Bank and Association has its own set of underwriting standards and lending policies, approved by its board of directors, that provides direction to its loan officers. Underwriting standards include, among other things, an evaluation of:

- character — borrower integrity and credit history,
- capacity — repayment capacity of the borrower based on cash flows from operations or other sources of income,
- collateral — protects the lender in the event of default and represents a potential secondary source of loan repayment,
- capital — ability of the operation to survive unanticipated risks, and
- conditions — intended use of the loan funds.

The retail credit risk management process begins with an analysis of the borrower's credit history, repayment capacity, financial position and collateral, which includes an analysis of credit scores for smaller loans. Repayment capacity focuses on the borrower's ability to repay the loan based on cash flows from operations or other sources of income, including off-farm income. Real estate mortgage loans must be secured by first liens on the real estate (collateral). As required by Farm Credit Administration regulations, each institution that makes loans on a secured basis must have collateral evaluation policies and procedures. Real estate mortgage loans may be made only in amounts up to 85% of the original appraised value of the property taken as security or up to 97% of the appraised value if guaranteed by a state, federal, or other governmental agency. The actual loan to appraised value when loans are made is generally lower than the statutory maximum percentage. Appraisals are required for loans of more than $250,000 with exemptions allowed pursuant to Farm Credit Administration regulation.

System institutions use a two-dimensional loan rating model based on internally generated combined System risk rating guidance that incorporates a 14-point risk-rating scale to identify and track the probability of borrower default and a separate scale addressing loss given default over a period of time. Probability of default is the probability that a borrower will experience a default within 12 months from the date of the determination of the risk rating. A default is considered to have occurred if the lender believes the borrower will not be able to pay its obligation in full or the borrower is past due more than 90 days. The loss given default is management's opinion as to the anticipated economic loss on a specific loan assuming default has occurred or is expected to occur within the next 12 months. The economic loss represents the principal balance plus interest at the date of default less the present value of subsequent cash flows occurring until the loan is collected or charged off, or otherwise is no longer considered in default and transferred to accrual status. This credit risk rating process incorporates objective and subjective criteria to identify inherent strengths, weaknesses and risks in a particular relationship.

The model's 14-point risk rating scale provides for nine acceptable categories, one other assets especially mentioned category, two substandard categories, one doubtful category and one loss category. These categories are defined as follows:

- acceptable — assets are expected to be fully collectible and represent the highest quality,
- other assets especially mentioned (OAEM) — assets are currently collectible but exhibit some potential weakness,
- substandard — assets exhibit some serious weakness in repayment capacity, equity, or collateral pledged on the loan,
- doubtful — assets exhibit similar weaknesses to substandard assets; however, doubtful assets have additional weaknesses in existing facts, conditions and values that make collection in full highly questionable, and
- loss — assets are considered uncollectible.

Each of the probability of default categories carries a distinct percentage of default probability. The probability of default between one and nine of the acceptable categories is very narrow and would reflect almost no default to a minimal default percentage. The probability of default grows more rapidly as a loan moves from a "nine" of the acceptable category to OAEM and grows significantly as a loan moves to a substandard (viable) level. A substandard (non-viable) rating indicates that the probability of default is almost certain.

The loss given default is separated into four categories that are defined as follows:

- A/B — no principal loss is expected; anticipated economic loss of 0%-15%

- C/D — anticipated principal loss of 0% to 15%; anticipated economic loss of 15%-25%
- E — anticipated principal loss of 15% to 40%; anticipated economic loss of 25%-50%
- F — anticipated principal loss of greater than 40%; anticipated economic loss of greater than 50%

The credit risk rating methodology is a key component of each Bank's and Association's allowance for loan losses evaluation, and is generally incorporated into the institution's loan underwriting standards and internal lending limits.

In addition, borrower and commodity concentration lending and leasing limits have been established by each individual System institution to manage credit exposure. The regulatory lending and leasing limit to a single borrower or lessee is 15% of the institution's permanent capital but System institutions' boards of directors have generally established more restrictive lending limits. This limit applies to Associations with long-term and short- and intermediate-term lending authorities, and to the Banks' (other than CoBank) loan participations.

The Banks manage credit risk arising from their wholesale loans (revolving lines of credit) to their affiliated Associations as well as credit risk arising from the Banks' retail loans to borrowers. An Association's ability to repay its loan from its affiliated Bank is dependent on repayment of loans made to the Association's borrowers. Monitoring of the credit risk by the related Bank of an Association's loan portfolio, together with appropriate credit administration and servicing, reduces credit risk on the wholesale loans. Monitoring may include various mechanisms, including testing the reliability of an Association's credit classifications, periodic meetings with the Association's management and board of directors, formalized risk assessments, and prior approval by the Bank of transactions that exceed the Association's delegated lending authority (which is determined by the Bank). In addition, some Banks utilize risk-based pricing programs that price funds differentially to Associations based on risk profiles. Each Bank utilizes a "General Financing Agreement" setting forth the terms and conditions of each loan to its affiliated Associations to achieve its goal of managing credit risk. This agreement generally includes:

- typical commercial lending provisions, including advance rates based on quality of pledged assets and financial performance covenants,
- a pledge of substantially all Association assets as collateral for the loan,
- a risk-based score that is based on the Association's profitability, credit quality, risk coverage, capital adequacy and quality of credit administration,
- a requirement that retail loans originated by the Association over an established dollar amount be approved by the Bank and all loans to Association board members receive prior approval by the Bank, and
- a requirement that the Association adopt underwriting standards consistent with the Bank's underwriting guidelines and maintain an internal audit function, which reviews its lending operations.

By selling loans or interests in loans to other institutions within the System or outside the System, a Bank or Association can manage its growth and capital, as well as limit its credit exposure to a borrower or geographic, industry or commodity concentration. By buying loans or interests in loans from another System institution or from outside the System, a Bank or Association can improve diversification.

Portfolio credit risk is also evaluated with the goal of managing the concentration of credit risk. Concentration risk is reviewed and measured by each institution by industry, product, geography and customer limits. The concentrations at the System level are illustrated in the "Loan Portfolio Diversification" section that follows.

Loan Portfolio

The System's loan portfolio consists only of retail loans. Bank loans to affiliated Associations have been eliminated in the combined financial statements. Loans outstanding for each of the past five years consisted of:

	December 31,				
	2016	2015	2014	2013	2012
			(in millions)		
Real estate mortgage	$114,446	$107,813	$100,811	$ 95,209	$ 92,504
Production and intermediate-term	50,282	49,204	46,305	44,309	43,446
Agribusiness:					
Processing and marketing	21,166	19,949	16,974	13,164	10,735
Loans to cooperatives	15,300	13,113	12,553	10,885	10,255
Farm-related business	3,162	3,533	3,408	2,999	2,858
Rural infrastructure:					
Power*	19,577	17,925	15,036	14,304	13,193
Communication	6,023	6,196	5,044	4,159	3,435
Water/waste water	1,840	1,677	1,488	1,325	1,215
Rural residential real estate	7,148	7,117	6,754	6,511	6,430
Agricultural export finance	5,531	5,075	4,837	4,743	4,729
Lease receivables	3,480	3,373	2,976	2,706	2,415
Loans to other financing institutions	813	915	868	746	689
Total loans	$248,768	$235,890	$217,054	$201,060	$191,904

* Formerly referred to as energy

Loans by type as a percentage of total loans for each of the past five years were:

	December 31,				
	2016	2015	2014	2013	2012
Real estate mortgage	46.0%	45.7%	46.5%	47.4%	48.1%
Production and intermediate-term	20.2	20.9	21.3	22.0	22.6
Agribusiness:					
Processing and marketing	8.5	8.5	7.8	6.5	5.6
Loans to cooperatives	6.2	5.6	5.8	5.4	5.3
Farm-related business	1.3	1.5	1.6	1.5	1.5
Rural infrastructure:					
Power	7.9	7.6	6.9	7.1	6.9
Communication	2.4	2.6	2.3	2.1	1.8
Water/waste water	0.7	0.7	0.7	0.7	0.6
Rural residential real estate	2.9	3.0	3.1	3.2	3.4
Agricultural export finance	2.2	2.1	2.2	2.4	2.5
Lease receivables	1.4	1.4	1.4	1.3	1.3
Loans to other financing institutions	0.3	0.4	0.4	0.4	0.4
Total loans	100.0%	100.0%	100.0%	100.0%	100.0%

The year-to-year change in loan volume was an increase of 5.5% in 2016, 8.7% in 2015, 8.0% in 2014 and 4.8% in 2013. The increase in 2016 was primarily attributable to increases in real estate mortgages, loans to cooperatives, rural power and processing and marketing loans.

Real estate mortgage loans increased $6.633 billion or 6.2% during 2016, primarily due to continued demand for cropland.

Production and intermediate-term loans increased $1.078 billion or 2.2% during 2016, primarily due to new loan growth and to a lesser extent advance purchases of 2017 inputs, such as fertilizer, seed and fuel, as part of tax planning strategies.

Processing and marketing loans increased $1.217 billion or 6.1% during 2016, resulting primarily from new loan growth and advances on existing loans.

Loans to cooperatives increased $2.187 billion or 16.7% during 2016, primarily due to higher levels of seasonal financing at many grain cooperatives and increased lending to food and agribusiness companies.

Rural power loans increased $1.652 billion or 9.2% during 2016, due to increased lending activity in the electric distribution and power supply sectors.

The increase in loan volume for 2015 was primarily attributable to increases in real estate mortgage, processing and marketing, rural power, and production and intermediate-term loans.

The increase in loan volume for 2014 was primarily attributable to increases in real estate mortgage, production and intermediate-term, loans to cooperatives and processing and marketing loans.

The increase in loan volume for 2013 was primarily attributable to increases in real estate mortgage, production and intermediate-term, processing and marketing and rural power loans.

Real estate mortgage loans represent the largest component of the System's loan portfolio. The following table provides credit risk information aggregating System institutions' assessments of the probability of default and loss given default on our real-estate mortgage loans outstanding (excluding accrued interest) of $114.446 billion at December 31, 2016.

		Loss Given Default Economic Loss*				
Risk Ratings	**Uniform Loan Classification System****	**A/B 0-15%**	**C/D 15-25%**	**E 25-50%**	**F >50%**	**Total**
				(in millions)		
1 through 3	Acceptable	$ 245				$ 245
4	Acceptable	6,310	$ 1,865	$ 31	$ 8	8,214
5	Acceptable	13,805	5,219	192	46	19,262
6	Acceptable	19,067	6,540	323	51	25,981
7	Acceptable	19,671	6,481	400	55	26,607
8	Acceptable	13,328	4,220	373	81	18,002
9	Acceptable	6,937	2,268	300	53	9,558
10	OAEM	2,439	693	70	29	3,231
11	Substandard (viable)	1,821	402	150	17	2,390
12	Substandard (non-viable)	562	198	111	82	953
13 and 14	Doubtful and Loss			1	2	3
	Total	$84,185	$27,886	$1,951	$424	$114,446

* Economic loss is the principal balance plus interest at the date of default less the present value of subsequent cash flows occurring until the loan is collected or charged off, or otherwise is no longer considered in default and transferred to accrual status. See pages 49 and 50 for a discussion of loss given default categories.

** The table is presented based on risk ratings and not the Uniform Loan Classification System. Therefore, properly executed and structured guarantees may allow a loan with a risk rating of 10 or worse to be classified as Acceptable.

Loan Portfolio Diversification

We make loans and provide financially related services to qualified borrowers in the agricultural and rural sectors and to certain related entities. Our loan portfolio at the System level is diversified by commodities financed and geographic locations served, as illustrated in the following two tables. Generally, a large percentage of agricultural operations include more than one commodity. Due to the geographic territories served by Banks and Associations, most institutions have higher geographic, borrower and commodity concentrations than does the System as a whole.

	December 31, 2016		December 31, 2015	
	Amount	Percentage	Amount	Percentage
	($ in millions)			
Cash grains (includes corn, wheat and soybeans)	$ 42,719	17.17%	$ 41,710	17.68%
Cattle	22,653	9.11	22,347	9.47
Rural power	19,577	7.87	17,925	7.60
Food products (includes meat, dairy and bakery products)	17,942	7.21	16,607	7.04
Dairy farms	16,499	6.63	15,265	6.47
Rural home loans, farm landlords and part-time farms	15,999	6.43	15,481	6.56
Forestry	15,554	6.25	14,855	6.30
Field crops (includes sugar beets, potatoes and vegetables)	13,800	5.55	12,774	5.42
Tree fruits, nuts and grapes	12,591	5.06	11,392	4.83
Farm supplies and marketing	10,556	4.24	9,330	3.96
General farms, primarily crop	8,777	3.53	8,682	3.68
Agricultural services and fish	7,404	2.98	6,919	2.93
Poultry and eggs	6,504	2.61	5,966	2.53
Rural communication	6,023	2.42	6,196	2.63
Hogs	5,582	2.24	4,963	2.10
Agricultural export finance	5,531	2.22	5,075	2.15
General farms, primarily livestock	4,365	1.76	4,261	1.81
Horticulture	2,603	1.05	2,548	1.08
Other livestock	2,353	0.95	1,998	0.85
Cotton	2,188	0.88	2,172	0.92
Rural water/waste water	1,840	0.74	1,677	0.71
Biofuels, primarily ethanol	1,150	0.46	951	0.40
Other	6,558	2.64	6,796	2.88
	$248,768	100.00%	$235,890	100.00%

The System makes credit available in all 50 states, the Commonwealth of Puerto Rico, and U.S. territories under conditions set forth in the Farm Credit Act. The following table presents the geographic distribution of the System's loan portfolio for states that represented 1% or more of the System's total loan volume during one or more of the past two years:

State	2016	2015
California	10.23%	9.88%
Texas	6.87	6.80
Iowa	5.29	5.20
Illinois	5.11	5.32
Minnesota	4.66	4.51
Ohio	3.79	3.86
Nebraska	3.76	3.95
Wisconsin	3.03	3.05
Indiana	2.99	3.04
Kansas	2.92	2.98
Michigan	2.72	2.75
Missouri	2.61	2.80
South Dakota	2.53	2.44
North Carolina	2.52	2.34
Georgia	2.37	2.40
New York	2.30	2.39
Washington	2.29	2.23
North Dakota	2.26	2.32
Colorado	2.12	2.21
Florida	2.00	1.86
Tennessee	1.95	2.04
Kentucky	1.92	1.94
Arkansas	1.92	1.90
Virginia	1.78	1.74
Idaho	1.59	1.44
Pennsylvania	1.58	1.51
Oregon	1.38	1.60
Oklahoma	1.35	1.34
Alabama	1.15	1.25
Mississippi	1.13	1.20
Maryland	1.01	1.02
South Carolina	0.99	1.02
Other	9.88	9.67
	100.00%	100.00%

The following table sets forth the loans by dollar size and number of borrowers:

	December 31, 2016		December 31, 2015	
Range	Amount Outstanding	Number of Borrowers	Amount Outstanding	Number of Borrowers
($ in thousands)	($ in millions)			
$1 — $249	$ 32,925	425,256	$ 32,643	402,724
$250 — $499	21,146	60,331	20,871	59,528
$500 — $999	24,404	34,917	23,956	34,298
$1,000 — $4,999	53,102	27,450	51,137	26,454
$5,000 — $24,999	37,255	3,774	35,954	3,654
$25,000 — $99,999	32,749	702	29,718	620
$100,000 — $249,999	21,970	148	21,188	135
$250,000 and over	25,217	60	20,423	49
Total	$248,768	552,638	$235,890	527,462

Small loans (less than $250,000) accounted for 77% of System borrowers and 13% of System loan volume at December 31, 2016, as compared with 76% and 14% at December 31, 2015. Credit risk on small loans, in many instances, is reduced by off-farm income sources.

Credit scorecards are used by the System for various types of loans, including production and intermediate-term, real estate mortgage, rural residential real estate loans and lease receivables. Loans up to $750,000 may be evaluated using validated automated credit scorecards (which are mathematical models that provide a quantitative measurement of a borrower's creditworthiness); however, many institutions set a lower limit and may perform additional underwriting procedures.

The following table sets forth information on scored loans for the past two years:

	December 31,	
	2016	2015
	($ in millions)	
Number of credit-scored loans	449,022	451,628
Amount of credit-scored loans	$ 26,774	$ 26,139
Delinquent (30 days or more past due) credit scored loans as a % of credit scored loans	0.69%	0.63%
Delinquent loans for overall portfolio as a % of accruing loans	0.26%	0.20%

The ten largest borrowers accounted for $6.947 billion or 2.79% of the System's total outstanding loans at December 31, 2016, as compared with $6.670 billion or 2.83% at December 31, 2015. The concentration of large loans to relatively few borrowers continued to be a significant factor in assessing the credit risk associated with loans. Although System institutions monitor credit risk individually, the System has established a quarterly process to report System large loan exposures (outstanding loan amounts plus any unfunded loan commitments). A System risk management committee reviews and monitors large loan exposures to existing individual customers that may reach $1.0 billion or, in certain limited circumstances, $1.5 billion. Since it is possible that one or more System institutions may simultaneously make credit available to a customer that may, in the aggregate, exceed these limits, the process provides for quarterly data to be compiled on existing large loan exposures with notice provided to the Banks and Associations of the largest loan exposures, including all loan exposures to a borrower greater than 75% of the $1.0 billion level or $750 million. While this process captures information regarding large loan exposures, any credit decision resides with the individual System institutions. At December 31, 2016, two exposures were above $1.0 billion but less than $1.5 billion, as compared with one exposure above $1.0 billion but less than $1.5 billion at December 31, 2015. Additionally, eight exposures at December 31, 2016 and six exposures at December 31, 2015 exceeded $750 million.

System institutions have reduced, to some extent, the credit risk of certain real estate mortgage loans by entering into agreements that provide long-term standby commitments to purchase System loans and other credit guarantees. The amount of loans under credit guarantees was $3.307 billion at December 31, 2016, of which $1.825 billion was provided by Farmer Mac, as compared with total credit guarantees of $4.125 billion at December 31, 2015, of which $2.113 billion was provided by Farmer Mac. Fees for credit guarantees totaled $14 million in 2016, $15 million in 2015 and $16 million in 2014, and are included in other operating expenses. In addition, approximately 23% and 33% of agricultural export finance loans were guaranteed through the USDA's Commodity Credit Corporation, a federal government-sponsored trade financing program, as of December 31, 2016 and 2015.

Loan Portfolio Maturity Distribution

The following table presents the contractual maturity distribution of loans, excluding real estate mortgage and rural residential real estate loans, at December 31, 2016:

	Due in 1 Year or Less	Due After 1 Year Through 5 Years	Due After 5 Years	Total
		(in millions)		
Production and intermediate-term	$21,222	$20,846	$ 8,214	$ 50,282
Agribusiness:				
Processing and marketing	8,656	6,449	6,061	21,166
Loans to cooperatives	5,471	5,339	4,490	15,300
Farm-related business	923	980	1,259	3,162
Rural infrastructure:				
Power	2,493	2,580	14,504	19,577
Communication	1,763	2,545	1,715	6,023
Water/waste water	132	568	1,140	1,840
Agricultural export finance	427	4,891	213	5,531
Lease receivables	450	1,794	1,236	3,480
Loans to other financing institutions	306	437	70	813
Total	$41,843	$46,429	$38,902	$127,174

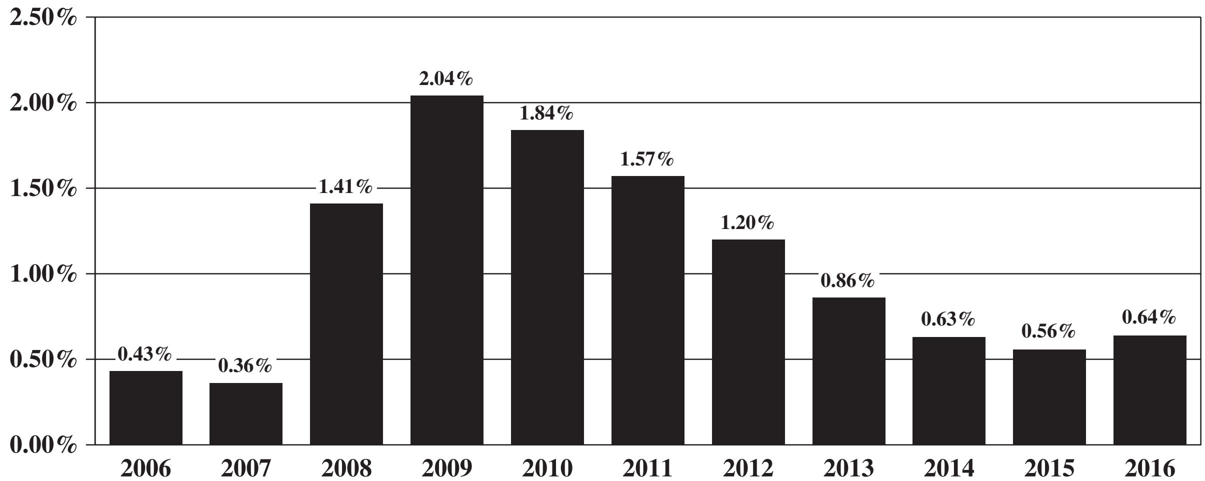
Note: Real estate mortgage and rural residential real estate loans have been excluded from the table above given the long-term maturities of such loans, including maturities of up to 40 years in certain cases.

Nonperforming Assets

Nonperforming assets (including related accrued interest) by loan type for each of the past five years consisted of the following:

	December 31,				
	2016	2015	2014	2013	2012
			(in millions)		
Nonaccrual loans:					
Real estate mortgage	$ 835	$ 703	$ 753	$ 941	$1,234
Production and intermediate-term	494	356	369	527	666
Agribusiness	167	106	75	77	206
Rural infrastructure		86	116	120	112
Rural residential real estate	52	57	56	65	76
Lease receivables	43	16	6	6	6
Total nonaccrual loans	1,591	1,324	1,375	1,736	2,300
Accruing restructured loans:					
Real estate mortgage	182	180	207	176	157
Production and intermediate-term	94	97	122	94	94
Agribusiness	2	2	2	9	14
Rural infrastructure	59			3	3
Rural residential real estate	7	7	6	4	3
Total accruing restructured loans	344	286	337	286	271
Accruing loans 90 days or more past due:					
Real estate mortgage	16	12	14	9	20
Production and intermediate-term	10	5	8	6	14
Agribusiness				1	
Rural residential real estate		1	3	2	3
Lease receivables	1	1			
Total accruing loans 90 days or more past due	27	19	25	18	37
Total nonperforming loans	1,962	1,629	1,737	2,040	2,608
Other property owned	75	96	132	198	324
Total nonperforming assets	$2,037	$1,725	$1,869	$2,238	$2,932

Nonaccrual Loans as a % of Total Loans Outstanding
as of December 31,



Loans are generally placed in nonaccrual status when principal or interest is delinquent for 90 days (unless adequately secured and in the process of collection) or when circumstances indicate that collection of principal and interest is in doubt. Nonaccrual loans may be transferred to accrual status if all contractual principal and interest due on the loan is paid and the loan is current, prior charge-offs are recovered, no reasonable doubt remains as to the borrower's willingness and ability to perform in accordance with the loan terms, and the borrower has demonstrated payment performance.

Nonaccrual loans increased $267 million to $1.591 billion at December 31, 2016, primarily due to loans transferred into nonaccrual status in excess of loan repayments. The increase was primarily due to reduced net farm income in certain agriculture production sectors and deterioration in the credit quality of a limited number of agribusiness borrowers.

Nonaccrual loans as a percentage of total loans outstanding increased from 0.56% at December 31, 2015 to 0.64% at December 31, 2016. Nonaccrual loans that were current as to principal and interest were 55.6% of total nonaccrual loans at December 31, 2016, as compared with 60.5% at December 31, 2015. Nonaccrual loans contractually past due with respect to either principal or interest were $707 million and $523 million at December 31, 2016 and 2015.

At December 31, 2016, the ten largest nonaccrual loans totaled $258 million, while at December 31, 2015, the ten largest nonaccrual loans totaled $242 million.

Accruing restructured loans, including related accrued interest, were $344 million and $286 million at December 31, 2016 and 2015. The increase was primarily due to a previously restructured nonaccrual communication loan returning to accruing status. The restructured loans include only the year-end balances of loans (and related accrued interest) on which the creditor for economic or legal reasons related to the debtor's financial difficulties grants a concession to the debtor that it would not otherwise consider. Concessions vary by program and are borrower-specific and may include interest rate reductions, term extensions, payment deferrals or the acceptance of additional collateral in lieu of payments. In limited circumstances, principal may be forgiven. Restructured loans do not include loans on which concessions have been granted but which remain in nonaccrual status. Upon restructuring, our accounting policies generally require a period of loan performance during which time the borrower complies with the restructured terms before a loan is transferred to accruing restructured status.

The following table presents the nonaccrual loan activity during the past three years:

	For the Year Ended December 31,		
	2016	2015	2014
		(in millions)	
Balance at beginning of year	$1,324	$1,375	$1,736
Additions:			
Gross amounts transferred into nonaccrual	1,230	756	634
Recoveries	39	55	48
Advances	227	166	269
Other, net	4		9
Reductions:			
Charge-offs	(78)	(92)	(119)
Transfers to other property owned (book value)	(47)	(57)	(83)
Returned to accrual status	(202)	(104)	(264)
Repayments	(906)	(760)	(855)
Other, net		(15)	
Balance at end of year	$1,591	$1,324	$1,375

Other property owned, which is held for sale and consists of real and personal property acquired through collection actions, decreased $21 million during 2016 to $75 million at December 31, 2016, primarily due to sales in excess of loans transferred into other property owned.

Loans classified under the Farm Credit Administration's Uniform Loan Classification System as Acceptable or Other Assets Especially Mentioned (OAEM) as a percentage of total loans and accrued interest receivable decreased to 97.4% at December 31, 2016, as compared with 98.1% at December 31, 2015. Loan delinquencies (accruing loans 30 days or more past due) as a percentage of accruing loans increased to 0.26% at December 31, 2016, as compared with 0.20% at December 31, 2015.

Although credit quality remained relatively strong, agriculture is a cyclical industry and the System may experience a downturn in credit quality within one or more sectors of the portfolio given reduced net farm income.

Allowance for Loan Losses

The allowance for loan losses was $1.506 billion at December 31, 2016 and $1.280 billion at December 31, 2015. Net loan charge-offs of $45 million, $37 million and $68 million were recorded during 2016, 2015 and 2014.

The allowance for loan losses at each period end was considered by management of System institutions to be adequate to absorb probable losses existing in and inherent to their loan portfolios. The allowance for loan losses represents the aggregate of each System entity's individual evaluation of its allowance for loan losses requirements. Although aggregated in the combined financial statements, the allowance for loan losses of each System entity is particular to that institution and is not available to absorb losses realized by other System entities. Managements' evaluations consider factors that include, among other things, loan loss experience, portfolio quality, loan portfolio composition, collateral value, current agricultural production conditions and economic conditions.

Even though certain System borrowers have been faced with challenges due to reduced net farm income in certain sectors, their financial positions remain generally healthy given the past decade of favorable U.S. farm economic conditions. System underwriting standards require strong collateral support for loans. By regulation, all non-guaranteed long-term real estate mortgage loans must have a loan-to-value ratio of 85% or less at origination. Most of the System's real estate mortgage loans at origination had a loan-to-value ratio generally lower than the statutory maximum of 85%.

In determining the allowance for loan losses, System institutions reflect estimated credit losses for specifically identified loans, as well as estimated probable credit losses inherent in the remainder of the portfolio as of the balance sheet date. All nonperforming loans are specifically identified and are evaluated for impairment. At December 31, 2016, $536 million of the System's $1.962 billion of nonperforming loans had specific reserves of $124 million. The remaining $1.426 billion of non-performing loans were evaluated and determined not to need a specific reserve.

One of the primary tools utilized by System institutions to determine probable losses inherent in their loan portfolios, which have not been specifically identified and evaluated for impairment, is to determine the credit risk ratings of the loans in their portfolios as indicated by the probability of default assigned to the loans multiplied by the estimated loss given default of the loans. The estimated losses derived from this calculation are aggregated, reviewed and adjusted to best reflect current economic and industry factors. The result of the analysis provides a basis to estimate probable losses and determine reserves adequate to cover these estimated probable losses.

The following table represents the risk rating distribution for the System's outstanding loans of $248.768 billion at December 31, 2016. Non-performing loans or impaired loans generally include substandard/non-viable, doubtful and loss loans.

		Loss Given Default				
		Economic Loss*				
Risk Ratings	Uniform Loan Classification System**	A/B 0-15%	C/D 15-25%	E 25-50%	F >50%	Total
		(in millions)				
1 through 3	Acceptable	$ 3,750	$ 1,170	$ 329	$ 1,519	$ 6,768
4	Acceptable	12,931	6,079	521	1,104	20,635
5	Acceptable	20,241	19,290	1,449	2,048	43,028
6	Acceptable	26,713	20,323	3,119	2,301	52,456
7	Acceptable	25,822	23,526	4,030	1,494	54,872
8	Acceptable	17,594	14,641	2,674	1,139	36,048
9	Acceptable	9,461	7,321	2,168	635	19,585
10	OAEM	3,758	3,124	602	570	8,054
11	Substandard (viable)	2,779	1,420	897	182	5,278
12	Substandard (non-viable)	885	469	315	248	1,917
13 and 14	Doubtful and Loss	71	19	14	23	127
	Total	$124,005	$97,382	$16,118	$11,263	$248,768

* Economic loss is the principal balance plus interest at the date of default less the present value of subsequent cash flows occuring until the loan is collected or charged off, or otherwise is no longer considered in default and transferred to accrual status. See pages 49 and 50 for discussion of loss given default categories.

** The table is presented based on risk ratings and not the Uniform Loan Classification System. Therefore, properly executed and structured guarantees may allow a loan with a risk rating of 10 or worse to be classified as Acceptable.

The following table presents the activity in the allowance for loan losses for the most recent five years:

	For the Year Ended December 31,				
	2016	2015	2014	2013	2012
	($ in millions)				
Balance at beginning of year	$1,280	$1,237	$1,238	$1,343	$1,290
Charge-offs:					
Real estate mortgage	(11)	(18)	(32)	(67)	(118)
Production and intermediate-term	(61)	(44)	(74)	(73)	(157)
Agribusiness	(9)	(15)	(3)	(40)	(24)
Rural infrastructure		(10)	(5)	(1)	(11)
Rural residential real estate	(3)	(4)	(4)	(8)	(10)
Lease receivables	(3)	(1)	(1)	(1)	(3)
Total charge-offs	(87)	(92)	(119)	(190)	(323)
Recoveries:					
Real estate mortgage	16	22	20	27	29
Production and intermediate-term	16	23	22	80	38
Agribusiness	5	7	6	16	10
Rural infrastructure	4	1	1	1	2
Rural residential real estate	1	1	1	1	
Agricultural export finance				1	1
Lease receivables		1	1	2	7
Total recoveries	42	55	51	128	87
Net loan charge-offs	(45)	(37)	(68)	(62)	(236)
Provision for loan losses (loan loss reversal)	266	106	40	(31)	313
Adjustment due to Bank and Association mergers*	(1)	(15)	(9)		(8)
Reclassification to/from reserve for unfunded commitments**	6	(11)	36	(12)	(16)
Balance at end of year	$1,506	$1,280	$1,237	$1,238	$1,343
Ratio of net loan charge-offs during the period to average loans outstanding during the period	0.02%	0.02%	0.03%	0.03%	0.13%

* Represents the elimination of the allowance for loan losses in connection with Bank and Association mergers that were accounted for under the acquisition method of accounting. See Note 11 to the accompanying combined financial statements.

** Represents reclassifications between the allowance for loan losses and the reserve for unfunded commitments primarily as a result of advances on or repayments of seasonal lines of credit or other loans.

The allowance for loan losses by loan type for the most recent five years is as follows:

	December 31,									
	2016	%	2015	%	2014	%	2013	%	2012	%
	($ in millions)									
Real estate mortgage	$ 399	26.5%	$ 336	26.3%	$ 317	25.6%	$ 320	25.8%	$ 307	22.9%
Production and intermediate-term	417	27.7	346	27.0	331	26.8	365	29.5	424	31.6
Agribusiness	407	27.0	320	25.0	334	27.0	292	23.6	359	26.7
Rural infrastructure	201	13.3	204	15.9	188	15.2	193	15.6	189	14.0
Rural residential real estate	21	1.4	20	1.6	22	1.8	22	1.8	22	1.6
Agricultural export finance	15	1.0	13	1.0	10	0.8	8	0.6	6	0.5
Lease receivables	45	3.0	40	3.1	34	2.7	37	3.0	35	2.6
Loans to other financing institutions	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1
Total	$1,506	100.0%	$1,280	100.0%	$1,237	100.0%	$1,238	100.0%	$1,343	100.0%

The allowance for loan losses as a percentage of loans outstanding and as a percentage of certain other credit quality indicators is shown below:

	December 31,				
	2016	2015	2014	2013	2012
Total loans	0.61%	0.54%	0.57%	0.62%	0.70%
Nonperforming loans	77	79	71	61	51
Nonaccrual loans	95	97	90	71	58

Credit Commitments and Reserve for Unfunded Commitments

The following tables summarize the maturity distribution (expiration) of unfunded credit commitments:

	December 31, 2016				
	Less than 1 Year	1-3 Years	3-5 Years	Over 5 Years	Total
	(in millions)				
Commitments to extend credit	$39,753	$24,618	$17,027	$7,885	$89,283
Standby letters of credit	1,721	377	177	124	2,399
Commercial and other letters of credit	313				313
Total commitments	$41,787	$24,995	$17,204	$8,009	$91,995

	December 31, 2015				
	Less than 1 Year	1-3 Years	3-5 Years	Over 5 Years	Total
	(in millions)				
Commitments to extend credit	$31,064	$20,551	$18,595	$8,391	$78,601
Standby letters of credit	1,695	388	209	138	2,430
Commercial and other letters of credit	268				268
Total commitments	$33,027	$20,939	$18,804	$8,529	$81,299

Since many of these commitments are expected to expire without being drawn upon, the total commitments do not necessarily represent future cash requirements. These credit-related financial instruments have off-balance-sheet credit risk because their contractual amounts are not reflected on the balance sheet until funded or drawn upon. However, standby letters of credit are reflected on the balance sheet at the fair value of the liability of $13 million and $14 million as of December 31, 2016 and 2015. The fair value of these letters of credit is estimated based on the cost to terminate the agreement or fees currently charged for similar agreements. The credit risk associated with issuing commitments and letters of credit is substantially the same as that involved in extending loans to borrowers and the same credit policies are applied by management. Upon fully funding a commitment, the credit risk amounts are equal to the contract amounts, assuming that borrowers fail completely to meet their obligations and the collateral or other security are of no value. The amount of collateral obtained, if deemed necessary upon extension of credit, is based on management's credit evaluation of the borrower. No material losses are anticipated as a result of these transactions.

At December 31, 2016, the System had a reserve for unfunded commitments of $175 million, as compared with a reserve of $181 million at December 31, 2015. The reserve for unfunded commitments is reported as other liabilities in the Combined Statement of Condition.

Interest Rate Risk Management

Interest rate risk is the risk of loss of future earnings or long-term market value of equity that may result from changes in interest rates. This risk can produce variability in System earnings (net interest spread achieved and net interest income earned) and, ultimately, the long-term capital position of the System. The System actively manages the following risks:

- Yield curve risk — results from changes in the level, shape, and implied volatility of the yield curve. Changes in the yield curve often arise due to the market's expectation of future interest rates at different points along the yield curve.
- Repricing risk — results from the timing differences (mismatches) between financial assets and related funding that limit the ability to alter or adjust the rates earned on assets or paid on liabilities in response to changes in market interest rates.
- Option risk — results from "embedded options" that are present in many financial instruments, including the right to prepay loans before the contractual maturity date. Lending practices or loan features that provide the borrower with flexibility frequently introduce a risk exposure for the lender. For example, a fixed-rate loan product may provide a potential borrower with a rate guarantee, an option to lock-in the loan rate for a period of time prior to closing, which protects the borrower from an increase in interest rates between the time loan terms are negotiated and the loan closes. If interest rates increase while the rate guarantee is in effect and if we do not take measures to hedge the rate guarantee, we might realize a lower spread than expected when the loan is funded.

  After the loan settles, the borrower may also have the option to repay the loan's principal ahead of schedule. If interest rates fall, System institutions may be forced to reinvest principal repaid from higher rate loans at a lower rate, which may reduce the interest rate spread unless the underlying debt can be similarly refinanced.

  Interest rate caps are another form of embedded options that may be present in certain investments and floating and adjustable rate loans. Interest rate caps typically prevent the investment or loan rate from increasing above a defined limit. In a rising interest rate environment, the spread may be reduced if caps limit upward adjustments to floating investment or loan rates while debt costs continue to increase.
- Basis risk — results from unexpected changes in the relationships among interest rates and interest rate indexes. Basis risk can produce volatility in the spread earned on a loan or an investment relative to its cost of funds. This risk arises when the floating-rate index tied to a loan or investment differs from the index on the Systemwide Debt Security issued to fund the loan or investment.

The goal of the Banks in managing interest rate risk is to maintain long-term value of equity and stable earnings over both the short- and long-term time horizons. In most cases, the wholesale funding provided by a Bank to an Association matches the terms and embedded options of the Association's retail loans. This funding approach shifts the majority of the interest rate risk connected with retail loans from the Association to its funding Bank where interest rate risk is managed centrally. The Banks and Associations are responsible for developing asset/liability management policies and strategies to manage interest rate risk and for monitoring this risk on a regular basis. These policies include guidelines for measuring and evaluating exposures to interest rate risk. In addition, the policies establish limits for interest rate risk and define the role of the board of directors in delegating day-to-day responsibility for interest rate risk management to Bank or Association management. That authority is delegated to an asset/liability management committee, made up of senior Bank or Association managers. The policies define the composition of the committee and its responsibilities. Interest rate risk management is also subject to certain intra-System agreements, including the CIPA and MAA, and regulatory oversight by the Farm Credit Administration.

One of the primary benefits of our status as a government-sponsored enterprise debt issuer is that, through the Funding Corporation and its selling group, the System has daily access to the debt markets and a great deal of flexibility in structuring the maturity and types of debt securities we issue to match asset cash flows. The ability to quickly access the debt markets helps us minimize the risk that interest rates might change between the time a loan commitment is made and the time it is funded.

Flexibility in structuring debt enables us to issue Systemwide Debt Securities that offset most of the primary interest rate risk exposures embedded in our loans. For example, by issuing LIBOR-indexed, floating-rate Systemwide Debt Securities we are able to minimize the basis risk exposure presented by our LIBOR-indexed, floating-rate loans. As we discussed above, some of our fixed-rate loans may provide borrowers with the option to prepay their loans. In most interest rate environments, we are able to significantly offset the risk created by a prepayment option by funding prepayable fixed-rate loans with callable debt. Callable debt provides us with the option to retire debt early to offset prepayment risk in earning assets or refinance debt in a declining interest rate environment. See "Risk Factors" for a discussion of certain of our funding risks.

Approximately 74% of our fixed-rate loans provide the borrowers with the option to prepay their loan at any time without fees, and the remainder of the System's fixed-rate loans contain provisions requiring prepayment fees to partially or fully compensate the System for the cost of retiring the debt, some of which may be non-callable.

The Banks participate in the derivatives markets, which provide additional tools to manage interest rate risk. Our use of derivatives is detailed later in this section.

Interest Rate Risk Measurements

The Banks measure interest rate risk using:

- interest rate gap analysis — compares the amount of interest sensitive assets to interest sensitive liabilities that reprice in defined time periods,
- net interest income sensitivity analysis — projects the impact of changes in the level of interest rates and the shape of the yield curve on net interest income for the next year,
- market value of equity sensitivity analysis — projects the impact of changes in the level of interest rates and the shape of the yield curve on the market value of assets, liabilities and equity, and
- duration gap analysis — measures the difference between the estimated durations of assets and liabilities.

These measures are calculated on a monthly basis and the assumptions used in these analyses are monitored routinely and adjusted as necessary. The Banks use simulation models to develop interest rate sensitivity estimates. These models are periodically back tested and reviewed by third parties for reasonableness.

Interest Rate Risk Management Results

Interest Rate Gap Analysis

The interest rate gap analysis shown below is a static indicator, which does not reflect the dynamics of balance sheet, cash flows, rate and spread changes, and may not necessarily indicate the sensitivity of net interest income in a changing rate environment. Within the gap analysis, gaps are created when an institution uses its capital to fund assets. Capital reduces the amount of debt that otherwise would be required to fund a certain level of assets. The quantity of assets will exceed the quantity of interest-bearing liabilities in any repricing interval where capital provides part of the funding. The gap table below includes anticipated cash flows on interest sensitive assets and liabilities given the current level of interest rates:

	Repricing Intervals				
	0-6 Months	6 Months to 1 Year	1-5 Years	Over 5 Years	Total
	($ in millions)				
Floating-rate loans:					
Indexed/adjustable-rate loans	$ 47,124	$ 440	$ 1,064	$ 809	$ 49,437
Administered-rate loans	53,421				53,421
Fixed-rate loans:					
Fixed-rate with prepayment or conversion fees	5,366	3,229	12,122	15,670	36,387
Fixed-rate without prepayment or conversion fees	22,022	10,116	45,563	30,231	107,932
Nonaccrual loans				1,591	1,591
Total gross loans	127,933	13,785	58,749	48,301	248,768
Federal funds sold, investments and other interest-earning assets	26,366	6,229	19,021	7,834	59,450
Total earning assets	154,299	20,014	77,770	56,135	308,218
Interest-bearing liabilities:					
Callable bonds and notes	265	4,143	34,227	21,421	60,056
Noncallable bonds and notes	126,910	20,577	34,992	15,247	197,726
Subordinated debt and other interest-bearing liabilities	3,937			236	4,173
Total interest-bearing liabilities	131,112	24,720	69,219	36,904	261,955
Effect of interest rate swaps and other derivatives	10,204	(2,100)	(9,671)	1,567	
Total interest-bearing liabilities adjusted for swaps and other derivatives	141,316	22,620	59,548	38,471	261,955
Interest rate sensitivity gap (total earning assets less total interest-bearing liabilities adjusted for swaps and other derivatives)	$ 12,983	$ (2,606)	$18,222	$17,664	$ 46,263
Cumulative gap	$ 12,983	$10,377	$28,599	$46,263	
Cumulative gap as a percentage of total earning assets	4.21%	3.37%	9.28%	15.01%	

Consistent with the positive gap between the System's earning assets and interest-bearing liabilities as reflected in the table above, the System's interest rate sensitivity position at December 31, 2016 for repricing intervals in the first six months of 2017 is characterized as "asset sensitive" (i.e., interest rates earned by the System on interest-earning assets may change or be changed more quickly than interest rates on interest-bearing liabilities used to fund these assets.)

Typically, the net interest margin of an institution that is "asset sensitive" will be unfavorably impacted in a declining interest-rate environment or an environment characterized by relatively stable interest rates and a steep yield curve, and favorably impacted in a rising interest-rate environment. The System's capital is invested in loans and investment securities that reprice to lower yields when interest rates are falling and to higher yields when interest rates increase. However, the net interest spread, a component of net interest margin, may react in a different manner due to competitive conditions at the time of repricing. Further, a significant portion of the System's floating-rate loans are management administered-rate loans that, unlike indexed loans, require definitive action at the discretion of the lending Bank or Association to change the interest rates charged and may reflect managements' assessments of whether rate changes are warranted or feasible in view of competitive market conditions. The actual interest rates charged on the administered-rate loans may not mirror the movement of some market interest rates, thereby creating volatility in net interest income.

Additionally, the Banks issue callable debt to accelerate the repricing of debt in a declining interest rate environment and thereby moderate the impact of falling interest rates on net interest income of institutions in an asset-sensitive position. During 2016, \$57.9 billion of debt was called and \$60.1 billion of callable debt obligations were outstanding at December 31, 2016. The System's cumulative gap position in the 0-6 months repricing interval decreased from 4.44% at December 31, 2015 to 4.21% at December 31, 2016.

Sensitivity Analysis

In addition to the static view of interest rate sensitivity shown by the gap analysis, each Bank conducts simulations of net interest income and market value of equity. The market value of equity sensitivity analysis incorporates the effects of leverage and the optionality of interest sensitive assets and liabilities due to interest rate changes. The two primary scenarios used for the analysis reflect the impact of interest rate shocks upward and downward (i.e., immediate, parallel changes upward and downward in the yield curve) on projected net interest income and on market value of equity. The Banks also use other types of measures to model exposures to interest rate changes, such as rate ramps (gradual change in rates) and yield curve slope changes.

The upward and downward shocks are generally based on movements of 100 and 200 basis points in interest rates, which are considered significant enough to capture the effects of embedded options and convexity within the assets and liabilities so that underlying risk may be revealed. However, in the current, relatively low interest rate environment, the downward shock is based on one-half of the three-month Treasury bill rate, which was 25 basis points and 8 basis points at December 31, 2016 and 2015. Under these simulations, the System's sensitivity to interest rate changes (sum of Districts' sensitivity analyses) was:

	December 31, 2016		
	-25	**+100**	**+200**
Change in net interest income	-0.63%	1.46%	3.11%
Change in market value of equity . . .	0.91%	-3.65%	-7.29%

	December 31, 2015		
	-8	**+100**	**+200**
Change in net interest income	-0.32%	1.79%	3.77%
Change in market value of equity . . .	0.24%	-3.31%	-6.67%

Each Bank's interest rate risk management policy establishes limits for changes in net interest income sensitivity and market value of equity sensitivity. These limits are measured monthly and reported to each Bank's board of directors at least quarterly. The limits set by the Banks' boards of directors for net interest income and market value of equity sensitivity ranged up to a negative 20% for a 200 basis point shock. During 2016 and 2015, no Bank exceeded its policy limits.

Further, each Bank has established a District interest rate risk sensitivity limit not to exceed a 15% reduction in net interest income and market value of equity, given a 200 basis point shock, as measured using the combined results of each Bank and its affiliated Associations. This limit is measured and reported on a quarterly basis. None of the Districts exceeded the District limit during 2016 and 2015. District measurements are presented in Supplemental Financial Information on page F-81.

In addition to the interest rate scenarios required for reporting and regulatory purposes, the Banks also periodically perform additional scenario analyses to study the effects of changes in critical modeling assumptions — for example, the impact of increased/decreased prepayments, changes in the relationship of the System's funding cost to other benchmark interest rates, additional non-parallel shifts in the yield curve, and changes in market volatility.

One of the primary modeling assumptions affecting the measurement of market value of equity is the prepayment function. The cash flows on some of our fixed-rate agricultural loans and most of our mortgage-related investment securities are sensitive to changes in interest rates because borrowers may have the flexibility to partially or completely repay the loan ahead of schedule. When interest rates decrease, borrowers can often reduce their interest costs by refinancing their fixed-rate loans. The financial incentive for the borrowers to refinance their loans increases as interest rates decline and the potential savings increase.

When interest rates rise, borrowers with fixed-rate loans lack the incentive to prepay their loans. However, prepayments can occur in any rate environment due to real estate sales transactions or early repayment of loans for reasons unrelated to interest rate conditions.

Lenders closely study the relationship between interest rates, the potential savings available from refinancing, and actual loan prepayment activity in order to gain a better understanding of prepayment behavior and more accurately forecast cash flows for prepayable loans.

We gather and maintain loan information, including prepayment data, for use in developing prepayment models for agricultural loans. These models typically specify a minimum or "baseline" level of expected prepayments that is not affected by the general level of interest rates, along with an interest-sensitive component that projects faster prepayments as the potential refinancing advantage increases. The refinancing advantage is defined as the difference between the loan rate on an outstanding fixed-rate loan and the current loan rate offered for a new fixed-rate loan with a similar maturity. Further, model refinements may reflect differences due to the loan product type and age or "seasoning" of the loan. The Banks' agricultural loan prepayment models are based on proprietary data and may differ from Bank to Bank and from prepayment models developed for use with residential mortgages.

We also maintain investment portfolios that contain mortgage- and asset-backed investments that may also be subject to prepayment risk. Detailed prepayment data for these assets are readily available and a number of banks and fixed-income consulting firms market product-specific prepayment models for use in asset/liability risk management. The Banks typically subscribe to a commercially available prepayment model appropriate for these securities and integrate the analysis within their regular asset/liability analysis.

Duration Gap Analysis

Another risk measurement is duration, which we calculate using a simulation model. Duration is the weighted average maturity (typically measured in months or years) of an instrument's cash flows, weighted by the present value of those cash flows. As such, duration provides an estimate of an instrument's sensitivity to small changes in market interest rates. The duration gap is the difference between the estimated durations of assets and liabilities. All else being equal, an institution with a small duration gap has less exposure to interest rate risk than an institution with a large duration gap.

A positive duration gap means there is a greater exposure to rising interest rates because it indicates that the duration of our assets exceeds the duration of our liabilities. A negative duration gap means that there is a greater exposure to declining interest rates because the duration of our assets is less than the duration of our liabilities. At December 31, 2016, the System's aggregate duration gap (the sum of the Banks' duration gaps) was a positive 3.9 months, as compared with a positive 3.6 months at December 31, 2015. Generally, a duration gap within the range of a positive six months to a negative six months indicates a small exposure to changes in interest rates.

Duration gap provides a relatively concise and static measure of the interest rate risk inherent in the balance sheet, but it is not directly linked to expected future earnings performance. An institution's overall exposure to interest rate risk is a function not only of the duration gap, but also of the financial leverage inherent in the institution's capital structure. For the same duration gap, an institution with more equity or capital will have a lower overall percentage exposure to interest rate risk, stated in terms of the percentage change in the market value of equity, than one with less capital and more leverage.

There are some limitations to duration analysis as balance sheets are dynamic. Durations change over time and as the composition of a portfolio changes.

Derivative Products

Derivative products are a part of our interest rate risk management activities and supplement our issuance of debt securities in the capital markets. We use derivative financial instruments as hedges against interest rate and liquidity risks and to lower the overall cost of funds. We do not hold or enter into derivative transactions for trading purposes. Our ability to modify the debt securities by using derivative instruments provides us with greater flexibility to manage our interest rate risk and liquidity risk.

The primary types of derivative products used and hedging strategies employed are summarized in the following table. For additional information, see Note 16 to the accompanying combined financial statements.

Derivative Products/Hedged Item	Purpose of the Hedge Transaction	Strategic Impact
Receive-fixed, pay-floating interest rate swap hedging callable or non-callable fixed-rate debt	To protect against the decline in interest rates on floating-rate assets by exchanging the debt's fixed-rate payment for a floating-rate payment that better reflects the timing of interest reset on the assets.	A common use is to create a substitute for conventional floating-rate funding. The fixed-rate received on the swap largely offsets the fixed-rate paid on the associated debt leaving a net floating payment. The strategy frequently provides cost savings or promotes liquidity by permitting access to longer maturity floating-rate funding than the outright issuance of floating-rate debt.
Pay-fixed, receive-floating interest rate swap hedging floating-rate debt	To protect against an increase in interest rates by exchanging the debt's floating-rate payment for a fixed-rate payment that matches the cash flows of assets.	The combination of the pay-fixed, receive-floating swap with floating-rate funding results in a net fixed-rate payment. This strategy may provide lower cost fixed-rate funding than outright issuance of fixed-rate debt.
Floating-for-floating swap hedging floating-rate assets and liabilities	Used to manage the basis risk that can result when assets and liabilities are based on different floating-rate indexes or reprice at different times.	The System's floating-rate loans and floating-rate investments are tied to a number of floating-rate indexes including Farm Credit's short-term debt cost, the prime rate, Federal funds and LIBOR. Ideally, floating-rate loans would be funded by issuing floating-rate funding tied to the same floating-rate index with identical reset terms. However, floating-rate funding is not consistently available to exactly meet these requirements. Floating-for-floating or "basis" swaps are used to bridge this gap.
Interest rate caps hedging floating-rate assets and debt	To replace income lost from floating-rate assets that have reached cap levels or to put a ceiling on interest cost on floating-rate debt.	Some floating-rate loans and investments may specify a maximum interest rate to limit the borrower's exposure to rising interest rates. Interest rate caps are purchased to provide offsetting protection against rising interest rates.
Interest rate floors hedging floating-rate loans	To protect against falling interest rates on floating-rate assets.	A purchased floor option will produce a cash flow when the index rate falls below the strike rate. Cash flow from the floor can be used to offset income lost on floating-rate assets when interest rates decline. Floor options may also be used in combination with interest rate caps to create interest rate collars or otherwise limit or modify floating-rate cash flows in both rising and declining interest rate environment.

The aggregate notional amount of the System's derivative products, most of which consisted of interest rate swaps, increased $5.488 billion to $34.555 billion at December 31, 2016, as compared with $29.067 billion at December 31, 2015. The aggregate notional amount of these instruments, which is not included in the Combined Statement of Condition, is indicative of the System's activities in derivative financial instruments, but is not an indicator of the level of credit risk associated with these instruments. The exposure to credit risk is a small fraction of the aggregate notional amount as more fully discussed on page 70. The majority of the swaps used by the Banks were receive-fixed swaps, which are used to improve liquidity or lower their cost of debt by issuing fixed-rate debt and swapping the debt to floating to create synthetic floating-rate debt.

The following table presents notional amounts and weighted average interest rates by expected (contractual) maturity dates for the System's derivative financial instruments. The fair values of these derivatives were recognized in the Combined Statement of Condition. The table was prepared using the implied forward yield curve at December 31, 2016.

Maturities of 2016 Derivative Products

	2017	2018	2019	2020	2021	2022 and Thereafter	Total	Fair Value at December 31, 2016
	($ in millions)							
Receive-fixed swaps								
Notional value	$4,223	$5,806	$3,028	$1,596	$ 262		$14,915	$(52)
Weighted average receive rate	2.33%	1.05%	1.23%	1.20%	1.43%		1.47%	
Weighted average pay rate	0.92%	0.98%	1.07%	0.71%	1.25%		0.96%	
Pay-fixed and amortizing-pay fixed swaps								
Notional value	$ 314	$ 543	$ 378	$ 477	$ 877	$ 5,044	$ 7,633	$(30)
Weighted average receive rate	0.80%	1.00%	1.15%	1.17%	1.12%	1.39%	1.28%	
Weighted average pay rate	1.66%	1.67%	2.00%	1.89%	2.20%	2.15%	2.08%	
Floating-for-floating and amortizing floating-for-floating swaps								
Notional value	$ 400	$ 200	$ 200	$ 300	$ 600	$ 1,400	$ 3,100	
Weighted average receive rate	1.36%	1.76%	2.13%	2.28%	2.40%	2.49%	2.24%	
Weighted average pay rate	1.53%	2.07%	2.13%	2.28%	2.41%	2.54%	2.30%	
Customer derivative products								
Notional value	$ 357	$ 543	$ 273	$ 380	$ 708	$ 3,323	$ 5,584	$ 68
Weighted average receive rate	1.15%	1.33%	1.43%	2.08%	2.29%	2.30%	2.07%	
Weighted average pay rate	0.58%	0.81%	0.85%	0.86%	0.80%	0.88%	0.84%	
Interest rate caps								
Notional value	$ 347	$ 355	$ 196	$ 153	$ 243	$ 1,755	$ 3,049	$ 42
Foreign exchange and other contracts								
Notional value	$ 274						$ 274	$ 1
Total notional value	$5,915	$7,447	$4,075	$2,906	$2,690	$11,522	$34,555	$ 29
Total weighted average rates on swaps:								
Receive rate	2.09%	1.09%	1.28%	1.43%	1.81%	1.86%	1.61%	
Pay rate	0.99%	1.05%	1.20%	1.11%	1.74%	1.77%	1.34%	

Approximately 41% of the notional amounts of derivative products outstanding at December 31, 2016 were entered into to create synthetic floating-rate debt for the purpose of reducing the cost of directly issuing floating-rate debt or managing liquidity risk. Most of the remaining derivative products outstanding at December 31, 2016 were entered into for other asset/liability management purposes.

By using derivative instruments, we are exposed to counterparty credit risk. If a counterparty fails to fulfill its performance obligations under a derivative contract, the Bank's credit risk (exposure) will equal the fair value gain in a derivative. When the fair value of a derivative is positive, the counterparty would owe the Bank on early termination of the derivative, thus creating a credit risk for the Bank. When the fair value of the derivative is negative, the Bank would owe the counterparty on early termination of the derivative, and, therefore, assumes no credit risk.

To minimize the risk of credit losses for non-cleared derivatives, the Banks typically enter into master agreements that govern all derivative transactions with a counterparty, which include bilateral collateral agreements requiring the posting of collateral in the event certain dollar thresholds of exposure of one party to the other one are reached. These thresholds may vary for certain Banks depending on the terms of these bilateral collateral agreements, which consider a counterparty's credit worthiness. The Banks may also clear derivative transactions through a futures commission merchant, with a clearinghouse or a central counterparty. Cleared derivatives require the payment of initial and variation margin as a protection against default. In addition, certain of the Banks' non-cleared derivatives will become subject to initial and variation margin requirements imposed pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act).

In October 2015, the Farm Credit Administration, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Board of Governors of the Federal Reserve System, and the Federal Housing Finance Agency (each an "Agency" and, collectively, "the Agencies") jointly adopted final rules to establish minimum margin and capital requirements for registered swap dealers, major swap participants, security based swap dealers, and major security-based swap participants (Swap Entities) that are subject to the jurisdiction of one of the Agencies (such entities, Covered Swap Entities, and the joint final rules, the Final Margin Rules).

The Final Margin Rules will subject non-cleared over-the-counter swaps and over-the-counter security-based swaps between Covered Swap Entities and financial end users that have material swaps exposure (i.e., an average daily aggregate notional of $8 billion or more in non-cleared swaps calculated in accordance with the Final Margin Rules), to a mandatory two-way minimum initial margin requirement. These rules will also require minimum variation margin to be exchanged daily for non-cleared swaps and non-cleared security-based swaps between Covered Swap Entities and all financial end-users (without regard to the swaps exposure of the particular financial end-user).

No System institution is a Covered Swap Entity but they are financial end-users under the Final Margin Rules, and certain of the Banks may have material swaps exposure when the initial margin requirements under these rules become effective. However, System institutions are eligible for certain exemptions from these rules. System institutions are exempt from these requirements for swaps to the extent that such swaps qualify for the end-user exemption from mandatory clearing (i.e., if the System institution has less than $10 billion in assets and the swap is for hedging purposes) or the cooperative exemption from clearing. System institutions that are not eligible for an exemption will likely be required to post and collect variation margin, but they may avoid having to post or collect initial margin to the extent that their derivatives activities cause them to fall below the material swaps exposure and initial margin amount thresholds imposed by these rules.

To further minimize the risk of credit losses from derivatives, the Banks transact with counterparties that have an investment grade long-term credit rating from a Nationally Recognized Statistical Rating Organization such as Moody's Investors Service, Standard & Poor's Ratings Services or Fitch Ratings, and also monitor the credit standing of and levels of exposure to individual counterparties.

In addition to entering into over-the-counter derivative transactions directly with a counterparty as described above, the Banks may also clear such transactions through a futures commission merchant (FCM) with a clearinghouse or a central counterparty (CCP). When the swap is cleared by the two parties, the single bilateral swap is divided into two separate swaps with the CCP becoming the counterparty to both of the initial parties to the swap. CCPs have several layers of protection against default including margin, member capital contributions, and FCM guarantees of their customers' transactions with the CCP. FCMs also pre-qualify the counterparties to all swaps that are sent to the CCP from a credit perspective, setting limits for each counterparty and collecting initial and variation margin daily from each counterparty for changes in the value of cleared derivatives. The margin collected from both parties to the swap protects against credit risk in the event a counterparty defaults. The initial and variation margin requirements are set by and held for the benefit of the CCP. Additional initial margin may be required and held by the FCM, due to its guarantees of its customers' trades with the CCP.

The Dodd-Frank Act also requires the centralized clearing of certain over-the-counter swaps by swap dealers and major swap participants, as well as certain other market participants, including financial institutions. Currently, instrument types that must be cleared will primarily be interest rate swaps and credit default swaps. System institutions with less than $10 billion in assets, qualify for an exemption from clearing if the swap is used to hedge commercial risk. All System institutions also qualify for a "cooperative exemption." This exemption does not cover all swaps that are executed by System institutions, and is generally limited to transactions entered into in connection with loans to members. At December 31, 2016 and 2015, the notional amount of cleared derivatives was $9.390 billion and $3.504 billion.

The exposure on derivatives by counterparty credit rating (Moody's) that would be owed to us due to a default or early termination by our counterparties at December 31, 2016 were:

Derivative Credit Exposure

			Years to Maturity(1)						
	Number of Counterparties	Notional Principal	Less than 1 Year	1 to 5 Years	Maturity Over 5 Years	Distribution Netting(2)	Credit Exposure	Collateral Held	Exposure, Net of Collateral
					($ in millions)				
Bilateral derivatives:									
Aa1	1	$ 1,718		$3	$12		$ 15	$ 15	
Aa2	2	5,098	$ 7		5		12	15	
Aa3	4	8,959	21	3	58	$(18)	64	53	$11
A1	6	2,665	12			(3)	9	9	
A2	1	73							
A3	1	40							
Baa1	1	864			1		1	1	
Baa2	1	151							
Cleared derivatives(3)	2	9,390			7	(5)	2	7	
Total	19	$28,958	$40	$6	$83	$(26)	$103	$100	$11

(1) Represents gain positions on derivative instruments with individual counterparties. Net gains represent the exposure to credit loss estimated by calculating the cost, on a present value basis, to replace all outstanding derivative contracts within a maturity category. Within each maturity category, contracts in a loss position are netted against contracts in a gain position with the same counterparty. If the net position within a maturity category with a particular counterparty is a loss, no amount is reported.

(2) Represents impact of netting of derivatives in a gain position and derivatives in a loss position with the same counterparty across different maturity categories.

(3) Represents derivative transactions cleared with central counterparties, which are not rated. Excluded from the table is initial margin posted by two Banks and one Association totaling $52 million at December 31, 2016 related to cleared derivative transactions.

Note: The remaining notional amount of derivative financial instruments of $5.584 billion at December 31, 2016 was related to interest rate swaps that two Banks entered into with certain of their customers. The market risk from these transactions is offset by concurrently entering into offsetting derivative transactions with some of the above counterparties. Another $13 million in notional amount of derivative financial instruments at December 31, 2016 related to forward commitments that one Association has entered into to hedge interest rate risk on interest rate locks.

At December 31, 2016, the credit exposure, net of collateral, was $11 million. The Banks' counterparties posted $86 million in cash and $7 million in securities as collateral with us. Two Banks posted collateral of $74 million with respect to its obligations under these agreements.

Liquidity Risk Management

General

Liquidity risk management is necessary to ensure our ability to meet our financial obligations. These obligations include the repayment of Systemwide Debt Securities as they mature, the ability to fund new and existing loan and other funding commitments, and the ability to fund operations in a cost-effective manner. A primary objective of liquidity risk management is to plan for unanticipated changes in the capital markets. The Banks have established a Contingency Funding Program to provide for contingency financing mechanisms and procedures to address potential disruptions in the System's communications, operations and payments systems, as well as the ability to handle events that threaten continuous market access by the Banks or disrupt the Funding Corporation's normal operations. Under this Program, the Funding Corporation has the option to finance maturing Systemwide Debt Securities through the issuance of Systemwide discount notes either directly to institutional investors or through the selling group. In addition, the Funding Corporation, in consultation with the Banks, may also issue Systemwide Bonds directly to institutional investors. The Funding Corporation, on behalf of the Banks, may also incur other obligations, such as Federal funds purchased, that would be the joint and several obligations of the Banks and would be insured by the Insurance Corporation to the extent funds are available in the Insurance Fund.

The System does not have a guaranteed line of credit from the U.S. Treasury or the Federal Reserve. However, the Insurance Corporation has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation. Under its existing statutory authority, the Insurance Corporation may use these funds to provide assistance to the System Banks in exigent market circumstances which threaten the Banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and terminates on September 30, 2017, unless otherwise renewed. The decision whether to seek funds from the Federal Financing Bank is in the discretion of the Insurance Corporation, and each funding obligation of the Federal Financing Bank is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by the System.

Funding Sources

Our primary source of liquidity is the ability to issue Systemwide Debt Securities, which are the general unsecured joint and several obligations of the Banks. We continually raise funds to support our mission to provide credit and related services to the agricultural and rural sectors, repay maturing Systemwide Debt Securities, and meet other obligations. As a government-sponsored enterprise, we have had access to the global capital markets. This access has traditionally provided us with a dependable source of competitively priced debt that is critical to support our mission of providing funding to the agricultural and rural sectors. The U.S. government does not guarantee, directly or indirectly, the payment of principal or interest on any Systemwide Debt Securities issued by the Banks.

Moody's Investors Service and Fitch Ratings rate our long-term debt as Aaa and AAA, and our short-term debt as P-1 and F1. These are the highest ratings available from these rating agencies. Standard & Poor's Ratings Services maintains the long-term sovereign credit rating of the U.S. government at AA+, which directly corresponds to its AA+ long-term debt rating of the System. These rating agencies base their ratings on many quantitative and qualitative factors, including the System's status as a government-sponsored enterprise. Material changes to the factors considered could result in a different debt rating.

Cumulative Systemwide Debt Securities maturities for the past two year-ends were:

	December 31,	
	2016	2015
	(in millions)	
Debt maturing within:		
one day	$ 1,486	$ 1,005
one week	1,882	1,690
one quarter	30,188	28,358
six months	54,727	50,456
one year	103,770	91,622

Cash provided by the System's operating activities, which is primarily generated from net interest income in excess of operating expenses, was $4.827 billion for 2016, $4.898 billion for 2015 and $4.350 billion for 2014 and provided an additional source of liquidity for the System that is not reflected in the individual Bank's calculation of days of liquidity, which is discussed under "Liquidity Standard" below. Further, funds in the Insurance Fund would be used to repay maturing Systemwide Debt Securities to the extent available if no other sources existed to repay the debt. At December 31, 2016 and 2015, the assets in the Insurance Fund totaled $4.453 billion and $4.039 billion. (See "Insurance Fund" on page 83 of this Annual Information Statement for additional information.)

Federal Funds and Available-for-Sale Securities

As permitted under Farm Credit Administration regulations, a Bank is authorized to hold Federal funds and available-for-sale investments in an amount not to exceed 35% of a Bank's average loans outstanding for the quarter. For purposes of this calculation, the 30-day average daily balance of Federal funds and investments, carried at amortized cost, is divided by the average daily balance for loans outstanding plus accrued interest for the quarter. We utilize investments for the purposes of maintaining a diverse source of liquidity and managing short-term surplus funds and reducing interest rate risk and, in so doing, enhance profitability. Farm Credit Administration regulations also permit an Association to hold eligible investments for purposes of managing short-term surplus funds and reducing interest rate risk with the approval of its affiliated Bank. At December 31, 2016, no Bank exceeded the 35% limit.

Farm Credit Administration regulations define eligible investments by specifying credit rating criteria, final maturity limit, and percentage of investment portfolio limit for each investment type. At the time of purchase, they must be highly rated by at least one Nationally Recognized Statistical Rating Organization, such as Moody's Investors Service, Standard & Poor's Ratings Services or Fitch Ratings. U.S. Treasury securities, U.S. agency securities (except mortgage securities) and other obligations fully insured or guaranteed by the U.S., its agencies, instrumentalities and corporations are considered eligible investments under the Farm Credit Administration's regulations even if downgraded. Under the regulations, these investments have no final maturity limit, no credit rating requirement by Nationally Recognized Statistical Rating Organizations, investment portfolio limit, or other requirements.

Credit Rating Criteria by Eligible Investment Type

	Moody's	Standard & Poor's	Fitch
Overnight Federal funds	P-1, P-2	A-1+, A-1, A2	F1, F2
Term Federal funds	P-1, P-2	A-1+, A-1, A2	F1, F2
Commercial paper	P-1	A-1+, A-1	F1
Corporate securities	Aaa, Aa1, Aa2, Aa3	AAA, AA+, AA, AA-	AAA, AA+, AA, AA-
Mortgage-backed securities	Aaa	AAA	AAA
Asset-backed securities	Aaa	AAA	AAA

Eligible investments (carried at fair value) based on credit ratings issued by Moody's Investors Service, Standard & Poor's Ratings Services, or Fitch Ratings were as follows:

December 31, 2016	Eligible Investments				
	AAA/Aaa	A1/P1/F1	Split Rated(1)	A2/P2/F2	Total
			(in millions)		
Federal funds sold and securities purchased under resale agreements		$1,186	$ 291	$150	$ 1,627
Commercial paper, bankers' acceptances, certificates of deposit and other securities		3,912	1,893		5,805
U.S. Treasury securities			15,544		15,544
U.S. agency securities			5,465		5,465
Mortgage-backed securities:					
Agency collateralized			22,726		22,726
Agency whole-loan pass through			2,055		2,055
Private label-FHA/VA			69		69
Asset-backed securities	$1,787		753		2,540
Total	$1,787	$5,098	$48,796	$150	$55,831

December 31, 2015	Eligible Investments				
	AAA/Aaa	A1/P1/F1	Split Rated(1)	A2/P2/F2	Total
			(in millions)		
Federal funds sold and securities purchased under resale agreements		$ 961	$ 500	$200	$ 1,661
Commercial paper, bankers' acceptances, certificates of deposit and other securities		3,279	2,002		5,281
U.S. Treasury securities			10,046		10,046
U.S. agency securities			6,199		6,199
Mortgage-backed securities:					
Agency collateralized			22,425		22,425
Agency whole-loan pass through			2,514		2,514
Non-agency	$ 1				1
Private label-FHA/VA			86		86
Asset-backed securities	1,615		876		2,491
Total	$1,616	$4,240	$44,648	$200	$50,704

(1) Investment that received the highest credit rating from at least one rating organization.

As noted in the tables above, the split rating on investments in U.S. Treasury, U.S. agency and agency mortgage-backed securities is the result of Standard & Poor's Ratings Services maintaining the U.S. government's long-term sovereign credit rating of AA+. Both Moody's Investors Service and Fitch Ratings maintain ratings of Aaa and AAA for U.S. government and agency securities.

If an investment no longer meets the eligibility criteria referred to above, the investment becomes ineligible for regulatory liquidity calculation purposes. Under Farm Credit Administration regulations, if an investment is eligible when purchased but no longer satisfies the eligibility criteria referred to above, the Bank may continue to hold it subject to the following requirements:

- the Bank must notify the Farm Credit Administration within 15 calendar days after such determination,
- the Bank must not use the investment to satisfy its liquidity requirement,
- the Bank must continue to include the investment in the investment portfolio limit calculation,
- the Bank may continue to include the investment as collateral and net collateral at lower of cost or market, and
- the Bank must develop a plan to reduce the risk posed by the investment.

The Farm Credit Administration has the authority to require a Bank to divest any investment at any time for failure to comply with its regulation. As of December 31, 2016, the Farm Credit Administration has not required disposition of any of these securities. Bank managements do not believe that events will occur that would require them to dispose of any of these securities.

The following tables set forth ineligible securities (carried at fair value) by credit rating, which represented 0.9% and 1.8% of Federal funds and available-for-sale investments at December 31, 2016 and 2015.

	Ineligible Investments										
December 31, 2016	**Number of Securities**	**AA/Aa**	**A/A**	**BBB/Baa**	**BB/Ba**	**B/B**	**CCC/Caa**	**CC/Ca**	**D/C**	**Total**	**Amortized Cost**
	($ in millions)										
Non-agency mortgage-backed securities	44	$11	$7	$4	$ 3		$ 22	$14	$10	$ 71	$ 63
Private label-FHA/VA mortgage-backed securities	16				147	$155	120			422	422
Asset-backed securities	13	3	1			3	23			30	21
Total	73	$14	$8	$4	$150	$158	$165	$14	$10	$523	$506

	Ineligible Investments										
December 31, 2015	**Number of Securities**	**AA/Aa**	**A/A**	**BBB/Baa**	**BB/Ba**	**B/B**	**CCC/Caa**	**CC/Ca**	**D/C**	**Total**	**Amortized Cost**
	($ in millions)										
Non-agency mortgage-backed securities	93	$ 22	$23	$25	$ 8	$ 26	$ 93	$20	$ 55	$272	$265
Private label-FHA/VA mortgage-backed securities	25	176			54	292	24		26	572	572
Asset-backed securities	32	4	3			8	27	17	19	78	37
Total	150	$202	$26	$25	$62	$326	$144	$37	$100	$922	$874

Note: Investments are classified based on the indicated rating as the highest rating from at least one rating organization.

At December 31, 2016, the Banks held 73 securities that were considered ineligible, as compared with 150 securities at December 31, 2015. The decrease in ineligible securities was primarily due to the sale of 73 ineligible securities during 2016.

The types of mortgage-backed and asset-backed securities that are included in the System's investment portfolio were:

	December 31, 2016			December 31, 2015		
	Amortized Cost	Fair Value	Unrealized Gains/(Losses)	Amortized Cost	Fair Value	Unrealized Gains/(Losses)
	(in millions)					
Mortgage-backed securities:						
Agency collateralized	$22,857	$22,726	$(131)	$22,483	$22,425	$(58)
Agency whole-loan pass through	2,003	2,055	52	2,442	2,514	72
Non-agency	63	71	8	266	273	7
Private label-FHA/VA	493	491	(2)	659	658	(1)
Total mortgage-backed securities	$25,416	$25,343	$ (73)	$25,850	$25,870	$ 20
Asset-backed securities:						
Home equity loans	$ 22	$ 32	$ 10	$ 39	$ 81	$ 42
Small business loans	749	752	3	871	874	3
Auto loans	1,345	1,344	(1)	1,152	1,150	(2)
Equipment loans	159	159		137	137	
Credit card receivables	281	280	(1)	323	323	
Student loans	3	3		4	4	
Total asset-backed securities	$ 2,559	$ 2,570	$ 11	$ 2,526	$ 2,569	$ 43

The fair values for floating-rate and fixed-rate mortgage-backed and asset-backed securities were:

	December 31,	
	2016	2015
	(in millions)	
Floating-rate mortgage-backed securities	$12,685	$13,824
Fixed-rate mortgage-backed securities	12,658	12,046
Total mortgage-backed securities	$25,343	$25,870
Floating-rate asset-backed securities	$ 942	$ 1,355
Fixed-rate asset-backed securities	1,628	1,214
Total asset-backed securities	$ 2,570	$ 2,569

Mission-Related and Other Investments

The Farm Credit Act states that the mission of the System is "to provide for an adequate and flexible flow of money into rural areas." Congress also recognized the "growing need for credit in rural areas" and declared that the System be designed to accomplish the objective of improving the income and well-being of America's farmers and ranchers. To further the System's mission to support rural America, the System has initiated mission-related programs and other mission-related investments approved by the Farm Credit Administration. These investments are not included in the Banks' liquidity calculations and are not covered by the eligible investment limitation discussed above. However, limitations on mission-related investments are determined by the Farm Credit Administration.

Mortgage-backed securities issued by Farmer Mac are also considered other investments and are excluded from the eligible investment limitation and the Banks' liquidity calculations. These Farmer Mac securities are backed by loans originated by Associations and previously held by the Associations under Farmer Mac standby purchase commitments.

Mission-related and other investments outstanding that are classified as held-to-maturity (carried at amortized cost) are as follows:

	December 31, 2016	December 31, 2015
	(in millions)	
Small Business Administration securities and other government guaranteed	$1,490	$1,453
Rural home loan securities	460	462
Farmer Mac securities	545	372
Rural America bonds and Agricultural Rural Community bonds	142	183
Other		8
Total	$2,637	$2,478

Mission-related and other investments outstanding that are classified as available-for-sale (carried at fair value) are as follows:

	December 31, 2016	December 31, 2015
	(in millions)	
Farmer Mac securities	$237	$293
Rural home loan securities	100	
Other	7	7
Total	$344	$300

Other-Than-Temporarily Impaired Investments

An investment is considered impaired if its fair value is less than its amortized cost. System institutions perform other-than-temporary impairment assessments on impaired securities based on evaluations of both current and future market and credit conditions. Each Bank or Association has its own model that includes relevant assumptions and inputs such as housing prices, unemployment, delinquencies and loss severity trends. Subsequent changes in market or credit conditions could change these evaluations. An impaired available-for-sale security in an unrealized loss position is considered to be other-than-temporarily impaired if a Bank or Association (1) intends to sell the security, (2) is more likely than not to be required to sell the security before recovering its cost, or (3) does not expect to recover the security's entire amortized cost basis even if the entity does not intend to sell. If a Bank or Association intends to sell an impaired security or it is more likely than not to be required to sell the security before recovery of its amortized cost basis, then the impairment is other-than-temporary and the difference between amortized cost and fair value of the impaired security should be recognized currently in earnings. As of December 31, 2016 and 2015, the Banks and Associations did not intend to sell available-for-sale securities in unrealized loss positions and it is not more likely than not that they will be required to sell these securities.

A Bank or Association also assesses whether any credit losses exist. Any shortfall between the amortized cost basis of the security and the present value of cash flows expected to be collected from the security is referred to as a "credit loss." If the Bank or Association determines credit losses do exist, the impairment is other-than-temporary and should be separated into (1) the estimated amount relating to credit loss, and (2) the amount relating to all other factors. Only the estimated credit loss amount is recognized currently in earnings, with the remainder recognized in other comprehensive income. The System recognized credit impairment losses of $16 million and $13 million in earnings for 2016 and 2015.

Liquidity Standard

The Farm Credit Administration regulations on liquidity set forth requirements for the Banks to:

- improve their capacity to pay their obligations and fund their operations by maintaining adequate liquidity to withstand various market disruptions and adverse economic or financial conditions;
- strengthen liquidity management;
- enhance the liquidity of assets that they hold in their liquidity reserves;
- maintain a three-tiered liquidity reserve. The first tier of the liquidity reserve must consist of a sufficient amount of cash and cash-like instruments to cover each Bank's financial obligations for 15 days. The second and third tiers of the liquidity reserve must contain cash and highly liquid instruments that are sufficient to cover the Bank's obligations for the next 15 and subsequent 60 days, respectively;
- establish an incremental liquidity reserve, in addition to the three tiers set forth immediately above, comprised of cash and eligible investments; and
- strengthen their Contingency Funding Plan.

The number of days of liquidity is calculated by comparing the principal portion of maturing Systemwide Debt Securities and other borrowings of the Banks with the total amount of cash, cash equivalents and eligible investments maintained by that Bank. For purposes of calculating liquidity, liquid assets are subject to discounts that reflect potential exposure to adverse market value changes that might be recognized upon liquidation or sale and include only the eligible investments of the Banks.

At December 31, 2016, each Bank maintained the three tiers of the liquidity reserve and exceeded the regulatory minimum 90 days of liquidity. The System's liquidity position was 180 days at December 31, 2016, as compared with 181 days at December 31, 2015. (See Note 21 for each Bank's liquidity position at December 31, 2016 and December 31, 2015.)

Contractual Obligations

We enter into contractual obligations in the ordinary course of business, including debt issuances for the funding of our business operations. Systemwide Debt Securities are the joint and several obligations of the Banks. Payments of principal and interest to the holders of Systemwide Debt Securities are insured by amounts held in the Insurance Fund as described in Note 7 to the accompanying combined financial statements. The Banks may issue certain other bonds directly to eligible purchasers. These bonds are the obligations solely of the issuing Bank and are not subject to joint and several liability of the other Banks.

In addition, we enter into derivative transactions with counterparties that create contractual obligations. See "Derivative Products" beginning on page 66 of this Annual Information Statement for additional information. Substantially all proceeds of debt issuances were used to repay maturing debt, as well as to fund growth in loans and investment securities. Issuance, maturity, and retirement activity of Systemwide Debt Securities for the past two years was:

	Systemwide Bonds		Systemwide Medium-Term Notes		Systemwide Discount Notes		Total	
	2016	2015	2016	2015	2016	2015	2016	2015
	(in millions)							
Balance, beginning of year	$ 210,935	$198,225	$118	$135	$ 32,282	$ 26,971	$ 243,335	$ 225,331
Issuances	134,164	108,687			199,866	189,568	334,030	298,255
Maturities/retirements	(116,940)	(95,977)	(23)	(17)	(202,620)	(184,257)	(319,583)	(280,251)
Balance, end of year	$ 228,159	$210,935	$ 95	$118	$ 29,528	$ 32,282	$ 257,782	$ 243,335

Weighted average interest rates and weighted average maturities for 2016 and 2015 were:

	Systemwide Bonds		Systemwide Medium-Term Notes		Systemwide Discount Notes		Total	
	2016	2015	2016	2015	2016	2015	2016	2015
At December 31:								
Average interest rate	1.25%	1.12%	5.85%	5.90%	0.63%	0.30%	1.18%	1.01%
Average remaining maturity	3.1 years	3.1 years	11.7 years	14.3 years	4.4 months	4.3 months	2.7 years	2.8 years
Issuances during the year:								
Average interest rate	1.26%	0.99%			0.34%	0.11%	0.71%	0.43%
Average maturity at issuance	4.3 years	3.6 years			58 days	50 days	22.0 months	17.0 months

The following table presents principal cash flows and related weighted average interest rates by contractual maturity dates for Systemwide Debt Securities.

	Fixed Rate	Average Interest Rate	Floating Rate	Average Interest Rate	Total
			($ in millions)		
2017	$ 50,664	0.80%	$ 53,106	0.68%	$103,770
2018	22,256	1.17	41,302	0.69	63,558
2019	15,589	1.36	9,368	0.83	24,957
2020	11,334	1.63	1,946	0.79	13,280
2021	9,028	1.82	1,983	0.98	11,011
2022 and thereafter	40,802	2.58	404	1.13	41,206
Total	$149,673	1.52	$108,109	0.71	$257,782
Fair value at December 31, 2016	$148,266		$109,442		$257,708

The Farm Credit Act and Farm Credit Administration regulations require, as a condition for a Bank's participation in the issuance of Systemwide Debt Securities, that the Bank maintain specified eligible assets, referred to in the Farm Credit Act as "collateral," at least equal in value to the total amount of the debt securities outstanding for which it is primarily liable. (See "Federal Regulation and Supervision of the Farm Credit System — Farm Credit Administration Regulations — Bank Collateral Requirements" for a description of eligible assets.) The collateral requirement does not provide holders of Systemwide Debt Securities with a security interest in any assets of the Banks.

At December 31, 2016, all Banks reported compliance with the collateral requirement. (See "Farm Credit Administration Capital Requirements" on page 82 of this Annual Information Statement and Note 9 to the accompanying combined financial statements.)

Each Bank determines its participation in each issue of Systemwide Debt Securities based on its funding and operating requirements, subject to: (1) the availability of eligible collateral (as described above), (2) compliance with the conditions of participation as prescribed in the Second Amended and Restated Market Access Agreement (MAA), (3) determination by the Funding Corporation of the amounts, maturities, rates of interest and terms of each issuance, and (4) Farm Credit Administration approval. As of December 31, 2016, no Bank was limited or precluded from participation in issuances of Systemwide Debt Securities. As required by the Farm Credit Act, Systemwide Debt Securities are issued pursuant to authorizing resolutions adopted by the board of directors of each Bank. Under the MAA, each Bank's ability to withdraw its authorizing resolution is restricted and, in certain circumstances, eliminated.

Issuance, maturity, and retirement activity of other bonds issued by Banks individually for the past two years was:

	Other Bonds	
	2016	2015
	(in millions)	
Balance, beginning of year	$ 2,879	$ 3,627
Issuances	129,778	123,330
Maturities/retirements	(130,226)	(124,078)
Balance, end of year	$ 2,431	$ 2,879

Weighted average interest rates and weighted average maturities of other bonds for 2016 and 2015 were:

	Other Bonds	
	2016	2015
At December 31:		
Average interest rate	0.09%	0.09%
Average remaining maturity	1 day	1 day
Issuances during the year:		
Average interest rate	0.06%	0.06%
Average maturity at issuance	1 day	1 day

Capital Adequacy and the Ability to Repay Systemwide Debt Securities

System Capitalization

The changes in capital for the year ended December 31, 2016 were:

	Capital				
	Combined Banks	**Combined Associations**	**Insurance Fund**	**Combination Entries**	**System Combined**
			(in millions)		
Balance at December 31, 2015	$16,637	$33,622	$4,039	$(5,464)	$48,834
Net income	1,937	3,387	414	(890)	4,848
Change in accumulated other comprehensive loss	(121)	(10)		44	(87)
Preferred stock issued	370	483			853
Preferred stock retired	(66)	(516)			(582)
Preferred stock dividends	(146)	(15)			(161)
Capital stock and participation certificates issued	311	83		(307)	87
Capital stock and participation certificates and retained earnings retired	(112)	(71)		85	(98)
Equity issued or recharacterized upon Association mergers		57			57
Equity retired or recharacterized upon Association mergers		(56)			(56)
Additional paid-in-capital and other	19				19
Patronage	(1,105)	(1,174)		876	(1,403)
Balance at December 31, 2016	$17,724	$35,790	$4,453	$(5,656)	$52,311

Note: System combined capital reflected eliminations of approximately $4.5 billion and $4.2 billion of Bank equities held by Associations as of December 31, 2016 and 2015. System combined capital also reflected net eliminations of transactions between System entities, primarily related to accruals, and retained earnings allocations by certain Banks to their Associations. (See Notes 12 and 21 to the accompanying combined financial statements.)

Capital serves to support asset growth and provide protection against unexpected credit and interest rate risk and operating losses. Capital is also needed for future growth and investment in new products and services. We believe a sound capital position is critical to providing protection to investors in Systemwide Debt Securities and our long-term financial success.

We continue to build capital primarily through net income earned and retained. Capital accumulated through earnings has been partially offset by cash distributions to stockholders. Retained earnings of $43.183 billion is the most significant component of capital. Retained earnings as a percentage of capital was 82.6% and 82.8% at December 31, 2016 and 2015. Capital as a percentage of assets was 16.4% at December 31, 2016 and 16.1% at December 31, 2015. Accumulated other comprehensive loss, net of tax, at December 31, 2016 and 2015 was comprised of the following components:

	December 31,	
	2016	**2015**
	(in millions)	
Unrealized (losses) gains on investments available-for-sale, net	$ (117)	$ 35
Unrealized gains on other-than-temporarily impaired investments available-for-sale	5	34
Unrealized losses on cash flow hedges, net	(49)	(107)
Pension and other benefit plans	(1,373)	(1,409)
	$(1,534)	$(1,447)

Accumulated other comprehensive loss increased $87 million during 2016 to $1.534 billion at December 31, 2016. The change from unrealized gains on investments available-for-sale to unrealized losses was primarily due to an increase in long-term interest rates lowering the value of existing fixed-rate investment securities.

Interdependency of the Banks and the Associations

Understanding the System's structure and the interdependent nature of the Banks and the Associations is critical to understanding our capital adequacy.

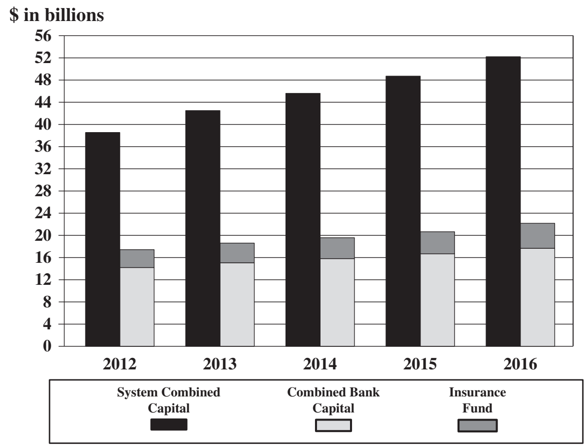
As previously discussed, each Bank is primarily liable for the repayment of Systemwide Debt Securities issued on its behalf, as well as being liable for Systemwide Debt Securities issued on behalf of the other Banks. The Banks, through the issuance of Systemwide Debt Securities, generally finance the wholesale loans to their affiliated Associations who lend the proceeds to their customers. CoBank, as an Agricultural Credit Bank, makes loans to agricultural and rural infrastructure cooperatives and businesses, and other eligible borrowers, as well as Associations. Each Bank's ability to repay Systemwide Debt Securities is due, in large part, to each of its Association's ability to repay its loan from the Bank. As a result, the Banks continually monitor the risk-bearing capabilities of each affiliated Association through various mechanisms, including testing the reliability of each Association's credit classifications and prior-approval of certain Association loan transactions. Capital, allowance for loan losses and earnings at the Association level also reduce the credit exposure that each Bank has with respect to the loans between the Bank and its affiliated Associations.

Since an Association's ability to obtain funds from sources other than its affiliated Bank is significantly limited, the financial well-being of the Bank and its ability to continue to provide funds is very important to the Association. In addition to the equity the Associations are required to purchase in connection with their direct loans from their affiliated Bank, under each Bank's bylaws, the Bank is authorized, under certain circumstances, to require its affiliated Associations and certain other equity holders to purchase additional Bank equity subject to certain limits or conditions. Further, the Banks generally possess indirect access to certain financial resources of their affiliated Associations through loan-pricing provisions and through Bank-influenced operating and financing policies and agreements for its District. (See Notes 12 and 21 to the accompanying combined financial statements for further discussion of Bank and Association capital.)

Notwithstanding the foregoing, only the Banks, and not the Associations, are jointly and severally liable for the repayment of Systemwide Debt Securities. Other than as described above, and subject to various regulatory and contractual conditions and limitations, the Banks do not have direct access to the capital of their affiliated Associations. In addition, any indirect access that the Banks may have to the capital of the Associations may be limited during stressed conditions in a deteriorating agricultural economic environment. Moreover, capital in one Association is not typically available to address capital needs of another Association or of a non-affiliated Bank.

Bank Capital and Insurance Fund

System Combined Capital,
Combined Bank Capital and Insurance Fund
as of December 31,



Combined Bank-only information is considered meaningful because only the Banks are jointly and severally liable for payment of principal and interest on Systemwide Debt Securities. Amounts in the Insurance Fund are included in the System's combined financial statements because, under the Farm Credit Act, these amounts can only be used for the benefit of the System. Before joint and several liability can be invoked, available amounts in the Insurance Fund would be used to make principal and interest payments on Systemwide Debt Securities. Combined Bank capital and the Insurance Fund increased $1.501 billion during 2016 to $22.177 billion at December 31, 2016. Combined Bank capital as a percentage of combined Bank assets increased slightly to 6.3% at December 31, 2016, as compared with 6.2% at December 31, 2015. Each Bank's capital as a percentage of its assets ranged from 5.3% to 7.6% at December 31, 2016. (See Note 21 to the accompanying combined financial statements.) The Banks have implemented and continue to evaluate capital and asset management strategies to provide additional capacity to meet the borrowing needs of its customers and to fulfill the System's mission of providing credit to agriculture and rural America.

Combined Bank-only net income increased $58 million to $1.937 billion for 2016, as compared with $1.879 billion for 2015, largely as a result of an increase in net interest income. The combined Bank-only net income reflects the earnings from Banks' wholesale loans to Associations, retail loans primarily consisting of CoBank's loans to cooperatives and other eligible borrowers and loans to finance agricultural export transactions, and investments. The Banks' wholesale loans to Associations represent a majority of the assets on the combined Bank-only balance sheet. These loans carry less risk than retail loans because the Associations operate under General Financing Agreements with their affiliated Banks and a regulatory framework that includes maintaining certain minimum capital standards, adequate reserves, and prudent underwriting standards. Based on the lower risk of loans to the Associations, the Banks typically operate with more leverage and lower earnings than would be expected from a retail bank.

One of the mechanisms used by the Banks to evaluate the credit risk of its wholesale loan portfolio is the Farm Credit Administration's Uniform Loan Classification System. The following table reflects the loan classifications of the Associations:

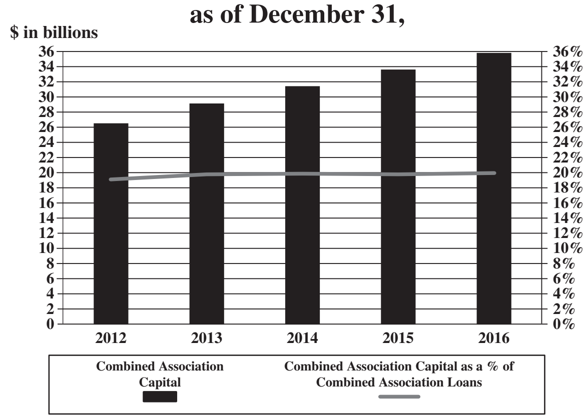
	December 31, 2016		December 31, 2015	
Uniform Loan Classification System	**Number of Associations**	**Direct Note**	**Number of Associations**	**Direct Note**
		($ in millions)		
Acceptable	74	$150,288	73	$142,170
OAEM			2	280
Total	74	$150,288	75	$142,450

Over the past five years, a substantial portion of income earned at the Bank level has been passed on to the Associations through patronage distributions. Bank capital increased $3.558 billion since December 31, 2012 and $1.087 billion since December 31, 2015 to $17.724 billion at December 31, 2016. The Banks had net income of $1.937 billion in 2016, retaining $686 million after patronage and preferred stock dividends.

For combining Bank-only information, see Note 21 to the accompanying combined financial statements.

Association Capital

Combined Association Capital and Combined Association Capital as a Percentage of Combined Association Loans as of December 31,



Combined Association capital increased $9.312 billion since December 31, 2012 and $2.168 billion since December 31, 2015 to $35.790 billion at December 31, 2016. The growth in Association capital during 2016 resulted primarily from income earned and retained. Combined Associations recorded $3.387 billion of net income in 2016, retaining $2.213 billion after patronage distributions, as compared with $3.262 billion of net income in 2015 with $2.177 billion retained after patronage distributions.

Combined Association capital as a percentage of combined Association loans increased slightly to 20.0% at December 31, 2016 from 19.8% at December 31, 2015. (See "Farm Credit Administration Capital Requirements" below for additional information.)

Capital Adequacy Plans

System institutions' capital management frameworks are intended to ensure there is sufficient capital to support the underlying risks of its business activities, exceed all regulatory capital requirements, and achieve certain capital adequacy objectives. Each System institution maintains a capital adequacy plan that addresses its capital targets in relation to its risks. The capital adequacy plan assesses the capital level and composition necessary to assure financial viability and to provide for growth. The plans are updated at least annually and are approved by the institution's board of directors. At a minimum, the plans consider the following factors in determining optimal capital levels:

- asset quality and the adequacy of the allowance for loan losses to absorb potential losses within the loan portfolio,
- quality and quantity of earnings,
- sufficiency of liquid funds,
- capability of management and the quality of operating policies, procedures, and internal controls,
- needs of an institution's customer base, and
- other risk-oriented activities, such as funding and interest rate risks, potential obligations under joint and several liability, contingent and off-balance-sheet liabilities and other conditions warranting additional capital.

Farm Credit Administration Capital Requirements

The Farm Credit Administration sets minimum regulatory capital requirements for Banks and Associations. Prior to January 1, 2017, the effective date for the new regulatory capital requirements, the Farm Credit Administration's capital regulations required that the Banks and Associations achieve and maintain: (1) permanent capital of at least seven percent of risk-adjusted assets, (2) a total surplus ratio of at least seven percent of risk-adjusted assets and (3) a core surplus ratio of at least three and one-half percent of risk-adjusted assets. The Banks were also required to achieve and maintain a minimum net collateral ratio as discussed below. For a discussion regarding the new regulatory capital requirements, including the new regulatory capital ratios, see "Regulatory Matters" on page 85 of this Annual Information Statement. At December 31, 2016, all System institutions maintained ratios in excess of these standards as follows:

System Institutions	Permanent Capital Ratio	Total Surplus Ratio	Core Surplus Ratio**	Net Collateral Ratio
Banks*	15.5% - 21.3%	14.5% - 21.2%	10.0% - 19.1%	105.5% - 107.4%
Associations	13.2% - 36.6%	13.0% -36.2%	12.1% - 36.1%	Not Applicable
Regulatory minimum required	7.0%	7.0%	3.5%	103%***

* See Note 21 for each Bank's permanent capital ratio and net collateral ratio at December 31, 2016 and 2015.

** Effective January 1, 2015, the Farm Credit Administration requires CoBank to maintain a core surplus ratio of 5.59% during a period in which it includes a portion of common stock as core surplus.

*** Due to having subordinated debt outstanding, CoBank is required by the Farm Credit Administration to maintain a minimum net collateral ratio of 104%. At December 31, 2016, AgFirst, AgriBank and the Farm Credit Bank of Texas had no subordinated debt outstanding.

Insurance Fund

An additional layer of protection for Systemwide Debt Security holders is the Insurance Fund that insures the timely payment of principal and interest on these securities. The primary sources of funds for the Insurance Fund are:

- premiums paid by the Banks, the cost of which may be passed on to the Associations, and
- earnings on assets in the Insurance Fund.

In the event a Bank is unable to timely pay Systemwide Debt Securities for which the Bank is primarily liable, the Insurance Corporation must expend amounts in the Insurance Fund to the extent available to insure the timely payment of principal and interest on the debt obligations. However, because of other authorized uses of the Insurance Fund, all of which benefit the Banks and Associations, or the magnitude of the default, there is no assurance that amounts in the Insurance Fund will be available and sufficient to fund the timely payment of principal and interest on Systemwide Debt Securities in the event of a default by a Bank.

Due to the restricted use of funds in the Insurance Fund, the assets of the Insurance Fund have been included as a restricted asset and the capital of the Insurance Fund as restricted capital in the System's combined financial statements. As of December 31, 2016, the assets in the Insurance Fund totaled \$4.453 billion. The aggregate amounts of additions to the Insurance Fund and the related transfers from retained earnings to restricted capital were \$414 million in 2016, \$289 million in 2015 and \$254 million in 2014. (See Note 7 to the accompanying combined financial statements and the Supplemental Combining Information on pages F-72 through F-74 for combining statements of condition and income that illustrate the impact of including the Insurance Fund in the System's combined financial statements.)

Premiums are due until the assets in the Insurance Fund for which no specific use has been identified or designated reach the "secure base amount." The Farm Credit Act, as amended, requires the secure base amount to be maintained at 2% of aggregate outstanding insured debt (adjusted to reflect the reduced risk on loans or investments guaranteed by federal or state governments) or such other percentage of aggregate outstanding insured debt as the Insurance Corporation in its sole discretion determines to be actuarially sound. Insurance premiums are established by the Insurance Corporation with the objective of maintaining the secure base amount at the level required by the Farm Credit Act.

As required by the Farm Credit Act, as amended, if at the end of any calendar year, the aggregate amount in the Insurance Fund exceeds the secure base amount, the Insurance Corporation is required to reduce premiums, as necessary, to maintain the 2% secure base level. In addition, the Insurance Corporation is required to establish Allocated Insurance Reserves Accounts for each Bank and for former Farm Credit System Financial Assistance Corporation stockholders.

As determined by the Insurance Corporation, the assets in the Insurance Fund for which no specific use has been identified or designated were 1.96% at December 31, 2016, 1.87% at December 31, 2015 and 1.90% at December 31, 2014 of adjusted insured obligations. No amounts were allocated as of December 31, 2016, 2015 and 2014.

In January 2017, the Insurance Corporation reviewed the level of the secure base amount and determined that it would decrease its assessment of premiums from 18 basis points to 15 basis points on adjusted insured debt and continue the assessment of an additional 10 basis points on nonaccrual loans and other-than-temporarily impaired investments. For further discussion on the Insurance Fund and the Allocated Insurance Reserves Accounts, see Note 7 to the accompanying combined financial statements.

Joint and Several Liability

The provisions of joint and several liability of the Banks with respect to Systemwide Debt Securities would be invoked if the available amounts in the Insurance Fund were exhausted. Once joint and several liability is triggered, the Farm Credit Administration is required to make "calls" to satisfy the liability first on all non-defaulting Banks in the proportion that each non-defaulting Bank's available collateral (collateral in excess of the aggregate of the Bank's collateralized obligations) bears to the aggregate available collateral of all non-defaulting Banks. If these calls do not satisfy the liability, then a further call would be made in proportion to each non-defaulting Bank's remaining assets. On making a call on non-defaulting Banks with respect to a Systemwide Debt Security issued on behalf of a defaulting Bank, the Farm Credit Administration is required to appoint the Insurance Corporation as the receiver for the defaulting Bank, and the receiver must expeditiously liquidate the Bank.

Operational Risk Management

Operational risk is the risk of loss resulting from inadequate or failed processes or systems, human factors or external events, including the execution of unauthorized transactions by employees, errors relating to transaction processing and technology, breaches of the internal control system and the risk of fraud by employees or persons outside the System. Each Bank's and Association's board of directors is required, by regulation, to adopt an internal control policy that provides adequate direction to the institution in establishing effective control over and accountability for operations, programs and resources. The policy must include, at a minimum, the following items:

- direction to management that assigns responsibility for the internal control function to an officer of the institution,
- adoption of internal audit and control procedures,
- direction for the operation of a program to review and assess its assets,
- adoption of loan, loan-related assets and appraisal review standards, including standards for scope of review selection and standards for work papers and supporting documentation,
- adoption of asset quality classification standards,
- adoption of standards for assessing credit administration, including the appraisal of collateral, and
- adoption of standards for the training required to initiate a program.

In general, System institutions address operational risk through the organization's internal control framework under the supervision of the internal auditors. Exposure to operational risk is typically identified with the assistance of senior management and internal audit, and higher risk areas receive more scrutiny.

However, no control system, no matter how well designed and operated, can provide absolute assurance that the objectives of the control systems are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud or errors can be detected. These inherent limitations include, but are not limited to, the realities that judgments in decision-making can be faulty and the breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part on certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, control may be inadequate because of changes in conditions, or the compliance with the policies or procedures may deteriorate.

Reputational Risk Management

Reputation risk is defined as the negative impact resulting from events, real or perceived, that shape the image of the System or any of its entities. The System could be harmed if its reputation were impacted by negative publicity about the System as a whole, an individual System entity or the agricultural industry in general.

Given the unique structure of the System, managing reputational risk is the direct responsibility of each System entity. (See "Structural Risk Management" on pages 47 and 48 of this Annual Information Statement for a discussion on the structure of the System).

Entities that serve the System at the national level, including the Coordinating Committee, the Presidents' Planning Committee and The Farm Credit Council, will communicate guidance to the System for reputational issues that have broader consequences for the System as a whole. These entities support those business and other practices that are consistent with our mission. (See pages 13 and 14 of this Annual Information Statement for a discussion on the Coordinating Committee and the Presidents' Planning Committee).

Political Risk Management

System institutions are instrumentalities of the federal government and are intended to further governmental policy concerning the extension of credit to or for the benefit of agriculture and rural America. The System and its borrowers may be significantly affected by federal legislation that affects the System directly, such as changes to the Farm Credit Act, or indirectly, such as agricultural appropriations bills. Political risk to the System is the risk of loss of support for the System or agriculture by the U.S. government.

We manage political risk by actively supporting The Farm Credit Council, which is a full-service, federated trade association located in Washington, D.C. representing the System before Congress, the Executive Branch, and others. The Council provides the mechanism for grassroots involvement in the development of System positions and policies with respect to federal legislation and government actions that impact the System. In addition, each District has a District Farm Credit Council that is a regional trade association dedicated to promoting the interests of cooperative farm lending institutions and their borrowers in the District.

Regulatory Matters

As of December 31, 2016, the Farm Credit Administration had not entered into written agreements with any System institutions, as compared with one Association whose assets totaled less than $200 million at December 31, 2015. Generally, written agreements require the institution to take corrective actions with respect to one or more of the following: asset quality, capital, portfolio management, and corporate governance.

New regulatory capital requirements for System Banks and Associations became effective January 1, 2017 and were adopted to:

- modernize capital requirements while ensuring that System institutions continue to hold sufficient regulatory capital to fulfill the System's mission as a government-sponsored enterprise,
- ensure 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 also to ensure that the rules recognize the cooperative structure and the organization of the System,
- make System regulatory capital requirements more transparent, and
- meet the requirements of Section 939A of the Dodd-Frank Act.

These new requirements replace the core surplus and total surplus requirements with Common Equity Tier 1, Tier 1 and Total Capital risk-based capital ratio requirements. The new requirements also replace the existing net collateral ratio for System Banks with a Tier 1 Leverage ratio that is applicable to all Banks and Associations. The Permanent Capital Ratio continues to remain in effect.

The following sets forth the new regulatory capital ratios:

Ratio	Primary Components of Numerator	Denominator	Minimum Requirement	Minimum Requirement with Buffer
Common Equity Tier 1 (CET1) Capital	Unallocated retained earnings (URE), Common stock (subject to certain conditions)	Risk-weighted assets	4.5%	7.0%
Tier 1 Capital	CET1 Capital, Non-cumulative perpetual preferred stock	Risk-weighted assets	6.0%	8.5%
Total Capital	Tier 1 Capital, Allowance for Loan Losses, other equity securities not included in Tier 1 Capital	Risk-weighted assets	8.0%	10.5%
Tier 1 Leverage	Tier 1 Capital (1.5% must be URE or URE equivalents)	Total assets	4.0%	5.0%

The new capital requirements have a three-year phase-in of the capital conservation buffer applied to the risk-adjusted capital ratios and there is no phase-in of the leverage buffer. Based on analysis, we believe System institutions are positioned to be in compliance with the new capital requirements.

On June 12, 2014, the Farm Credit Administration approved a proposed rule to revise the requirements governing the eligibility of investments for System Banks and Associations. The stated objectives of the proposed rule are as follows:

- To strengthen the safety and soundness of System Banks and Associations,
- To ensure that System Banks hold sufficient liquidity to continue operations and pay maturing obligations in the event of market disruption,

- To enhance the ability of the System Banks to supply credit to agricultural and aquatic producers,
- To comply with the requirements of Section 939A of the Dodd-Frank Act,
- To modernize the investment eligibility criteria for System Banks, and
- To revise the investment regulation for System Associations to improve their investment management practices so they are more resilient to risk.

The public comment period ended on October 23, 2014. The Farm Credit Administration expects to issue a final regulation in 2017.

Financial Regulatory Reform

The Dodd-Frank Act was signed into law on July 21, 2010. While the Dodd-Frank Act represents a significant overhaul of many aspects of the regulation of the financial services industry, many of the statutory provisions of the Dodd-Frank Act are not applicable to the Farm Credit System.

The provisions of the Dodd-Frank Act pertaining to the regulation of derivatives transactions require, among other things, more of these transactions to be cleared through a third-party central clearinghouse and traded on regulated exchanges or other multilateral platforms. Margin is required for these transactions. Derivative transactions that are not subject to mandatory trading and clearing requirements may be subject to minimum margin and capital requirements. The Commodity Futures Trading Commission and other federal banking regulators have exempted System institutions from certain, but not all, of these new requirements, including for swaps with members, mandatory clearing and minimum margin for non-cleared swaps.

Notwithstanding the above-mentioned exemptions from clearing and margin requirements for System institutions, counterparties of System institutions may require margin or other forms of credit support as a condition to entering into non-cleared transactions because such transactions may subject these counterparties to more onerous capital, liquidity and other requirements absent such margin or credit support. Alternatively, these counterparties may pass on the capital and other costs associated with entering into transactions if insufficient margin or if other credit support is not provided.

The Dodd-Frank Act also created a new federal agency called the Consumer Financial Protection Bureau (CFPB). The CFPB is responsible for regulating the offering of consumer financial products or services under federal consumer financial laws. The Farm Credit Administration retains the responsibility to oversee and enforce compliance by System institutions with relevant rules adopted by the CFPB.

In light of the foregoing, it is difficult to predict at this time the extent to which the Dodd-Frank Act or the forthcoming implementing rules and regulations will have an impact on the System. However, it is possible they could affect our funding and hedging strategies and increase our funding and hedging costs.

Recently Adopted or Issued Accounting Pronouncements

In August 2016, the Financial Accounting Standards Board (FASB) issued guidance entitled "Classification of Certain Cash Receipts and Cash Payments." The guidance addresses specific cash flow issues with the objective of reducing the diversity in the classification of these cash flows. Included in the cash flow issues are debt prepayment or debt extinguishment costs and settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing. This guidance becomes effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance is not expected to impact the System's financial condition or its results of operations but could change the classification of certain items in the statement of cash flows.

In June 2016, the FASB issued guidance entitled "Measurement of Credit Losses on Financial Instruments." The guidance replaces the current incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. Credit losses relating to available-for-sale securities would also be recorded through an allowance for credit losses. For public business entities that are not U.S. Securities and Exchange Commission filers this guidance becomes effective for interim and annual periods beginning after December 15, 2020, with early application permitted. The System will evaluate the impact of adoption on the System's financial condition and its results of operations.

In February 2016, the FASB issued guidance entitled "Leases." The guidance requires the recognition by lessees of lease assets and lease liabilities on the balance sheet for the rights and obligations created by those leases. Leases with lease terms of more than 12 months are impacted by this guidance. This guidance becomes effective for interim and annual periods beginning after December 15, 2018, with early application permitted. The System will evaluate the impact of adoption on the System's financial condition and its results of operations.

In January 2016, the FASB issued guidance entitled "Recognition and Measurement of Financial Assets and Liabilities." The guidance affects, among other things, the presentation and disclosure requirements for financial instruments. For public entities, the guidance eliminates the requirement to disclose the methods and significant assumptions used to estimate the fair value of financial instruments carried at amortized cost. This guidance becomes effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance is not expected to impact the System's financial condition or its results of operations.

In May 2015, the FASB issued guidance entitled "Disclosures of Investments in Certain Entities that Calculate Net Asset Value per Share (or its Equivalent)." The guidance removes the requirements to categorize assets valued using net asset value per share within the fair value hierarchy (Levels 1 — 3) as well as certain other disclosures. The guidance became effective for interim and annual periods beginning after December 15, 2015. The adoption of this guidance did not impact the System's financial condition or its results of operations but did impact the System's pension disclosures for annual reporting purposes.

In August 2014, the FASB issued guidance entitled "Presentation of Financial Statements — Going Concern." The guidance governs management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. This guidance requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year after the date the financial statements are issued or within one year after the financial statements are available to be issued, when applicable. Substantial doubt exists if it is probable that the entity will be unable to meet its obligations for the assessed period. This guidance became effective for interim and annual periods ending after December 15, 2016, and early application is permitted. Management has completed its initial assessment as of December 31, 2016.

In May 2014, the FASB issued guidance entitled "Revenue from Contracts with Customers." The guidance governs revenue recognition from contracts with customers and requires an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Financial instruments and other contractual rights within the scope of other guidance issued by the FASB are excluded from the scope of this new revenue recognition guidance. In this regard, a majority of our contracts would be excluded from the scope of this new guidance. In August 2015, the FASB issued an update that defers this guidance by one year, which results in the new revenue standard becoming effective for interim and annual reporting periods beginning after December 15, 2017. System institutions are in the process of reviewing contracts to determine the effect, if any, on the System's financial condition or its results of operations.

Other Matters

In June 2016, Robert B. Engel, then CEO of CoBank, announced that he will leave CoBank upon completion of his employment agreement on June 30, 2017. CoBank's board of directors appointed Thomas E. Halverson, previously CoBank's Chief Banking Officer, to succeed Mr. Engel as the CEO. On January 1, 2017, Mr. Engel moved into a senior strategic advisory role and Mr. Halverson became the CEO.

Effective December 1, 2016, William J. Thone assumed the role of CEO of AgriBank, where he had been interim CEO since August 1, 2016. Mr. Thone began his Farm Credit career at the Farm Credit Bank of St. Louis in 1979. In 1999, Mr. Thone was named AgriBank's vice president and general counsel responsible for board secretary duties and governance oversight, as well as corporate legal counsel and management of AgriBank's legal team. As vice president and general counsel, Mr. Thone was also a member of AgriBank's executive leadership team until his retirement in 2015.

INDEX TO COMBINED FINANCIAL STATEMENTS AND SUPPLEMENTAL COMBINING AND FINANCIAL INFORMATION

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The System's principal executives and principal financial officers, or persons performing similar functions, are responsible for establishing and maintaining adequate internal control over financial reporting for the System's combined financial statements. For purposes of this report, "internal control over financial reporting" is defined as a process designed by, or under the supervision of the System's principal executives and principal financial officers, or persons performing similar functions, and effected by the System's boards of directors, managements and other personnel, to provide reasonable assurance regarding the reliability of financial reporting information and the preparation of the System's combined financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America and includes those policies and procedures that: (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the System, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial information in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures of the System are being made only in accordance with authorizations of managements and directors of the System, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the System's assets that could have a material effect on the System's combined financial statements.

Managements of System institutions have completed an assessment of the effectiveness of the System's internal control over financial reporting as of December 31, 2016. In making the assessment, managements of System institutions used the framework in *Internal Control — Integrated Framework (2013)*, promulgated by the Committee of Sponsoring Organizations of the Treadway Commission, commonly referred to as the "COSO" criteria.

Based on the assessment performed, the Funding Corporation concluded that as of December 31, 2016, the System's internal control over financial reporting was effective based upon the COSO criteria. Additionally, based on this assessment, the Funding Corporation determined that there were no material weaknesses in the System's internal control over financial reporting as of December 31, 2016.

The System's internal control over financial reporting as of December 31, 2016 has been audited by PricewaterhouseCoopers, LLP, an independent auditor, as stated in their accompanying report on pages F-3 and F-4 which expresses an unqualified opinion on the effectiveness of the System's internal control over financial reporting as of December 31, 2016.

Theresa E. McCabe

Theresa E. McCabe
President and CEO
Funding Corporation

Karen R. Brenner

Karen R. Brenner
Managing Director — Financial
Management Division
Funding Corporation

pwc

REPORT OF INDEPENDENT AUDITORS

TO THE BOARD OF DIRECTORS OF THE FEDERAL FARM CREDIT BANKS FUNDING CORPORATION:

In our opinion, the accompanying combined statements of condition and the related combined statements of income, of comprehensive income, of changes in capital and of cash flows present fairly, in all material respects, the financial position of the Farm Credit System (the System) at December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the System maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016 based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The System's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the Report on Internal Control over Financial Reporting appearing on page F-2 of this Annual Information Statement. Our responsibility is to express opinions on these financial statements and on the System's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States) and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Our audits were conducted for the purpose of forming an opinion on the combined financial statements taken as a whole. The supplemental combining information on pages F-72 through F-79 of this Annual Information Statement is presented for purposes of additional analysis and is not a required part of the combined financial statements. The information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the combined financial statements. The information has been subjected to the auditing procedures applied in the audit of the combined financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the combined financial statements or to the combined financial statements themselves and other additional procedures, in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the combined financial statements taken as a whole.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers LLP

New York, NY
March 1, 2017

FARM CREDIT SYSTEM

COMBINED STATEMENT OF CONDITION
(in millions)

	December 31, 2016	December 31, 2015
A S S E T S		
Cash	$ 3,240	$ 4,974
Federal funds sold and securities purchased under resale agreements	1,627	1,661
Investments (Note 3)		
Available-for-sale (amortized cost of $54,839 and $49,884, respectively)	54,727	49,965
Mission-related and other held-to-maturity (fair value of $2,583 and $2,462, respectively)	2,637	2,478
Mission-related and other available-for-sale (amortized cost of $350 and $301, respectively)	344	300
Loans (Note 4)	248,768	235,890
Less: allowance for loan losses (Note 4)	(1,506)	(1,280)
Net loans	247,262	234,610
Accrued interest receivable	2,140	1,973
Premises and equipment (Note 5)	1,198	1,112
Other assets (Notes 6, 13, 14, 15, 16 and 17)	2,287	2,391
Restricted assets (Note 7)	4,453	4,039
Total assets	$319,915	$303,503
L I A B I L I T I E S A N D C A P I T A L		
Systemwide Debt Securities		
Due within one year:		
Systemwide discount notes	$ 29,528	$ 32,282
Systemwide bonds and medium-term notes	74,242	59,340
	103,770	91,622
Due after one year:		
Systemwide bonds and medium-term notes	154,012	151,713
Total Systemwide Debt Securities (Notes 8 and 9)	257,782	243,335
Subordinated debt (Note 10)	499	1,550
Other bonds (Note 9)	2,431	2,879
Notes payable and other interest-bearing liabilities	1,243	1,343
Accrued interest payable	614	623
Other liabilities (Notes 6, 13, 14, 15, 16 and 17)	5,035	4,939
Total liabilities	267,604	254,669
Commitments and contingencies (Notes 4, 15 and 19)		
Capital (Note 12)		
Preferred stock	3,018	2,742
Capital stock and participation certificates	1,800	1,726
Additional paid-in-capital (Note 11)	1,391	1,316
Restricted capital (Note 7)	4,453	4,039
Accumulated other comprehensive loss, net of tax (Notes 3, 13 and 16)	(1,534)	(1,447)
Allocated retained earnings	3,102	2,863
Unallocated retained earnings	40,081	37,595
Total capital	52,311	48,834
Total liabilities and capital	$319,915	$303,503

The accompanying notes are an integral part of these combined financial statements.

FARM CREDIT SYSTEM

COMBINED STATEMENT OF INCOME
(in millions)

	For the Year Ended December 31,		
	2016	2015	2014
Interest income			
Investments, Federal funds sold and securities purchased under resale agreements	$ 840	$ 695	$ 674
Loans	9,591	8,683	8,228
Total interest income	10,431	9,378	8,902
Interest expense			
Systemwide bonds and medium-term notes	2,759	2,206	1,966
Systemwide discount notes	163	49	28
Subordinated debt and other interest-bearing liabilities	62	108	104
Total interest expense	2,984	2,363	2,098
Net interest income	7,447	7,015	6,804
Provision for loan losses	(266)	(106)	(40)
Net interest income after provision for loan losses	7,181	6,909	6,764
Noninterest income			
Fees for financially related services	250	245	228
Loan-related fee income	243	259	228
Mineral income	48	76	132
Net gains on sales of investments and other assets	47	30	28
Income earned on Insurance Fund assets (Note 7)	46	31	34
Net other-than-temporary impairment losses included in earnings	(16)	(13)	(2)
Losses on extinguishment of debt	(64)	(50)	(66)
Other income	80	91	118
Total noninterest income	634	669	700
Noninterest expense			
Salaries and employee benefits (Note 13)	1,810	1,739	1,637
Occupancy and equipment expense	237	217	200
Purchased services	161	165	150
Other expense	584	572	532
Total noninterest expense	2,792	2,693	2,519
Income before income taxes	5,023	4,885	4,945
Provision for income taxes (Note 14)	(175)	(197)	(221)
Net income	$ 4,848	$4,688	$4,724

The accompanying notes are an integral part of these combined financial statements.

FARM CREDIT SYSTEM

COMBINED STATEMENT OF COMPREHENSIVE INCOME
(in millions)

	For the Year Ended December 31,		
	2016	2015	2014
Net income	$4,848	$4,688	$4,724
Other comprehensive (loss) income:			
Change in unrealized gains on investments available-for-sale not other-than-temporarily impaired, including reclassification adjustments of $(3), $(7) and $2, respectively	(168)	(138)	124
Change in unrealized gains/losses on other-than-temporarily impaired investments, including reclassification adjustments of $(21), $(6) and $(25), respectively	(31)	(16)	19
Change in unrealized losses on cash flow hedges, including reclassification adjustments of $5, $6 and $(1), respectively	58	(9)	(103)
Change in net periodic pension benefit cost, including reclassification adjustments of $120, $127 and $72, respectively	35	(9)	(540)
Income tax related to other comprehensive income	19	21	9
Total other comprehensive loss	(87)	(151)	(491)
Comprehensive income	$4,761	$4,537	$4,233

The accompanying notes are an integral part of these combined financial statements.

FARM CREDIT SYSTEM

COMBINED STATEMENT OF CHANGES IN CAPITAL
(in millions)

	Preferred Stock	Capital Stock and Participation Certificates	Additional Paid-in-Capital	Restricted Capital Farm Credit Insurance Fund	Accumulated Other Comprehensive Loss	Allocated Retained Earnings	Unallocated Retained Earnings	Total Capital
Balance at December 31, 2013	$2,469	$1,645	$ 738	$3,496	$ (807)	$2,539	$32,521	$42,601
Comprehensive (loss) income					(491)		4,724	4,233
Transfer of Insurance Fund premiums and other income from retained earnings to restricted capital				254			(254)	
Preferred stock issued by Banks	300						(5)	295
Preferred stock retired by Banks	(137)							(137)
Preferred stock issued by Associations	554							554
Preferred stock retired by Associations	(488)							(488)
Preferred stock dividends							(136)	(136)
Capital stock and participation certificates issued		69						69
Capital stock and participation certificates retired		(104)						(104)
Equity issued or recharacterized upon Association mergers		6	366					372
Equity retired or recharacterized upon Association mergers		(6)					(353)	(359)
Recharacterization of other comprehensive loss due to fair value adjustments related to the Association mergers					1			1
Patronage:								
Cash						(144)	(1,051)	(1,195)
Capital stock, participation certificates and retained earnings allocations		66				321	(387)	
Balance at December 31, 2014	2,698	1,676	1,104	3,750	(1,297)	2,716	35,059	45,706
Comprehensive (loss) income					(151)		4,688	4,537
Transfer of Insurance Fund premiums and other income from retained earnings to restricted capital				289			(289)	
Preferred stock retired by Banks	(10)		3					(7)
Preferred stock issued by Associations	609							609
Preferred stock retired by Associations	(555)							(555)
Preferred stock dividends							(143)	(143)
Capital stock and participation certificates issued		86						86
Capital stock and participation certificates retired		(109)						(109)
Equity issued or recharacterized upon Association mergers		2	209					211
Equity retired or recharacterized upon Association mergers		(1)					(220)	(221)
Recharacterization of other comprehensive loss due to fair value adjustments related to the Association mergers					1			1
Patronage:								
Cash						(161)	(1,120)	(1,281)
Capital stock, participation certificates and retained earnings allocations		72				308	(380)	
Balance at December 31, 2015	2,742	1,726	1,316	4,039	(1,447)	2,863	37,595	48,834
Comprehensive (loss) income					(87)		4,848	4,761
Transfer of Insurance Fund premiums and other income from retained earnings to restricted capital				414			(414)	
Preferred stock issued by Banks	375						(5)	370
Preferred stock retired by Banks	(66)		19					(47)
Preferred stock issued by Associations	483							483
Preferred stock retired by Associations	(516)							(516)
Preferred stock dividends							(161)	(161)
Capital stock and participation certificates issued		87						87
Capital stock and participation certificates retired		(98)						(98)
Equity issued or recharacterized upon Association merger		1	56					57
Equity retired or recharacterized upon Association merger		(1)					(55)	(56)
Patronage:								
Cash						(130)	(1,273)	(1,403)
Capital stock, participation certificates and retained earnings allocations		85				369	(454)	
Balance at December 31, 2016	$3,018	$1,800	$1,391	$4,453	$(1,534)	$3,102	$40,081	$52,311

The accompanying notes are an integral part of these combined financial statements.

FARM CREDIT SYSTEM

COMBINED STATEMENT OF CASH FLOWS
(in millions)

	For the Year Ended December 31, 2016	2015	2014
Cash flows from operating activities			
Net income	$ 4,848	$ 4,688	$ 4,724
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for loan losses	266	106	40
Depreciation and amortization on premises and equipment	112	103	96
Accretion of fair value adjustments related to the Bank merger	(30)	(40)	(51)
Net gains on sales of investments and other assets	(47)	(30)	(28)
Income on Insurance Fund assets, net of operating expenses	(42)	(28)	(31)
Increase in accrued interest receivable	(167)	(149)	(105)
Other, net	(113)	248	(295)
Net cash provided by operating activities	4,827	4,898	4,350
Cash flows from investing activities			
Increase in loans, net	(13,002)	(18,981)	(16,199)
Decrease (increase) in Federal funds sold and securities purchased under resale agreements, net	34	(77)	(506)
Investments available-for-sale:			
Purchases	(31,892)	(16,988)	(17,450)
Proceeds from maturities and payments	25,794	15,893	11,433
Proceeds from sales	1,284	240	173
Mission-related and other investments held-to-maturity:			
Purchases	(722)	(3)	(198)
Proceeds from maturities and payments	544	161	395
Mission-related and other investments available-for-sale:			
Purchases	(208)	(38)	(21)
Proceeds from maturities, payments and sales	160	120	92
Premiums paid to the Insurance Fund	(261)	(223)	(174)
Other, net	(141)	(124)	85
Net cash used in investing activities	(18,410)	(20,020)	(22,370)
Cash flows from financing activities			
Systemwide bonds issued	134,164	108,687	80,019
Systemwide bonds and medium-term notes retired	(116,744)	(95,739)	(70,054)
Systemwide discount notes issued	199,866	189,568	249,975
Systemwide discount notes retired	(202,646)	(184,277)	(241,643)
Subordinated debt retired	(1,055)		
Other bonds (retired) issued, net	(448)	(748)	412
(Decrease) increase in notes payable and other interest-bearing liabilities, net	(100)	61	200
Decrease in collateral held from derivative counterparties	(29)	(131)	(205)
Preferred stock issued	853	609	849
Preferred stock retired	(563)	(565)	(625)
Capital stock and participation certificates issued	87	86	69
Capital stock, participation certificates and retained earnings retired	(186)	(243)	(220)
Preferred stock dividends paid	(147)	(132)	(130)
Cash patronage paid	(1,203)	(1,094)	(978)
Net cash provided by financing activities	11,849	16,082	17,669
Net (decrease) increase in cash	(1,734)	960	(351)
Cash at beginning of year	4,974	4,014	4,365
Cash at end of year	$ 3,240	$ 4,974	$ 4,014
Supplemental schedule of non-cash investing and financing activities:			
Loans transferred to other property owned	$ 50	$ 68	$ 91
Patronage and dividends distributions payable	1,480	1,289	1,210
Transfer of retained earnings to additional paid-in-capital related to Association mergers	56	209	366
Change in other assets relating to building sale-leaseback	(76)		
Supplemental non-cash fair value changes related to hedging activities:			
Decrease in Systemwide bonds and medium-term notes	(173)	(193)	(259)
Decrease in other assets	137	209	243
Increase in other liabilities	32	9	35
Supplemental disclosure of cash flow information:			
Cash paid during the year for:			
Interest	2,968	2,282	2,114
Taxes	183	184	198

The accompanying notes are an integral part of these combined financial statements.

NOTE 1 — ORGANIZATION, OPERATIONS AND PRINCIPLES OF COMBINATION

Organization and Operations

The Farm Credit System is a federally chartered network of interdependent, borrower-owned lending institutions (Banks and Associations) and affiliated service organizations. The System was established by Acts of Congress and is subject to the provisions of the Farm Credit Act of 1971, as amended (Farm Credit Act). The Farm Credit Act provides authority for changes in the organizational structure and operations of the System and its entities.

At December 31, 2016, the System consisted of: (1) three Farm Credit Banks (AgFirst FCB; AgriBank, FCB; and FCB of Texas) and their affiliated Associations, (2) one Agricultural Credit Bank (CoBank, ACB) and its affiliated Associations, (3) the Federal Farm Credit Banks Funding Corporation (Funding Corporation) and (4) various service and other organizations.

The Associations are cooperatives owned by their borrowers and the Farm Credit Banks are cooperatives primarily owned by their affiliated Associations. CoBank is a cooperative principally owned by cooperatives, other eligible borrowers and its affiliated Associations. Each Bank and Association manages and controls its own business activities, operations and financial performance. Each Bank and Association has its own board of directors and is not commonly owned or controlled.

A Bank and its affiliated Associations are financially and operationally interdependent as the Bank is statutorily required to serve as an intermediary between the financial markets and the retail lending activities of its affiliated Associations. The Banks are the primary source of funds for the Associations. Associations are not legally authorized to accept deposits and they may not borrow from other financial institutions without the approval of their affiliated Bank. The Banks are not legally authorized to accept deposits and they principally obtain their funds through the issuance of Systemwide Debt Securities. As a result, the loans made by the Associations are substantially funded by the issuance of Systemwide Debt Securities by the Banks. The repayment of Systemwide Debt Securities is dependent upon the ability of borrowers to repay their loans from the Associations. In addition, CoBank makes retail loans and leases directly to agricultural and rural infrastructure cooperatives and businesses, and other eligible borrowers, and the Banks purchase retail loan participations from Associations and other lenders, including other System Banks. Therefore, the repayment of Systemwide Debt Securities is also dependent upon the ability of these retail borrowers to repay their loans.

As required by the Farm Credit Act, the System specializes in providing financing and related services to qualified borrowers in the agricultural and rural sectors and to certain related entities. The System makes credit available in all 50 states, the Commonwealth of Puerto Rico, and U.S. territories under conditions set forth in the Farm Credit Act, which provides both geographic and agricultural sector diversification.

The Banks or Associations jointly own several organizations that were created to provide a variety of services for the System. The Funding Corporation provides for the issuance, marketing and handling of Systemwide Debt Securities, using a selling group, and prepares and distributes the Farm Credit System Quarterly and Annual Information Statements. The Farm Credit System Building Association is a partnership of the Banks that owns premises and other fixed assets that are leased to the Farm Credit Administration, the System's regulator.

Farm Credit Leasing Services Corporation, a wholly-owned subsidiary of CoBank, ACB, provides a variety of leasing programs primarily for agriculture-related equipment and facilities. Other leasing programs exist in the System through Associations and through alliances with non-System leasing companies.

Most System institutions provide financially related services to their customers, including credit, appraisal, estate planning, record keeping services, tax planning and preparation, and consulting. Also, many System institutions serve as agent or broker to provide crop, mortgage life and disability insurance. A limited number of System institutions have entered into contractual arrangements to provide financial support to a captive reinsurance company in a specified dollar amount, which is not material to the System's financial condition or results of operations. System institutions would share in the gains and losses of the captive reinsurance company in accordance with the terms of the contract, but are responsible for losses only up to predetermined limits as set forth in the contract.

The Farm Credit Act provided for the establishment of the Farm Credit System Insurance Corporation (Insurance Corporation). As more fully described in Note 7, the Farm Credit Insurance Fund (Insurance Fund) is under the direct control of the Insurance Corporation.

The Farm Credit Administration is delegated authority by Congress to regulate the activities of the Banks, Associations and certain other System institutions. The Farm Credit Administration examines the activities of System institutions to ensure their compliance with the Farm Credit Act, Farm Credit Administration regulations, and safe and sound banking practices. The Farm Credit Administration has statutory enforcement and related authorities with respect to System institutions.

Principles of Combination

The accompanying Farm Credit System (System) combined financial statements include the accounts of the Banks, the affiliated Associations, the Funding Corporation and the Insurance Fund and reflect the investments in, and allocated earnings of, the service organizations owned jointly by the Banks or Associations. The System combined financial statements include the equity investments of the Farm Credit System Building Association. All significant intra-System transactions and balances have been eliminated in combination. Combined financial statements of the System are presented because of the financial and operational interdependence of the Banks and Associations. Notwithstanding the presentation in the accompanying combined financial statements, the joint and several liability for Systemwide Debt Securities is limited to the Banks, as more fully described in Notes 8, 9, 12 and 21.

NOTE 2 — SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Accounting Principles and Reporting Practices

The accounting and reporting policies of the System conform to accounting principles generally accepted in the United States of America (GAAP) and prevailing practices within the banking industry. The preparation of combined financial statements in conformity with GAAP requires the managements of System institutions to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Significant estimates are discussed in these footnotes, where applicable. Actual results could differ from those estimates.

Certain amounts in prior years' combined financial statements have been reclassified to conform to the current year presentation.

Recently Adopted or Issued Accounting Pronouncements

In August 2016, the Financial Accounting Standards Board (FASB) issued guidance entitled "Classification of Certain Cash Receipts and Cash Payments." The guidance addresses specific cash flow issues with the objective of reducing the diversity in the classification of these cash flows. Included in the cash flow issues are debt prepayment or debt extinguishment costs and settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing. This guidance becomes effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance is not expected to impact the System's financial condition or its results of operations but could change the classification of certain items in the statement of cash flows.

In June 2016, the FASB issued guidance entitled "Measurement of Credit Losses on Financial Instruments." The guidance replaces the current incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. Credit losses relating to available-for-sale securities would also be recorded through an allowance for credit losses. For public business entities that are not U.S. Securities and Exchange Commission filers this guidance becomes effective for interim and annual periods beginning after December 15, 2020, with early application permitted. The System will evaluate the impact of adoption on the System's financial condition and its results of operations.

In February 2016, the FASB issued guidance entitled "Leases." The guidance requires the recognition by lessees of lease assets and lease liabilities on the balance sheet for the rights and obligations created by those leases. Leases with lease terms of more than 12 months are impacted by this guidance. This guidance becomes effective for interim and annual periods beginning after December 15, 2018, with early application permitted. The System will evaluate the impact of adoption on the System's financial condition and its results of operations.

In January 2016, the FASB issued guidance entitled "Recognition and Measurement of Financial Assets and Liabilities." The guidance affects, among other things, the presentation and disclosure requirements for financial instruments. For public entities, the guidance eliminates the requirement to disclose the methods and significant assumptions used to estimate the fair value of financial instruments carried at amortized cost. This guidance becomes effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance is not expected to impact the System's financial condition or its results of operations.

In May 2015, the FASB issued guidance entitled "Disclosures of Investments in Certain Entities that Calculate Net Asset Value per Share (or its Equivalent)." The guidance removes the requirements to categorize assets valued using net asset value per share within the fair value hierarchy (Levels 1 — 3) as well as certain other disclosures. The guidance became effective for interim and annual periods beginning after December 15, 2015. The adoption of this guidance did not impact the System's financial condition or its results of operations but did impact the System's pension disclosures for annual reporting purposes.

In August 2014, the FASB issued guidance entitled "Presentation of Financial Statements — Going Concern." The guidance governs management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. This guidance requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year after the date the financial statements are issued or within one year after the financial statements are available to be issued, when applicable. Substantial doubt exists if it is probable that the entity will be unable to meet its obligations for the assessed period. This guidance became effective for interim and annual periods ending after December 15, 2016, and early application is permitted. Management has completed its initial assessment as of December 31, 2016.

In May 2014, the FASB issued guidance entitled "Revenue from Contracts with Customers." The guidance governs revenue recognition from contracts with customers and requires an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Financial instruments and other contractual rights within the scope of other guidance issued by the FASB are excluded from the scope of this new revenue recognition guidance. In this regard, a majority of our contracts would be excluded from the scope of this new guidance. In August 2015, the FASB issued an update that defers this guidance by one year, which results in the new revenue standard becoming effective for interim and annual reporting periods beginning after December 15, 2017. System institutions are in the process of reviewing contracts to determine the effect, if any, on the System's financial condition or its results of operations.

Cash

Cash, as included in the financial statements, represents cash on hand and deposits at banks.

Investments and Federal Funds

The Banks and Associations, as permitted under Farm Credit Administration regulations, hold investments for the purposes of maintaining a liquidity reserve, managing short-term surplus funds, and managing interest rate risk. These investments are generally classified as available-for-sale and carried at fair value, and unrealized holding gains and losses are netted and reported as a separate component of capital. Changes in the fair value of these investments are reflected as direct charges or credits to other comprehensive income, unless the investment is deemed to be other than temporarily impaired. Impairment is considered to be other-than-temporary if the present value of cash flows expected to be collected from the debt security is less than the amortized cost basis of the security (any such shortfall is referred to as a "credit loss"). If an entity intends to sell an impaired debt security or is more likely than not to be required to sell the security before recovery of its amortized cost basis less any current-period credit loss, the impairment is other-than-temporary and the loss is recognized currently in earnings in an amount equal to the entire difference between fair value and amortized cost. If a credit loss exists, but an entity does not intend to sell the impaired debt security and is not more likely than not to be required to sell before recovery, the impairment is other-than-temporary and is separated into (1) the estimated amount relating to credit loss and (2) the amount relating to all other factors. Only the estimated credit loss amount is recognized currently in earnings, with the remainder of the loss amount recognized in other comprehensive income.

In subsequent periods, if the present value of cash flows expected to be collected is less than the amortized cost basis, the Bank or Association would record an additional other-than-temporary impairment and adjust the yield of the security prospectively. The amount of total other-than-temporary impairment for an available-for-sale security that previously was impaired is determined as the difference between its carrying amount prior to the determination of other-than-temporary impairment and its fair value.

Gains and losses on the sales of investments available-for-sale are determined using the specific identification method. Premiums and discounts are amortized or accreted into interest income over the term of the respective issues. Neither the Banks nor the Associations hold investments for trading purposes.

All or a portion of the unrealized holding gain or loss of an available-for-sale security that is designated as a hedged item in a fair value hedge must be recognized in earnings during the period of the hedge.

Banks and Associations may also hold additional investments in accordance with mission-related and other investment programs approved by the Farm Credit Administration. These programs allow Banks and Associations to make investments that further the System's mission to support rural America. These investments are not included in the Banks' liquidity calculations and are not covered by the eligible investment limitations specified by the Farm Credit Administration regulations. Mission-related and other investments for which the System institution has the intent and ability to hold to maturity are classified as held-to-maturity and carried at cost, adjusted for the amortization of premiums and accretion of discounts.

Loans, Allowance for Loan Losses and Reserve for Unfunded Commitments

Loans are generally carried at their principal amount outstanding adjusted for charge-offs, deferred loan fees or costs, and valuation adjustments relating to hedging activities. Loan origination fees and direct loan origination costs are netted and capitalized, on a combined System basis, and the net fee or cost is amortized over the average life of the related loan as an adjustment to interest income. Loan prepayment fees are reported in interest income. Interest on loans is accrued and credited to interest income based on the daily principal amount outstanding.

Loans acquired in a business combination are initially recognized at fair value, and therefore, no "carryover" of the allowance for loan losses is permitted. Those loans with evidence of credit quality deterioration at purchase are required to follow the authoritative accounting guidance on "Accounting for Certain Loans or Debt Securities Acquired in a Transfer." This guidance addresses accounting for differences between contractual cash flows and cash flows expected to be collected from the initial investment in loans if those differences are attributable, at least in part, to credit quality. The initial fair values for these types of loans are determined by discounting both principal and interest cash flows expected to be collected using an observable discount rate for similar instruments with adjustments that management believes a market participant would consider in determining fair value. Subsequent decreases to expected principal cash flows will result in a charge to the provision for loan losses and a corresponding increase to allowance for loan losses. Subsequent increases in expected principal cash flows will result in recovery of any previously recorded allowance for loan losses, to the extent applicable, and a reclassification from nonaccretable difference to accretable yield for any remaining increase. For variable rate loans, expected future cash flows were initially based on the rate in effect at acquisition; expected future cash flows are recalculated as rates change over the lives of the loans.

Impaired loans are loans for which it is probable that all principal and interest will not be collected according to the original contractual terms and are generally considered substandard or doubtful, which is in accordance with the loan rating model, as described below. Impaired loans include nonaccrual loans, restructured loans and loans past due 90 days or more and still accruing interest. A loan is considered contractually past due when any principal repayment or interest payment required by the loan instrument is not received on or before the due date. A loan shall remain contractually past due until it is formally restructured or until the entire amount past due, including principal, accrued interest, and penalty interest incurred as the result of past due status, is collected or otherwise discharged in full.

A restructured loan constitutes a troubled debt restructuring if for economic or legal reasons related to the debtor's financial difficulties the Bank or Association grants a concession to the debtor that it would not otherwise consider.

Impaired loans are generally placed in nonaccrual status when principal or interest is delinquent for 90 days (unless adequately secured and in the process of collection) or when circumstances indicate that collection of principal and interest is in doubt. Additionally, all loans over 180 days past due are placed in nonaccrual status. When a loan is placed in nonaccrual status, accrued interest that is considered uncollectible is reversed (if accrued in the current year) or charged against the allowance for loan losses (if accrued in prior years). Loans are charged-off at the time they are determined to be uncollectible.

When loans are in nonaccrual status, interest payments received in cash are generally recognized as interest income if the collectibility of the loan principal is fully expected and certain other criteria are met. Otherwise, payments received on nonaccrual loans are applied against the recorded investment in the loan asset. Nonaccrual loans may be returned to accrual status when principal and interest are current, the borrower has demonstrated payment performance, there are no unrecovered prior charge-offs and collection of future payments is no longer in doubt. If previously unrecognized interest income exists at the time the loan is transferred to accrual status, cash received at the time of or subsequent to the transfer should first be recorded as interest income until such time as the recorded balance equals the contractual indebtedness of the borrower.

The Bank and related Associations use a two-dimensional loan rating model based on an internally generated combined system risk rating guidance that incorporates a 14-point risk-rating scale to identify and track the probability of borrower default and a separate scale addressing loss given default over a period of time. Probability of default is the probability that a borrower will experience a default within 12 months from the date of the determination of the risk rating. A default is considered to have occurred if the lender believes the borrower will not be able to pay its obligation in full or the borrower is past due more than 90 days. The loss given default is management's estimate as to the anticipated economic loss on a specific loan assuming default has occurred or is expected to occur within the next 12 months.

Each of the probability of default categories carries a distinct percentage of default probability. There are nine acceptable categories that range from a borrower of the highest quality to a borrower of minimally acceptable quality. The probability of default between one and nine is very narrow and would reflect almost no default to a minimal default percentage. The probability of default grows more rapidly as a loan moves from a "nine" to other assets especially mentioned and grows significantly as a loan moves to a substandard (viable) level. A substandard (non-viable) rating indicates that the probability of default is almost certain.

The credit risk rating methodology is a key component of each Bank's and Association's allowance for loan losses evaluation, and is generally incorporated into the institution's loan underwriting standards and internal lending limit. The allowance for loan losses is maintained at a level considered adequate to provide for probable and estimable losses inherent in the loan portfolios. The allowance for loan losses represents the aggregate of each System entity's individual evaluation of its allowance for loan losses requirements. Although aggregated in the combined financial statements, the allowance for loan losses of each System entity is particular to that institution and is not available to absorb losses realized by other System entities. The allowance is increased through provisions for loan losses and loan recoveries and is decreased through loan loss reversals and loan charge-offs.

The allowance is based on a periodic evaluation of the loan portfolio in which numerous factors are considered, including economic conditions, collateral values, borrowers' financial conditions, loan portfolio composition and prior loan loss experience. The allowance for loan losses encompasses various judgments, evaluations and appraisals with respect to the System's loans and their underlying security that, by their nature, contain elements of uncertainty and imprecision. Changes in the agricultural economy and their impact on borrower repayment capacity will cause these various judgments, evaluations and appraisals to change over time. Accordingly, actual circumstances could vary significantly from System institutions' expectations and predictions of those circumstances. Managements consider a number of factors in determining and supporting the levels of System institutions' allowances for loan losses, which include: the System's concentration of lending in agriculture, combined with uncertainties associated with farmland values, commodity prices, exports, government assistance programs, regional economic effects and weather-related influences.

The allowance for loan losses includes components for loans individually evaluated for impairment, loans collectively evaluated for impairment and loans acquired with deteriorated credit quality. Generally, for loans individually evaluated the allowance for loan losses represents the difference between the recorded investment in the loan and the present value of the cash flows expected to be collected discounted at the loan's effective interest rate, or at the fair value of the collateral, if the loan is collateral dependent. For those loans collectively evaluated for impairment, the allowance for loan losses is determined using the risk-rating model.

Certain Banks and Associations have established a reserve for unfunded commitments that provides for potential losses related to unfunded commitments and is maintained at a level that is considered the best estimate of the amount required to absorb estimated probable losses related to these unfunded commitments. The reserve is determined using a similar methodology used for the allowance for loan losses. The reserve for unfunded commitments is recorded as a liability in the Combined Statement of Condition.

Premises and Equipment

Premises and equipment are carried at cost, less accumulated depreciation and amortization, which is provided on the straight-line method over the estimated useful lives of the assets. Gains and losses on dispositions are reflected in current operations. Maintenance and repairs are charged to operating expenses and improvements are capitalized.

Other Assets

In connection with past foreclosure and sale proceedings, some Banks and Associations acquired certain mineral interests and equity positions in land from which revenues are received in the form of lease bonuses, rentals and leasing and production royalties. These intangible assets are recorded at nominal or no value in the Combined Statement of Condition. The Farm Credit Act requires that mineral rights acquired through foreclosure in 1986 and later years be sold to the buyer of the land surface rights.

Employee Benefit Plans

Substantially all employees of System institutions participate in various retirement plans. System institutions generally provide defined benefit or defined contribution retirement plans for their employees. For financial reporting purposes, System institutions use the projected unit credit actuarial method for defined benefit retirement plans.

The Banks and Associations provide certain healthcare and life insurance benefits to eligible retired employees. Employees of System institutions may become eligible for those benefits if they reach normal retirement age while working for the institution. The authoritative accounting guidance requires the accrual of the expected cost of providing postretirement benefits other than pensions (primarily healthcare benefits) to an employee and an employee's beneficiaries and covered dependents during the years that the employee renders service necessary to become eligible for these benefits.

Income Taxes

The Farm Credit Banks, certain Associations, and the income related to the Insurance Fund are exempt from federal and other income taxes as provided in the Farm Credit Act. CoBank, ACB, certain other Associations and service organizations are not exempt from federal and certain other income taxes. Taxable institutions are eligible to operate as cooperatives that qualify for tax treatment under Subchapter T of the Internal Revenue Code. Under specified conditions, these cooperatives can exclude from taxable income amounts distributed as qualified patronage distributions in the form of cash, stock or allocated retained earnings. Provisions for income taxes are made only on those earnings that will not be distributed as qualified patronage distributions. System institutions whose patronage distributions are based on book income recognize the tax effect of all temporary differences based on the assumption that these temporary differences are retained by the institution and will therefore impact future tax payments. Certain taxable System institutions have provided a valuation allowance for deferred tax assets to the extent that it is more likely than not that the deferred tax assets will not be realized.

Deferred income taxes have not been provided by the taxable Associations on pre-1993 (the adoption date of the FASB guidance on income taxes) earnings from their related Bank when management's intent is to permanently invest these undistributed earnings in the Bank and to indefinitely postpone their conversion to cash, or if distributed by the related Bank, to pass these earnings through to Association borrowers through qualified patronage allocations.

Deferred income taxes have not been provided for the Banks' post-1992 earnings allocated to taxable Associations to the extent that the earnings will be passed through to Association borrowers through qualified patronage allocations. No deferred income taxes have been provided for the Banks' post-1992 unallocated earnings. The Banks currently have no plans to distribute unallocated Bank earnings and do not contemplate circumstances that, if distributions were made, would result in taxes being paid at the Association level.

Derivative Products and Hedging Activity

The Banks are party to derivative financial products, primarily interest rate swaps, which are principally used to manage interest rate risk on assets, liabilities, anticipated transactions and firm commitments. Derivatives are recorded on the combined statement of condition as assets or liabilities, measured at fair value. Derivative contracts may be netted by counterparty pursuant to acceptable master netting arrangements.

Changes in the fair value of a derivative are recorded in current period earnings or accumulated other comprehensive income (loss) depending on the use of the derivative and whether it qualifies for hedge accounting. For fair-value hedge transactions, which hedge changes in the fair value of assets, liabilities, or firm commitments, changes in the fair value of the derivative are reflected in current period earnings and are generally offset by changes in the hedged item's fair value. For cash-flow hedge transactions, which hedge the variability of future cash flows related to a floating-rate asset, liability, or a forecasted transaction, changes in the fair value of the derivative are deferred and reported in accumulated other comprehensive income (loss). The gains and losses on the derivative that are deferred and reported in accumulated other comprehensive income (loss) are reclassified as earnings in the periods in which earnings are impacted by the variability of the cash flows of the hedged item. The ineffective portion of all hedges is recorded in current period earnings. For derivatives not designated as a hedging instrument, the related change in fair value is recorded in current period earnings.

Each Bank formally documents all relationships between hedging instruments and hedged items, as well as the risk management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value or cash flow hedges to (1) specific assets or liabilities on the balance sheet or (2) firm commitments or forecasted transactions. Each Bank also formally assesses (both at the hedge's inception and on an ongoing basis, at least quarterly) whether the derivatives that are used in hedging transactions have been highly effective in offsetting changes in the fair value or cash flows of hedged items and whether those derivatives may be expected to remain highly effective in future periods. Each Bank typically uses regression analyses or other statistical analyses to assess the effectiveness of its hedges. Each Bank discontinues hedge accounting prospectively when the Bank determines that a hedge has not been or is not expected to be effective as a hedge. For discontinued cash flow hedges, any remaining accumulated other comprehensive income (loss) is amortized into earnings over the remaining life of the original hedged item. For discontinued fair value hedges, changes in the fair value of the derivative are recorded in current period earnings. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the Bank carries the derivative at its fair value on the balance sheet, recognizing changes in fair value in current period earnings.

Fair Value Measurement

The fair value guidance defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. It describes three levels of inputs that may be used to measure fair value:

Level 1 — Quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 1 assets and liabilities include debt and equity securities and derivative contracts that are traded in an active exchange market, as well as certain U.S. government and agency mortgage-backed debt securities that are highly liquid and are actively traded in over-the-counter markets. Also included in Level 1 are assets held in trust funds, which relate to deferred compensation and the supplemental retirement plan. The trust funds include investments that are actively traded and have quoted net asset values that are observable in the marketplace. Pension plan assets that are invested in equity securities, including mutual funds, and fixed-income securities that are actively traded are also included in Level 1.

Level 2 — Observable inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. Level 2 inputs include the following: (1) quoted prices for similar assets or liabilities in active markets; (2) quoted prices for identical or similar assets or liabilities in markets that are not active; (3) inputs other than quoted prices that are observable such as interest rates and yield curves, prepayment speeds, credit risks and default rates; and (4) inputs derived principally from or corroborated by observable market data by correlation or other means. This category generally includes certain U.S. Treasury, other U.S. government and agency mortgage-backed debt securities, corporate debt securities, and derivative contracts. The market value of collateral assets and liabilities is their face value, plus accrued interest, as these instruments are cash balances; therefore, fair value approximates face value. Pension plan assets that are derived from observable inputs, including corporate bonds and mortgage-backed securities are reported in Level 2.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. These unobservable inputs reflect the reporting entity's own assumptions about assumptions that market participants would use in pricing the asset or liability. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation. This category generally includes certain private equity investments, retained residual interests in securitizations, asset-backed securities and certain mortgage-backed securities, highly structured or long-term derivative contracts, certain loans and other property owned. Pension plan assets, such as certain mortgage-backed securities that are supported by little or no market data in determining the fair value, are included in Level 3.

Merger Accounting

The FASB guidance on business combinations applies to all transactions in which an entity obtains control of one or more businesses. The guidance requires the acquirer to use the acquisition method of accounting and recognize assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree at their fair values as of the acquisition date.

For System Banks and Associations, because the stock in each institution is fixed in value, the stock issued pursuant to the merger provides no basis for estimating the fair value of the consideration transferred pursuant to the merger. In the absence of a purchase price determination, the acquiring institution would identify and estimate the acquisition date fair value of the equity interests (net assets) of the acquired institution instead of the acquisition date fair value of the equity interests transferred as consideration. The fair value of the assets acquired, including specific intangible assets and liabilities assumed, are measured based on various estimates using assumptions that management believes are reasonable utilizing information currently available. The excess value received, by the acquiring institution from the acquired institution, over the par value of capital stock and participation certificates issued in the merger is considered to be additional paid-in capital.

Off-Balance-Sheet Credit Exposures

Commitments to extend credit are agreements to lend to customers, generally having fixed expiration dates or other termination clauses that may require payment of a fee. Commercial letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party. These letters of credit are issued to facilitate commerce and typically result in the commitment being funded when the underlying transaction is consummated between the customer and third party. The credit risk associated with commitments to extend credit and commercial letters of credit is substantially the same as that involved with extending loans to customers and is subject to normal credit policies. Collateral may be obtained based on management's assessment of the customer's creditworthiness.

(dollars in millions, except as noted)

NOTE 3 — INVESTMENTS

Available-for-Sale

The following is a summary of available-for-sale investments held by the Banks for maintaining a liquidity reserve, managing short-term surplus funds and managing interest rate risk:

	December 31, 2016				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Commercial paper, bankers' acceptances, certificates of deposit and other securities	$ 5,804	$ 2	$ (1)	$ 5,805	1.07%
U.S. Treasury securities	15,604	38	(98)	15,544	1.36
U.S. agency securities	5,456	33	(24)	5,465	1.62
Mortgage-backed securities	25,416	126	(199)	25,343	1.66
Asset-backed securities	2,559	15	(4)	2,570	1.23
Total	$54,839	$214	$(326)	$54,727	1.49

	December 31, 2015				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Commercial paper, bankers' acceptances, certificates of deposit and other securities	$ 5,282	$ 1	$ (2)	$ 5,281	0.56%
U.S. Treasury securities	10,038	37	(29)	10,046	1.33
U.S. agency securities	6,188	42	(31)	6,199	1.47
Mortgage-backed securities	25,850	169	(149)	25,870	1.55
Asset-backed securities	2,526	49	(6)	2,569	1.07
Total	$49,884	$298	$(217)	$49,965	1.37

The System realized gross gains of $40 million and gross losses of $1 million in 2016 and gross gains of $29 million and gross losses of $2 million in 2015 from sales of available-for-sale investment securities.

(dollars in millions, except as noted)

A summary of the fair value and amortized cost of investments available-for-sale at December 31, 2016 by contractual maturity is as follows:

	Due in 1 Year or Less		Due After 1 Year Through 5 Years		Due After 5 Years Through 10 Years		Due After 10 Years		Total	
	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield
Commercial paper, bankers' acceptances, certificates of deposit and other securities	$ 5,660		$ 145						$ 5,805	1.07%
U.S. Treasury securities	3,826		8,916		$2,802				15,544	1.36
U.S. agency securities	1,558		1,592		2,315				5,465	1.62
Mortgage-backed securities	13		1,245		2,225		$21,860		25,343	1.66
Asset-backed securities	4		1,776		29		761		2,570	1.23
Total fair value	$11,061	0.95%	$13,674	1.50%	$7,371	1.60%	$22,621	1.71%	$54,727	1.49
Total amortized cost	$11,058		$13,655		$7,453		$22,673		$54,839	

Substantially all mortgage-backed securities have contractual maturities in excess of ten years. However, expected and actual maturities for mortgage-backed securities will typically be shorter than contractual maturities because borrowers generally have the right to prepay the underlying mortgage obligations with or without prepayment penalties.

The ratings of the eligible investments held for maintaining a liquidity reserve, managing short-term surplus funds and managing interest rate risk must meet the applicable regulatory guidelines, which require securities to be high quality, and rated triple-A at the time of purchase, except for commercial paper and corporate securities. Commercial paper must have the highest short-term rating and corporate securities one of the two highest ratings at the time of purchase. U.S. Treasury securities, U.S. agency securities (except mortgage securities) and other obligations fully insured or guaranteed by the U.S., its agencies, instrumentalities and corporations are considered eligible investments under the Farm Credit Administration regulations regardless of credit ratings.

Under the Farm Credit Administration regulations, if an investment is eligible when purchased but no longer satisfies the eligibility criteria, the Bank may continue to hold the investment, subject to meeting certain requirements.

System institutions perform analyses on these securities based on the expected behavior of the underlying loan collateral, whereby these loan performance scenarios are applied against each security's credit-support structure to monitor credit-enhancement sufficiency to protect the investment. The model output includes projected cash flows, including any shortfalls in the capacity of the underlying collateral to fully return the original investment, plus accrued interest.

(dollars in millions, except as noted)

Held-to-Maturity Mission-Related and Other Investments

The Banks and Associations may hold mission-related and other investments. Mission-related programs and other mission-related investments are approved by the Farm Credit Administration. The following is a summary of held-to-maturity mission-related and other investments:

	December 31, 2016				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Mortgage-backed securities	$2,132	$17	$(66)	$2,083	3.05%
Asset-backed securities	370	5	(12)	363	2.11
Other securities	135	5	(3)	137	5.87
Total	$2,637	$27	$(81)	$2,583	3.06

	December 31, 2015				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Mortgage-backed securities	$1,916	$23	$(44)	$1,895	3.12%
Asset-backed securities	378	7	(8)	377	1.85
Other securities	184	8	(2)	190	5.57
Total	$2,478	$38	$(54)	$2,462	3.11

A summary of the fair value and amortized cost of held-to-maturity mission-related and other investments at December 31, 2016 by contractual maturity is as follows:

	Due in 1 Year or Less		Due After 1 Year Through 5 Years		Due After 5 Years Through 10 Years		Due After 10 Years		Total	
	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield
Mortgage-backed securities	$ 8		$ 54		$135		$1,935		$2,132	3.05%
Asset-backed securities	3		95		98		174		370	2.11
Other securities	10		24		20		81		135	5.87
Total amortized cost	$21	3.75%	$173	3.76%	$253	2.98%	$2,190	3.01%	$2,637	3.06
Total fair value	$21		$175		$252		$2,135		$2,583	

Available-for-Sale Mission-Related and Other Investments

The following is a summary of available-for-sale mission-related and other investments:

	December 31, 2016				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Mortgage-backed securities	$343	$2	$(8)	$337	2.67%
Other securities	7	—	—	7	5.70
Total	$350	$2	$(8)	$344	2.73

(dollars in millions, except as noted)

	December 31, 2015				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Mortgage-backed securities	$294	$3	$(4)	$293	2.53%
Other securities	7	—	—	7	5.79
Total	$301	$3	$(4)	$300	2.61

A summary of the fair value and amortized cost of available-for-sale mission-related and other investments at December 31, 2016 by contractual maturity is as follows:

	Due After 1 Year Through 5 Years		Due After 5 Years Through 10 Years		Due After 10 Years		Total	
	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield
Mortgage-backed securities	$23		$30		$284		$337	2.67%
Other securities	2		—		5		7	5.70
Total fair value	$25	4.17%	$30	4.27%	$289	2.44%	$344	2.73
Total amortized cost	$25		$32		$293		$350	

Other-Than-Temporarily Impaired Investments Evaluation

The following tables show the gross unrealized losses and fair value of the System's available-for-sale, and mission-related and other investment securities that have been in a continuous unrealized loss position. An investment is considered impaired if its fair value is less than its cost. The continuous loss position is based on the date the impairment was first identified.

	Less Than 12 Months		12 Months or More	
December 31, 2016	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Commercial paper, bankers' acceptances, certificates of deposit and other securities	$ 758	$ (1)	$ 45	$ (3)
U.S. Treasury securities	8,788	(98)		
U.S. agency securities	1,269	(15)	642	(9)
Mortgage-backed securities	12,419	(160)	5,973	(113)
Asset-backed securities	1,045	(7)	469	(9)
Total	$24,279	$(281)	$7,129	$(134)

	Less Than 12 Months		12 Months or More	
December 31, 2015	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Commercial paper, bankers' acceptances, certificates of deposit and other securities	$ 2,761	$ (3)	$ 23	$ (1)
U.S. Treasury securities	6,885	(29)		
U.S. agency securities	2,368	(13)	976	(18)
Mortgage-backed securities	9,659	(74)	5,012	(123)
Asset-backed securities	1,698	(9)	420	(5)
Total	$23,371	$(128)	$6,431	$(147)

(dollars in millions, except as noted)

As more fully discussed in Note 2, the guidance for other-than-temporary impairment contemplates numerous factors in determining whether an impairment is other-than-temporary including: (1) whether or not an entity intends to sell the security, (2) whether it is more likely than not that an entity would be required to sell the security before recovering its costs, or (3) whether or not an entity expects to recover the security's entire amortized cost basis (even if it does not intend to sell).

System institutions perform an evaluation quarterly on a security-by-security basis considering all available information. If a Bank or Association intends to sell the security or it is more likely than not that it would be required to sell the security, the impairment loss equals the full difference between amortized cost and fair value of the security. When a Bank or Association does not intend to sell securities in an unrealized loss position, other-than-temporary impairment is considered using various factors, including the length of time and the extent to which the fair value is less than cost, adverse conditions specifically related to the industry, geographic area and the condition of the underlying collateral, payment structure of the security, ratings by rating agencies, the creditworthiness of bond insurers and volatility of the fair value changes. A Bank or Association uses estimated cash flows over the remaining lives of the underlying collateral to assess whether credit losses exist. In estimating cash flows, it considers factors such as expectations of relevant market and economic data, including underlying loan level data for mortgage-backed and asset-backed securities and credit enhancements.

For impaired investments, a Bank or Association estimates the portion of the loss that is attributable to credit losses using a discounted cash flow model on a security-by-security basis. The various models require key assumptions related to the underlying collateral, including default rates, degree and timing of prepayments, and loss severity. Assumptions can vary widely from security to security and are influenced by such factors as interest rate, geographical location of the borrower, borrower characteristics and collateral type. Default rate assumptions are generally estimated using historical loss and performance information to estimate future defaults and prepayment rate assumptions are based on historical and projected prepayment rates. The Banks obtain the loss severity assumptions from independent third parties or through research using available data on the underlying collateral type from sources including broker/dealers and rating agencies. The following summarizes the assumptions used at:

	December 31, 2016	
Assumptions Used	**Mortgage-backed Securities**	**Asset-backed Securities**
Default rate by range	6.2% - 11.4%	5.9% - 18.8%
Prepayment rate by range	10.3% - 15.2%	11.4% - 49.4%
Loss severity by range	7.8% - 79.8%	33.8% - 39.9%

	December 31, 2015	
Assumptions Used	**Mortgage-backed Securities**	**Asset-backed Securities**
Default rate by range	1.2% - 25.3%	3.3% - 39.8%
Prepayment rate by range	3.1% - 15.6%	2.4% - 35.5%
Loss severity by range	4.4% - 72.6%	38.7% - 100.0%

As of December, 31, 2016 and 2015, the Banks and Associations did not intend to sell available-for-sale securities in unrealized loss positions and it is not more likely than not that they will be required to sell these securities. The System recognized credit impairment losses of $16 million and $13 million in earnings for 2016 and 2015.

(dollars in millions, except as noted)

NOTE 4 — LOANS AND ALLOWANCE FOR LOAN LOSSES

The System is limited by statute to providing credit and related services to farmers, ranchers, producers and harvesters of aquatic products, rural homeowners, certain farm-related businesses, agricultural and aquatic cooperatives (or to other entities for the benefit of the cooperatives) and their customers, rural utilities, other eligible borrowers, and entities engaging in certain agricultural export finance transactions. Accordingly, the borrowers' abilities to perform in accordance with their loan contracts are generally dependent upon the performance of the agricultural economic sector. While the amounts in the following table represent the maximum potential credit risk as it relates to recorded loan principal, a substantial portion of the System's lending activities is collateralized, which reduces the exposure to credit risk associated with the activities.

Loans outstanding by portfolio segment and class consisted of the following:

	December 31, 2016	December 31, 2015
Real estate mortgage	$114,446	$107,813
Production and intermediate-term*	53,762	52,577
Agribusiness	39,628	36,595
Rural infrastructure	27,440	25,798
Rural residential real estate	7,148	7,117
Other**	6,344	5,990
Total loans	$248,768	$235,890

* Includes lease receivables.

** Includes agricultural export finance loans and loans to other financing institutions.

Approximately 40% of the loan volume at December 31, 2016 and 2015 contained terms under which the interest rate on the outstanding balance may be adjusted from time-to-time during the term of the loan. These floating-rate loans are comprised of administered-rate loans that may be adjusted at the discretion of the lending institution and indexed/adjustable loans that are periodically adjusted based on changes in specified indices. Fixed-rate loans comprised the remaining 60% of loans outstanding at December 31, 2016 and 2015.

The Farm Credit Administration Uniform Loan Classification System includes five categories: acceptable, other assets especially mentioned (OAEM), substandard, doubtful and loss. The following table shows loans and related accrued interest classified under the Farm Credit Administration Uniform Loan Classification System as a percentage of total loans and related accrued interest receivable by loan type:

	December 31, 2016	December 31, 2015
Real estate mortgage		
Acceptable	94.8%	96.2%
OAEM	2.5	1.9
Substandard/doubtful	2.7	1.9
	100.0	100.0
Production and intermediate-term		
Acceptable	91.1	94.6
OAEM	4.6	2.6
Substandard/doubtful	4.3	2.8
	100.0	100.0
Agribusiness		
Acceptable	94.9	95.7
OAEM	2.7	2.7
Substandard/doubtful	2.4	1.6
	100.0	100.0
Rural infrastructure		
Acceptable	97.1	97.4
OAEM	2.6	1.8
Substandard/doubtful	0.3	0.8
	100.0	100.0
Rural residential real estate		
Acceptable	97.0	97.3
OAEM	1.1	0.9
Substandard/doubtful	1.9	1.8
	100.0	100.0
Other		
Acceptable	100.0	100.0
OAEM	0.0	0.0
Substandard/doubtful	0.0	0.0
	100.0	100.0
Total Loans		
Acceptable	94.5	96.0
OAEM	2.9	2.1
Substandard/doubtful	2.6	1.9
	100.0	100.0

(dollars in millions, except as noted)

Impaired loans (which consist of nonaccrual loans, accruing restructured loans and accruing loans 90 days or more past due) are loans for which it is probable that not all principal and interest will be collected according to the contractual terms of the loan. The following tables present information concerning impaired loans and include both the principal outstanding and the related accrued interest receivable on these loans.

	December 31,	
	2016	2015
Nonaccrual loans:		
Current as to principal and interest	$ 884	$ 801
Past due	707	523
Total nonaccrual loans	1,591	1,324
Impaired accrual loans:		
Restructured accrual loans	344	286
Accrual loans 90 days or more past due	27	19
Total impaired accrual loans	371	305
Total impaired loans	$1,962	$1,629

(dollars in millions, except as noted)

The following table reflects nonperforming assets (which consist of impaired loans and other property owned) in a more detailed manner than the previous table.

	December 31, 2016	December 31, 2015
Nonaccrual loans:		
Real estate mortgage	$ 835	$ 703
Production and intermediate-term	537	372
Agribusiness	167	106
Rural infrastructure		86
Rural residential real estate	52	57
Total nonaccrual loans	1,591	1,324
Accruing restructured loans:		
Real estate mortgage	182	180
Production and intermediate-term	94	97
Agribusiness	2	2
Rural infrastructure	59	
Rural residential real estate	7	7
Total accruing restructured loans	344	286
Accruing loans 90 days or more past due:		
Real estate mortgage	16	12
Production and intermediate-term	11	6
Rural residential real estate		1
Total accruing loans 90 days or more past due	27	19
Total nonperforming loans	1,962	1,629
Other property owned	75	96
Total nonperforming assets	$2,037	$1,725

The following table reflects certain related credit quality statistics:

	December 31, 2016	December 31, 2015
Nonaccrual loans as a percentage of total loans	0.64%	0.56%
Nonperforming assets as a percentage of total loans and other property owned	0.82	0.73
Nonperforming assets as a percentage of capital	3.89	3.53

Commitments to lend additional funds to debtors whose loans were classified as impaired were $46 million and $41 million at December 31, 2016 and 2015.

(dollars in millions, except as noted)

Additional impaired loan information by class is as follows:

	December 31, 2016			December 31, 2015		
	Recorded Investment*	Unpaid Principal Balance**	Related Allowance	Recorded Investment*	Unpaid Principal Balance**	Related Allowance
Impaired loans with a related allowance for loan losses:						
Real estate mortgage	$ 198	$ 221	$ 33	$ 139	$ 164	$ 27
Production and intermediate-term	215	251	71	166	198	61
Agribusiness	117	139	18	90	109	16
Rural infrastructure				25	29	4
Rural residential real estate	6	7	2	9	10	2
Total	536	618	124	429	510	110
Impaired loans with no related allowance for loan losses:						
Real estate mortgage	835	1,005		756	950	
Production and intermediate-term	427	629		309	481	
Agribusiness	52	88		18	66	
Rural infrastructure	59	83		61	100	
Rural residential real estate	53	65		56	70	
Total	1,426	1,870		1,200	1,667	
Total impaired loans:						
Real estate mortgage	1,033	1,226	33	895	1,114	27
Production and intermediate-term	642	880	71	475	679	61
Agribusiness	169	227	18	108	175	16
Rural infrastructure	59	83		86	129	4
Rural residential real estate	59	72	2	65	80	2
Total	$1,962	$2,488	$124	$1,629	$2,177	$110

* The recorded investment is the face amount of the receivable increased or decreased by applicable accrued interest and unamortized premium, discount, finance charges, or acquisition costs and may also reflect a previous direct write-down of the investment.

** Unpaid principal balance represents the contractual principal balance of the loan.

(dollars in millions, except as noted)

	For the Year Ended					
	December 31, 2016		December 31, 2015		December 31, 2014	
	Average Impaired Loans	Interest Income Recognized	Average Impaired Loans	Interest Income Recognized	Average Impaired Loans	Interest Income Recognized
Impaired loans with a related allowance for loan losses:						
Real estate mortgage	$ 130	$ 2	$ 158	$ 4	$ 208	$ 4
Production and intermediate-term	191	2	191	3	216	3
Agribusiness	87	1	82		38	1
Rural infrastructure	13		19		36	
Rural residential real estate	7		10		15	
Total	428	5	460	7	513	8
Impaired loans with no related allowance for loan losses:						
Real estate mortgage	862	50	769	48	832	43
Production and intermediate-term	410	32	337	33	379	28
Agribusiness	33	4	23	3	28	6
Rural infrastructure	59	4	78	1	65	3
Rural residential real estate	55	3	52	3	53	3
Total	1,419	93	1,259	88	1,357	83
Total impaired loans:						
Real estate mortgage	992	52	927	52	1,040	47
Production and intermediate-term	601	34	528	36	595	31
Agribusiness	120	5	105	3	66	7
Rural infrastructure	72	4	97	1	101	3
Rural residential real estate	62	3	62	3	68	3
Total	$1,847	$98	$1,719	$95	$1,870	$91

(dollars in millions, except as noted)

The following table provides an aging analysis of past due loans (including accrued interest) by portfolio segment:

	December 31, 2016					
	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or less than 30 Days Past Due	Total Loans and Accrued Interest	Recorded Investment >90 Days and Accruing
Real estate mortgage	$355	$296	$ 651	$114,964	$115,615	$16
Production and intermediate-term	295	237	532	53,747	54,279	11
Agribusiness	22	26	48	39,714	39,762	
Rural infrastructure	15		15	27,531	27,546	
Rural residential real estate	76	18	94	7,083	7,177	
Other				6,362	6,362	
Total	$763	$577	$1,340	$249,401	$250,741	$27

	December 31, 2015					
	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or less than 30 Days Past Due	Total Loans and Accrued Interest	Recorded Investment >90 Days and Accruing
Real estate mortgage	$291	$212	$503	$108,374	$108,877	$12
Production and intermediate-term	188	141	329	52,729	53,058	6
Agribusiness	25	27	52	36,667	36,719	
Rural infrastructure		25	25	25,856	25,881	
Rural residential real estate	68	21	89	7,057	7,146	1
Other				6,006	6,006	
Total	$572	$426	$998	$236,689	$237,687	$19

Interest income on nonaccrual and accruing restructured loans that would have been recorded if the loans had been current in accordance with their original terms:

	December 31,		
	2016	2015	2014
Interest income that would have been recognized under original terms	$139	$126	$119
Less: interest income recognized	(96)	(93)	(88)
Interest income not recognized	$ 43	$ 33	$ 31

(dollars in millions, except as noted)

A summary of changes in the allowance for loan losses and the recorded investment for loans outstanding by portfolio segment follows:

	Real estate mortgage	Production and intermediate-term	Agribusiness	Rural infrastructure	Rural residential real estate	Other	Total
Allowance for Loan Losses:							
Balance at December 31, 2015	$ 336	$ 386	$ 320	$ 204	$ 20	$ 14	$ 1,280
Charge-offs	(11)	(64)	(9)		(3)		(87)
Recoveries	16	16	5	4	1		42
Provision for loan losses (loan loss reversal)	61	124	81	(6)	3	3	266
Adjustment due to merger	(1)						(1)
Reclassification to/from reserve for unfunded commitments*	(2)		10	(1)		(1)	6
Balance at December 31, 2016	$ 399	$ 462	$ 407	$ 201	$ 21	$ 16	$ 1,506
Balance at December 31, 2014	$ 317	$ 365	$ 334	$ 188	$ 22	$ 11	$ 1,237
Charge-offs	(18)	(45)	(15)	(10)	(4)		(92)
Recoveries	22	24	7	1	1		55
Provision for loan losses (loan loss reversal)	31	49	(18)	40	1	3	106
Adjustment due to merger	(6)	(9)					(15)
Reclassification to/from reserve for unfunded commitments*	(10)	2	12	(15)			(11)
Balance at December 31, 2015	$ 336	$ 386	$ 320	$ 204	$ 20	$ 14	$ 1,280
Ending Balance at December 31, 2016:							
Individually evaluated for impairment	$ 33	$ 71	$ 18		$ 2		$ 124
Collectively evaluated for impairment	366	391	389	$ 201	19	$ 16	1,382
Balance at December 31, 2016	$ 399	$ 462	$ 407	$ 201	$ 21	$ 16	$ 1,506
Ending Balance at December 31, 2015:							
Individually evaluated for impairment	$ 27	$ 61	$ 17	$ 4	$ 2		$ 111
Collectively evaluated for impairment	309	325	303	200	18	$ 14	1,169
Balance at December 31, 2015	$ 336	$ 386	$ 320	$ 204	$ 20	$ 14	$ 1,280
Recorded Investments in Loans Outstanding:							
Ending balance at December 31, 2016:							
Loans individually evaluated for impairment	$ 1,226	$ 666	$ 185	$ 17	$1,700	$ 71	$ 3,865
Loans collectively evaluated for impairment	114,389	53,613	39,577	27,529	5,477	6,291	246,876
Balance at December 31, 2016	$115,615	$54,279	$39,762	$27,546	$7,177	$6,362	$250,741
Ending balance at December 31, 2015:							
Loans individually evaluated for impairment	$ 1,084	$ 501	$ 133	$ 88	$1,824	$ 80	$ 3,710
Loans collectively evaluated for impairment	107,793	52,557	36,586	25,793	5,322	5,926	233,977
Balance at December 31, 2015	$108,877	$53,058	$36,719	$25,881	$7,146	$6,006	$237,687

* Represents reclassifications between the allowance for loan losses and the reserve for unfunded commitments as a result of advances on or repayments of seasonal lines of credit or other loans.

(dollars in millions, except as noted)

A restructuring of a loan constitutes a troubled debt restructuring, also known as formally restructured, if the creditor for economic or legal reasons related to the debtor's financial difficulties grants a concession to the debtor that it would not otherwise consider. Concessions vary by program and are borrower-specific and may include interest rate reductions, term extensions, payment deferrals or the acceptance of additional collateral in lieu of payments. In limited circumstances, principal may be forgiven. When a restructured loan constitutes a troubled debt restructuring, these loans are included within our risk loans under nonaccrual or accruing restructured loans. All risk loans are analyzed within our allowance for loan losses.

The following table presents additional information regarding troubled debt restructurings that occurred during the past three years:

	For the Year Ended December 31,					
	2016		2015		2014	
	Pre-modification Outstanding Recorded Investment*	Post-Modification Outstanding Recorded Investment*	Pre-modification Outstanding Recorded Investment*	Post-modification Outstanding Recorded Investment*	Pre-modification Outstanding Recorded Investment*	Post-modification Outstanding Recorded Investment*
Troubled debt restructurings:						
Real estate mortgage	$ 41	$ 40	$ 35	$ 34	$ 46	$ 46
Production and intermediate-term	66	66	62	61	78	75
Agribusiness	27	27	32	32		
Rural residential real estate	2	2	2	2	3	3
Total	$136	$135	$131	$129	$127	$124

* Pre-modification represents the recorded investment just prior to restructuring and post-modification represents the recorded investment immediately following the restructuring. The recorded investment is the face amount of the receivable increased or decreased by applicable accrued interest and unamortized premium, discount, finance charges, or acquisition costs and may also reflect a previous direct write-down of the investment.

The System had no significant troubled debt restructurings that occurred within the previous 12 months and for which there was a payment default during each of the years 2016, 2015 and 2014.

(dollars in millions, except as noted)

The following table provides information on outstanding loans restructured in troubled debt restructurings at period end. These loans are included as impaired loans in the impaired loan table:

	Loans Modified as Troubled Debt Restructurings		Troubled Debt Restructurings in Nonaccrual Status*	
	December 31, 2016	December 31, 2015	December 31, 2016	December 31, 2015
Real estate mortgage	$270	$301	$ 88	$121
Production and intermediate-term	163	201	69	104
Agribusiness	53	33	51	31
Rural infrastructure	59	61		61
Rural residential real estate	11	12	4	5
Total	$556	$608	$212	$322

* Represents the portion of loans modified as troubled debt restructurings that are in nonaccrual status.

Additional commitments to lend to borrowers whose loans have been modified in troubled debt restructurings was $19 million and $14 million at December 31, 2016 and 2015.

NOTE 5 — PREMISES AND EQUIPMENT

Premises and equipment consisted of the following:

	December 31,	
	2016	2015
Land, buildings and improvements	$1,260	$1,164
Furniture and equipment	721	716
	1,981	1,880
Less: accumulated depreciation	(783)	(768)
	$1,198	$1,112

Loans held for sale were $115 million and $55 million at December 31, 2016 and 2015. Such loans are included in other assets and are carried at the lower of cost or fair value.

NOTE 6 — OTHER ASSETS AND OTHER LIABILITIES

Other assets consisted of the following:

	December 31,	
	2016	2015
Equipment held for lease	$ 982	$1,080
Accounts receivable	322	317
Interest rate swaps and other derivatives	226	301
Assets held in non-qualified benefits trusts	151	139
Loans held for sale	115	55
Equity investments in other System institutions	100	99
Other property owned	75	96
Collateral pledged to derivative counterparties	74	50
Prepaid expenses	64	63
Net deferred tax assets	20	18
Other	158	173
Total	$2,287	$2,391

(dollars in millions, except as noted)

Other liabilities consisted of the following:

	December 31, 2016	December 31, 2015
Pension and other postretirement benefit plan liabilities	$1,379	$1,443
Patronage and dividends payable	1,256	1,126
Accounts payable	690	528
Net deferred tax liabilities	477	502
Accrued salaries and employee benefits	242	230
Interest rate swaps and other derivatives	197	165
Reserve for unfunded commitments	175	181
Bank drafts payable	159	147
Liabilities held in non-qualified benefit trusts	87	81
Collateral held from derivative counterparties	86	115
Other	287	421
Total	$5,035	$4,939

Substantially all derivative contracts are supported by bilateral collateral agreements with counterparties requiring the posting of collateral in the event certain dollar thresholds of credit with exposure are reached by one of the counterparties to the other. For derivative transactions that are cleared through a futures commission merchant with a clearinghouse or central counterparty, the bilateral swap is divided into two separate swaps with the clearinghouse or central counterparty becoming the counterparty to both of the initial parties to the swap.

Reserve for unfunded commitments provides for potential losses related to unfunded commitments. This reserve is determined using a similar methodology as used for our allowance for loan losses.

NOTE 7 — FARM CREDIT INSURANCE FUND

The assets in the Insurance Fund are designated as restricted assets and the related capital is designated as restricted capital. The classification of the Insurance Fund as restricted assets (and as restricted capital) in the System's combined financial statements is based on the statutory requirement that the amounts in the Insurance Fund are to be used solely for purposes specified in the Farm Credit Act, all of which benefit Banks and Associations. The Insurance Fund is under the direct control of the Insurance Corporation, an independent U.S. government-controlled corporation, and not under the control of any System institution. A board of directors consisting of the Farm Credit Administration Board directs the Insurance Corporation.

The Insurance Corporation's primary asset is the Insurance Fund and the primary sources of funds for the Insurance Fund are:

- premiums paid by the Banks, which may be passed on to the Associations, and
- earnings on assets in the Insurance Fund.

Premiums will be due until the assets in the Insurance Fund for which no specific use has been identified or designated reach the "secure base amount," which is defined in the Farm Credit Act as 2% of the aggregate outstanding insured obligations (adjusted to reflect the System's reduced risk on loans and investments guaranteed by federal or state governments) or such other percentage of the aggregate outstanding insured obligations as the Insurance Corporation, in its sole discretion, determines to be actuarially sound.

The Insurance Corporation is required to expend funds in the Insurance Fund to:

- insure the timely payment of principal and interest on Systemwide Debt Securities, and
- ensure the retirement of protected borrower stock at par value.

The Insurance Corporation is authorized to use the Insurance Fund to cover its operating costs. Subject to the "least-cost determination" described below, the Insurance Corporation is authorized, in its sole discretion, to expend amounts in the Insurance Fund to:

- provide assistance to a financially stressed Bank or Association,

- make loans on the security of, or may purchase, and liquidate or sell, any part of the assets of any Bank or Association that is placed in receivership because of the inability of the institution to pay the principal or interest on any of its notes, bonds, debentures, or other obligations in a timely manner, or
- provide assistance to qualified merging institutions.

The Insurance Corporation cannot provide discretionary assistance to an eligible institution as described above unless the means of providing the assistance is the least costly means of all possible alternatives available to the Insurance Corporation. The alternatives may include liquidation of the eligible institution (taking into account, among other factors, payment of the insured obligations issued on behalf of the institution).

In the event a Bank is unable to pay on a timely basis an insured debt obligation for which that Bank is primarily liable, the Insurance Corporation must expend amounts in the Insurance Fund to the extent available to insure the timely payment of principal and interest on the debt obligation. The provisions of the Farm Credit Act providing for joint and several liability of the Banks on the obligation cannot be invoked until the Insurance Fund is exhausted. However, because of other mandatory and discretionary uses of the Insurance Fund, there is no assurance that there will be sufficient funds to pay principal or interest on the insured debt obligation. The insurance provided through use of the Insurance Fund is not an obligation of and is not a guarantee by the U.S. government.

The System does not have a guaranteed line of credit from the U.S. Treasury or the Federal Reserve. However, the Insurance Corporation has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation. Under its existing statutory authority, the Insurance Corporation may use these funds to provide assistance to the System Banks in exigent market circumstances which threaten the Banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and terminates on September 30, 2017, unless otherwise renewed. The decision whether to seek funds from the Federal Financing Bank is in the discretion of the Insurance Corporation, and each funding obligation of the Federal Financing Bank is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by the System.

As of December 31, 2016, the assets in the Insurance Fund aggregated $4.453 billion for which no specific use has been identified or designated by the Insurance Corporation. At December 31, 2016, assets in the Insurance Fund consisted of investments of $4.017 billion, accrued interest receivable of $17 million, other receivables of $46 million and premiums receivable from System institutions of $373 million accrued on the basis of adjusted outstanding insured debt at December 31, 2016.

If at the end of any calendar year, the aggregate amount in the Insurance Fund exceeds the secure base amount, the Insurance Corporation is required to reduce premiums, as necessary, to maintain the Insurance Fund at the 2% level. In addition, the Insurance Corporation is required to establish Allocated Insurance Reserves Accounts for each Bank and for former Farm Credit System Financial Assistance Corporation stockholders. At December 31, 2016, 2015 and 2014, the secure base amount was 1.96%, 1.87% and 1.90%.

(dollars in millions, except as noted)

At December 31, 2016 and 2015, the investments in the Insurance Fund, which are classified as restricted assets and are carried at amortized cost, consisted of the following:

	December 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury obligations	$4,017	$7	$(17)	$4,007

	December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury obligations	$3,615	$5	$(12)	$3,608

The amortized cost and fair value at December 31, 2016 by contractual maturity were as follows:

	Amortized Cost	Fair Value
Due in one year or less	$ 799	$ 799
Due one year through five years	3,136	3,128
Due after five years through ten years	82	80
	$4,017	$4,007

NOTE 8 — SHORT-TERM BORROWINGS

The System uses short-term borrowings as a source of funds. The following table shows short-term borrowings by category:

	2016		2015	
	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate
Systemwide discount notes:				
Outstanding at December 31	$29,528	0.63%	$32,282	0.30%
Average during year	32,160	0.51	23,185	0.21
Maximum month-end balance during year	34,227		32,282	
Systemwide bonds(1):				
Outstanding at December 31	10,696	0.84	10,117	0.42
Average during year	11,139	0.66	9,488	0.31
Maximum month-end balance during year	12,360		10,129	

(1) Represents bonds issued with a maturity of one year or less.

(dollars in millions, except as noted)

NOTE 9 — SYSTEMWIDE DEBT SECURITIES AND OTHER BONDS

Aggregate maturities and the weighted average interest rate of Systemwide Debt Securities were as follows at December 31, 2016:

	Bonds		Medium-term notes		Discount notes		Total	
	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate
2017	$ 74,242	0.78%			$29,528	0.63%	$103,770	0.74%
2018	63,558	0.86					63,558	0.86
2019	24,956	1.16	$ 1	6.67%			24,957	1.16
2020	13,280	1.51					13,280	1.51
2021	11,007	1.67	4	7.35			11,011	1.67
2022 and thereafter	41,116	2.56	90	5.77			41,206	2.57
Total	$228,159	1.25	$95	5.85	$29,528	0.63	$257,782	1.18

Included in Systemwide Debt Securities at December 31, 2016 are callable debt securities, which are summarized below:

Year of Maturity/Next Call Date	Maturing Amount	Callable Amount
2017	$ 2,727	$58,439
2018	7,626	671
2019	9,154	893
2020	8,264	
2021	6,511	53
2022 and thereafter	25,774	
Total	$60,056	$60,056

The average maturity of Systemwide discount notes was 4.4 months and 4.3 months at December 31, 2016 and 2015. Pursuant to authorizations by the Farm Credit Administration, the maximum amount of Systemwide discount notes, medium-term notes and global debt securities that Banks in the aggregate may have outstanding at any one time is currently $60 billion, $40 billion and $5 billion. There is no limit on the amount of Systemwide bonds that may be outstanding at any one time.

Systemwide Debt Securities are the joint and several obligations of the Banks. Payments of principal and interest to the holders of Systemwide Debt Securities with an outstanding balance aggregating $257.782 billion at December 31, 2016 are insured by amounts held in the Insurance Fund as described in Note 7.

Certain other bonds are debt issued directly by individual Banks and are the obligations solely of the issuing Bank. Payments on other bonds are not insured by the Farm Credit Insurance Corporation. The aggregate amount of bonds issued directly by the Banks was $2.431 billion at December 31, 2016 and $2.879 billion at December 31, 2015. All of these bonds mature in the following year, and had a weighted average interest rate of 0.09% for 2016 and 2015.

The Farm Credit Act and Farm Credit Administration regulations require each Bank to maintain specified eligible assets at least equal in value to the total amount of debt securities outstanding for which it is primarily liable as a condition for participation in the issuance of Systemwide Debt Securities. Each Bank was in compliance with these requirements as of December 31, 2016. At December 31, 2016, the combined Banks had specified eligible assets of \$279.3 billion, as compared with \$260.8 billion of Systemwide Debt Securities and other bonds and accrued interest payable at that date. The specified eligible asset requirement does not provide holders of the securities with a security interest in any assets of the Banks.

Farm Credit Administration regulations provide that, in the event a Bank is placed in liquidation, holders of Systemwide Debt Securities have claims against the Bank's assets, whether or not these holders file individual claims. Under these regulations, the claims of these holders are junior to claims relating to costs incurred by the receiver in connection with the administration of the receivership, claims for taxes, claims of secured creditors and claims of holders of bonds issued by the Bank individually to the extent such bonds are collateralized in accordance with the requirements of the Farm Credit Act. These regulations further provide that the claims of holders of Systemwide Debt Securities are senior to all claims of general creditors.

Amounts paid to dealers in connection with the sale of Systemwide Debt Securities are deferred and amortized to interest expense using the straight-line method (which approximates the interest method) over the term of the related indebtedness.

NOTE 10 — SUBORDINATED DEBT

As of December 31, 2016, CoBank had \$499 million of three-month LIBOR plus 0.60% unsecured subordinated notes outstanding, which were issued in June 2007 and due in 2022. The notes are redeemable in whole or in part, at CoBank's option, on June 15, 2017 and may also be redeemed, in whole, at par, upon the occurrence of certain defined regulatory events.

On April 15, 2016, CoBank redeemed \$405 million of its 7.875% subordinated debt due in 2018 at par plus accrued interest. On June 6, 2016, the Farm Credit Bank of Texas redeemed \$50 million of its 8.406% subordinated debt at par plus accrued interest due in 2018. On July 15, 2016, AgriBank redeemed \$500 million of its 9.125% subordinated debt at par plus accrued interest due in 2019. On December 15, 2016, AgStar Financial Services, ACA redeemed \$100 million of its 9.0% subordinated debt at par plus accrued interest due in 2025. The Banks and Association redeemed their subordinated debt due to the occurrence of a "Regulatory Event," as defined under the terms of the debt.

Subordinated debt is unsecured and subordinate to all other categories of creditors, including any claims of holders of Systemwide Debt Securities and general creditors, and senior to all classes of shareholders. Interest will be deferred if, as of the fifth business day prior to an interest payment date of the debt, any applicable minimum regulatory capital ratios are not satisfied. A deferral period may not last for more than five consecutive years or beyond the maturity date of the debt. During such a period, the System institution may not declare or pay any dividends or patronage distributions, among certain other restrictions, until interest payments are resumed and all deferred interest has been paid. The subordinated debt is not considered a Systemwide Debt Security and is not guaranteed by the Farm Credit System or any Banks in the System, other than the issuing Bank. Payments on the subordinated debt are not insured by the Insurance Fund.

NOTE 11 — MERGER OF SYSTEM INSTITUTIONS

The primary reason for System entity mergers is based on a determination that the combined organization would be financially and operationally stronger with an enhanced ability to fulfill its mission. The mergers were accounted for under the acquisition method of accounting.

System Banks and Associations are cooperatives that are owned and controlled by their members who use the cooperatives' products or services. As such, their capital stock provides no significant interest in corporate earnings or growth. Specifically, due to restrictions in applicable regulations and their bylaws, the capital stock is not tradable, and the capital stock can be retired only for the lesser of par value or book value. In these and other respects, the shares of capital stock in one institution that were converted to shares of another institution had identical rights and attributes. For this reason, the outstanding capital stock and other equities of the acquired institutions were converted into a like amount of capital stock and equities of the acquiring institutions. Management believes that because the stock is fixed in value, the stock issued pursuant to the mergers provides no basis for estimating the fair value of the consideration transferred pursuant to the mergers. In the absence of a purchase price determination, the acquiring institutions identified and estimated the acquisition date fair value of the equity interests (net assets) of the acquired institution instead of the acquisition date fair value of the equity interests transferred as consideration. The fair value of the net assets acquired, including specific intangible assets and liabilities assumed, were measured based on various estimates using assumptions that management believes are reasonable utilizing information currently available. These evaluations produced a fair value of identifiable assets acquired and liabilities assumed that was substantially equal to the fair value of the member interests transferred in the mergers. The difference between the fair value of identifiable net assets acquired and the fair value of member interests transferred was recorded as additional paid-in capital or a reduction in retained earnings. The mergers did not have a material impact on the System's financial condition or results of operations because the incomes of the acquired institutions were previously reflected in the Combined Statement of Income.

(dollars in millions, except as noted)

Effective January 1, 2016, two Associations within the CoBank District merged. Two Associations within the Texas District merged effective January 1, 2015, and two Associations in the CoBank District also merged effective November 1, 2015.

Effective January 1, 2014, there were several Association mergers within the System reducing the number of Associations by four (two Associations within the CoBank District and two Associations within the Texas District) and on October 1, 2014, two Associations in the CoBank District merged.

The following table summarizes the fair values of the identifiable assets acquired and liabilities assumed as of:

	Fair Value		
Merger Date	**Total Assets Acquired**	**Total Liabilities Assumed**	**Net Assets Acquired**
January 1, 2016	$ 304	$ 248	$ 56
November 1, 2015	986	852	134
January 1, 2015	547	459	88
October 1, 2014	144	105	39
January 1, 2014	1,853	1,480	373

The following table summarizes the loans acquired in the merger transactions:

Merger Date	**Loans Acquired at Fair Value**	**Loans Acquired at Contractual Amount**	**Gross Contractual Amount Not Expected to be Collected**
January 1, 2016	$ 267	$ 288	$0
November 1, 2015	918	923	0
January 1, 2015	521	525	2
October 1, 2014	126	127	0
January 1, 2014	1,766	1,762	7

(dollars in millions, except as noted)

NOTE 12 — CAPITAL STRUCTURE

Preferred Stock

As of December 31, 2016, $2.499 billion of non-cumulative perpetual preferred stock was issued and outstanding by the four Banks and one Association, plus an additional $519 million of Class H stock was issued and outstanding by four other Associations. The non-cumulative preferred stock is held by institutional investors or knowledgeable, high net worth individuals. The following table presents the general terms of the non-cumulative perpetual preferred stock outstanding issued by the Banks and one Association as of December 31, 2016 (par amount in whole dollars):

Bank	Issue Date	Amount	Shares Issued and Outstanding	Par Amount	Security Type and Dividend Rate	Key Terms
AgFirst	June 2007	$ 49.25	49,250	$1,000	Non-cumulative perpetual three-month LIBOR plus 1.13% payable quarterly	Redeemable on June 15, 2017, and each five year anniversary thereafter.
AgriBank	October 2013	250.00	2,500,000	100	Non-cumulative perpetual 6.875% payable quarterly	Beginning January 1, 2024, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 4.225%. Redeemable on January 1, 2024 and any dividend payment date thereafter.
Texas	August 2010	300.00	300,000	1,000	Non-cumulative subordinated perpetual 10.00% payable semi-annually	Redeemable after the dividend payment date in June 2020.
Texas	July 2013	300.00	3,000,000	100	Non-cumulative perpetual 6.75% payable quarterly	Beginning September 15, 2023, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 4.01%. Redeemable on September 15, 2023 and any dividend payment date thereafter.
CoBank	January 2012	225.00	225,000	1,000	Non-cumulative perpetual three-month LIBOR plus 1.18% payable quarterly	Redeemable on July 10, 2017 and each five year anniversary thereafter.
CoBank	October 2012	400.00	4,000,000	100	Non-cumulative perpetual 6.25% payable quarterly	Beginning October 1, 2022, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 4.557%. Redeemable on October 1, 2022 and any dividend payment date thereafter.
CoBank	April 2013	200.00	2,000,000	100	Non-cumulative perpetual 6.125% payable quarterly	Redeemable on July 1, 2018 and any dividend payment date thereafter.
CoBank	November 2014	300.00	3,000,000	100	Non-cumulative perpetual 6.20% payable quarterly	Beginning January 1, 2025, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 3.744%. Redeemable on January 1, 2025 and any dividend payment date thereafter.
CoBank	April 2016	375.00	3,750,000	100	Non-cumulative perpetual 6.25% payable semi-annually	Beginning October 1, 2026, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 4.66% payable quarterly. Redeemable on October 1, 2026 and any dividend payment date thereafter.
AgStar Financial Services, ACA	May 2013	100.00	100,000	1,000	Non-cumulative perpetual 6.75% payable quarterly	Beginning August 15, 2023, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 4.58%. Redeemable on August 15, 2023 and any dividend payment date thereafter.
Total		$2,499.25				

During 2016, AgFirst repurchased for $47 million, through privately negotiated transactions, and cancelled 65,750 shares of non-cumulative perpetual subordinated preferred stock at a par value of $1,000 per share. The effect of this transaction was to reduce preferred stock outstanding by $66 million and increase additional paid-in-capital by $19 million.

During 2016, CoBank issued $375 million of non-cumulative perpetual preferred stock. Dividends on preferred stock, if declared by CoBank's board of directors in its sole discretion, are non-cumulative and are payable semi-annually. Proceeds from this preferred stock issuance were used to increase regulatory capital pursuant to current Farm Credit Administration regulations and for general corporate purposes.

Non-cumulative perpetual preferred stock is not mandatorily redeemable at any time but is redeemable at par value, in whole or in part, at a Bank's option. Dividends will be payable, when, as and if declared by the board of directors in its sole discretion.

In addition, four Associations had Class H preferred stock outstanding of $519 million at December 31, 2016. The purchase of this preferred stock is limited to existing common stockholders of each issuing Association. Each Association's board of directors sets the dividend rate, and at its discretion, may retire the stock.

Capital Stock and Participation Certificates

In accordance with the Farm Credit Act, each borrower, as a condition of borrowing, is generally required to invest in capital stock or participation certificates of the Bank or Association that makes the loan. The statutory minimum amount of capital investment required for borrowers is 2% of the loan or one thousand dollars, whichever is less. The Associations are required to purchase stock in their affiliated Bank. The different classes of capital stock and participation certificates and the manner in which capital stock and participation certificates are issued, retired and transferred are set forth in the respective Bank's or Association's bylaws. The Bank or Association generally has a first lien on the capital stock and participation certificates as collateral for the repayment of the borrower/stockholder loan.

The retirement of at-risk capital must be solely at the discretion of the board of directors and not based on a date certain or on the occurrence of any event, such as the repayment of the borrower's loan.

The boards of directors of individual Banks and Associations generally may authorize the payment of dividends or patronage distributions as provided for in their respective bylaws. The payment of dividends or distribution of earnings is subject to regulations that establish minimum at-risk capital standards, as discussed below.

Additional Paid In Capital

The majority of additional paid in capital relates to Association mergers and represents the excess value received by the acquiring Association from the acquired Association over the par-value of capital stock and participation certificates issued. The amount recognized by the Combined Banks represents the excess over par value received by one Bank for its repurchase of non-cumulative fixed-to-floating preferred stock.

Additional paid in capital is considered unallocated retained earnings for purposes of shareholder distributions. Generally, patronage is paid out of current year earnings and as such, this would not be paid out in the form of patronage. In the case of liquidation, additional paid in capital would be treated as unallocated retained earnings and distributed to shareholders after other obligations of the Association had been satisfied.

(dollars in millions, except as noted)

Capital consisted of the following at December 31, 2016:

	Combined Banks	Combined Associations	Combination Entries	System Combined
Preferred stock	$ 2,399	$ 619		$ 3,018
Capital stock and participation certificates	5,682	575	$(4,457)	1,800
Additional paid-in-capital	59	1,332		1,391
Restricted capital — Insurance Fund			4,453	4,453
Accumulated other comprehensive loss	(249)	(142)	(1,143)	(1,534)
Retained earnings	9,833	33,406	(56)	43,183
Total capital	$17,724	$35,790	$(1,203)	$52,311

Combined System retained earnings reflected net eliminations of $56 million representing transactions between the Banks, the Associations, or the Insurance Fund primarily related to retained earnings allocations by certain Banks to their Associations. The Associations owned capital stock and participation certificates of the Banks amounting to approximately $4.5 billion. These amounts have been eliminated in the accompanying combined financial statements. Restricted capital is available only for the uses described in Note 7 and is not available for payment of dividends or patronage distributions.

Accumulated other comprehensive loss, net of tax, at December 31, 2016 and 2015 was comprised of the following components:

	December 31, 2016			December 31, 2015		
	Before Tax	Deferred Tax	Net of Tax	Before Tax	Deferred Tax	Net of Tax
Unrealized (losses) gains on investments available-for-sale, net	$ (121)	$ 4	$ (117)	$ 47	$(12)	$ 35
Unrealized gains on other-than-temporarily impaired investments available-for-sale	6	(1)	5	37	(3)	34
Unrealized losses on cash flow hedges, net	(61)	12	(49)	(119)	12	(107)
Pension and other benefit plans	(1,414)	41	(1,373)	(1,449)	40	(1,409)
	$(1,590)	$56	$(1,534)	$(1,484)	$ 37	$(1,447)

(dollars in millions, except as noted)

The following tables present the activity in the accumulated other comprehensive loss, net of tax, by component:

	Unrealized (losses) gains on investments available-for-sale, net	Unrealized gains on other-than-temporarily impaired investments available-for-sale	Unrealized losses on cash flow hedges, net	Pension and other benefit plans	Accumulated other comprehensive loss
Balance at December 31, 2015	$ 35	$ 34	$(107)	$(1,409)	$(1,447)
Other comprehensive income before reclassifications	(149)	(8)	53	(82)	(186)
Amounts reclassified from accumulated other comprehensive loss to income	(3)	(21)	5	118	99
Net current period other comprehensive income	(152)	(29)	58	36	(87)
Balance at December 31, 2016	$(117)	$ 5	$ (49)	$(1,373)	$(1,534)

	Unrealized gains on investments available-for-sale, net	Unrealized gains on other-than-temporarily impaired investments available-for-sale	Unrealized losses on cash flow hedges, net	Pension and other benefit plans	Accumulated other comprehensive loss
Balance at December 31, 2014	$ 160	$ 47	$(102)	$(1,402)	$(1,297)
Other comprehensive income before reclassifications	(121)	(10)	(10)	(132)	(273)
Amounts reclassified from accumulated other comprehensive loss to income	(4)	(3)	5	124	122
Net current period other comprehensive income	(125)	(13)	(5)	(8)	(151)
Adjustment due to Association mergers				1	1
Balance at December 31, 2015	$ 35	$ 34	$(107)	$(1,409)	$(1,447)

(dollars in millions, except as noted)

The following table represents reclassifications out of accumulated other comprehensive income (loss):

	For the Year Ended December 31, 2016	2015	Location of Gain/Loss Recognized in Combined Statement of Income
Unrealized (losses) gains on investments available-for-sale, net:			
Sales gains and losses	$ 3	$ 7	Net gains on sales of investments and other assets
Deferred tax		(3)	Provision for income taxes
Net amounts reclassified	3	4	
Unrealized gains on other-than-temporarily impaired investments available-for-sale:			
Holding gains and losses	(16)	(13)	Net other-than-temporary impairment losses recognized in earnings
Sales gains and losses	37	19	Net gains on sales of investments and other assets
Deferred tax		(3)	Provision for income taxes
Net amounts reclassified	21	3	
Unrealized losses on cash flow hedges, net:			
Interest rate contracts	(6)	(4)	Interest expense
Other contracts	1	(2)	Interest income
Deferred tax		1	Provision for income taxes
Net amounts reclassified	(5)	(5)	
Pension and other benefit plans:			
Net actuarial loss	(119)	(126)	Salaries and employee benefits
Prior service cost	(1)	(1)	Salaries and employee benefits
Deferred tax	2	3	Provision for income taxes
Net amounts reclassified	(118)	(124)	
Total reclassifications	$ (99)	$(122)	

As discussed in Notes 9 and 21, only the Banks are statutorily liable for the payment of principal and interest on Systemwide Debt Securities. Under each Bank's bylaws, the Bank is authorized under certain circumstances to require its affiliated Associations and certain other equity holders to purchase additional Bank equities. In most cases, the Banks are limited as to the amounts of these purchases that may be required, generally with reference to a percentage of the Association's or other equity holder's direct loan from the Bank, and calls for additional equity investments may be subject to other limits or conditions. However, the Banks generally possess indirect access to certain financial resources of their affiliated Associations through loan-pricing provisions and through Bank-influenced District operating and financing policies and agreements.

In case of liquidation or dissolution, preferred stock, capital stock, participation certificates and unallocated retained earnings would be distributed to equity holders, after the payment of all liabilities in accordance with Farm Credit Administration regulations, in the following order: (1) retirement of preferred stock at par, (2) retirement of all common stock and participation certificates at par, (3) retirement of all patronage surplus in amounts equal to the face amount of the applicable nonqualified written notices of allocation or such other notice, and (4) remaining unallocated retained earnings and reserves would be paid to the holders of voting stock, nonvoting stock and participation certificates in proportion to patronage to the extent possible.

(dollars in millions, except as noted)

Farm Credit Administration's capital regulations require that the Banks and Associations maintain permanent capital of at least seven percent of risk-adjusted assets. In addition, Farm Credit Administration regulations require that: (1) all System institutions achieve and maintain a total surplus ratio of at least seven percent of risk-adjusted assets and a core surplus ratio of at least three and one-half percent of risk-adjusted assets and (2) all Banks achieve and maintain a net collateral ratio of at least 103%. Failure of an institution to meet any of these capital requirements may result in certain discretionary actions by the Farm Credit Administration that, if undertaken, could have a direct effect on the institution's financial and operational performance. At December 31, 2016, all System institutions reported compliance with these standards.

Ranges of capital ratios reported by System institutions at December 31, 2016 were as follows:

System Institutions	Permanent Capital Ratio	Total Surplus Ratio	Core Surplus Ratio**	Net Collateral Ratio
Banks*	15.5% - 21.3%	14.5% - 21.2%	10.0% - 19.1%	105.5% - 107.4%
Associations	13.2% - 36.6%	13.0% - 36.2%	12.1% - 36.1%	Not Applicable
Regulatory minimum required	7.0%	7.0%	3.5%	103%***

* See Note 21 for each Bank's permanent capital ratio and net collateral ratio at December 31, 2016 and 2015.

** Effective January 1, 2015, the Farm Credit Administration requires CoBank to maintain a core surplus ratio of 5.59% during a period in which it includes a portion of common stock as core surplus.

*** Due to having subordinated debt outstanding, CoBank is required by the Farm Credit Administration to maintain a minimum net collateral ratio of 104%. At December 31, 2016, AgFirst, AgriBank and the Farm Credit Bank of Texas had no subordinated debt outstanding.

System institutions are prohibited from reducing capital by retiring stock (other than protected borrower stock) or making certain distributions to shareholders if, after or due to the retirement or distribution, the institution would not meet the minimum capital adequacy standards established by the Farm Credit Administration under the Farm Credit Act.

By regulation, the Farm Credit Administration is empowered to direct a transfer of funds or equities by one or more Banks or Associations to another Bank or Association, under specified circumstances. The System has never been called on to initiate any transfers pursuant to this regulation and is not aware of any proposed action under this regulation.

NOTE 13 — EMPLOYEE BENEFIT PLANS

The Banks and substantially all Associations participate in defined benefit retirement plans. The Banks and Associations, except for CoBank and certain related Associations, generally have governmental plans that cover many System institutions and as such cannot be attributed to any individual entity. Thus, these plans are recorded at the combined District level. Although these plans are aggregated in the System's combined financial statements, the plan assets are particular to each plan's obligations. These retirement plans are noncontributory and benefits are based on salary and years of service. The Banks and Associations have closed their defined benefit pension plans to new participants and offer defined contribution retirement plans to all employees hired subsequent to the close of their respective plans. In addition, certain System institutions provide healthcare and other postretirement benefits to eligible retired employees. Employees of System institutions may become eligible for healthcare and other postretirement benefits if they reach normal retirement age while working for the System.

(dollars in millions, except as noted)

The following tables set forth the funding status and the amounts recognized in the System's Combined Statement of Condition for pension and other postretirement benefit plans:

	Pension Benefits December 31,		Other Benefits December 31,	
	2016	2015	2016	2015
Change in benefit obligation:				
Benefit obligation at beginning of year	$ 3,881	$ 3,871	$ 293	$ 322
Service cost	73	77	4	5
Interest cost	156	155	13	14
Plan participants' contributions			3	3
Plan amendments	(26)	10		(6)
Actuarial loss (gain)	135	(53)	2	(30)
Benefits and premiums paid	(199)	(179)	(15)	(15)
Benefit obligation at end of year	$ 4,020	$ 3,881	$ 300	$ 293
Change in plan assets:				
Fair value of plan assets at beginning of year	$ 2,732	$ 2,763		
Actual return on plan assets	205	(34)		
Employer contributions	204	182	$ 12	$ 12
Plan participants' contributions			3	3
Benefits and premiums paid	(199)	(179)	(15)	(15)
Fair value of plan assets at end of year	$ 2,942	$ 2,732	$ 0	$ 0
Funded status at end of year	$(1,078)	$(1,149)	$(300)	$(293)
Amounts recognized in the balance sheet consist of:				
Pension asset	$ 1	$ 1		
Pension liability	(1,079)	(1,150)	$(300)	$(293)
Net amount recognized	$(1,078)	$(1,149)	$(300)	$(293)

The accumulated benefit obligation for all defined benefit pension plans was $3.591 billion, $3.419 billion and $3.397 billion at December 31, 2016, 2015 and 2014.

The following represent the amounts included in accumulated other comprehensive loss (pre-tax) at December 31:

	Pension Benefits		Other Benefits	
	2016	2015	2016	2015
Net actuarial loss	$1,390	$1,396	$42	$44
Prior service costs	(11)	18	(7)	(9)
Total amount recognized in AOCL	$1,379	$1,414	$35	$35

Information for pension plans with an accumulated benefit obligation in excess of plan assets:

	December 31,	
	2016	2015
Projected benefit obligation	$4,004	$3,865
Accumulated benefit obligation	3,576	3,404
Fair value of plan assets	2,926	2,716

(dollars in millions, except as noted)

The net periodic pension cost for defined benefit plans and other postretirement benefit plans included in the Combined Statement of Income and changes in plan assets and benefit obligations recognized in other comprehensive income (loss) are as follows:

	Pension Benefits For The Year Ended December 31,			Other Benefits For The Year Ended December 31,		
	2016	2015	2014	2016	2015	2014
Net Periodic Benefit Cost:						
Service cost	$ 73	$ 77	$ 70	$ 4	$ 5	$ 5
Interest cost	156	155	154	13	14	13
Expected return on plan assets	(180)	(182)	(178)			
Net amortization and deferral	117	122	74	1	5	(2)
Curtailments	2		2			(3)
Net periodic benefit cost	168	172	122	18	24	13
Other Changes in Plan Assets and Benefit Obligations:						
Net actuarial loss (gain)	110	163	552	1	(31)	60
Prior service (credit) cost	(26)	10	1		(6)	
Amortization of net actuarial loss	(116)	(120)	(72)	(3)	(7)	(1)
Amortization of prior service (cost) credit	(3)	(2)	(2)	2	2	3
Total recognized in other comprehensive (loss) income	(35)	51	479	0	(42)	62
Total recognized in net periodic benefit cost and other comprehensive income (loss)	$ 133	$ 223	$ 601	$18	$(18)	$75

The estimated net loss for the defined benefit pension plans that will be amortized from accumulated other comprehensive income into net periodic benefit cost over the next year is $114 million. The estimated prior service credit for the other defined benefit postretirement plans that will be amortized from accumulated other comprehensive income into net periodic benefit cost over the next year is $2 million and an estimated net loss of $3 million for other benefits.

Weighted average assumptions used to determine benefit obligations at December 31:

	Pension Benefits			Other Benefits		
	2016	2015	2014	2016	2015	2014
Discount rate	4.06%-4.30%	4.31%-4.58%	3.90%-4.17%	3.70%-4.60%	3.92%-4.70%	4.10%-4.55%
Rate of compensation increase	4.06%-5.50%	4.04%-5.50%	4.03%-5.50%	N/A	N/A	N/A

(dollars in millions, except as noted)

Weighted average assumptions used to determine net periodic benefit cost for years ended December 31:

	Pension Benefits			Other Benefits		
	2016	2015	2014	2016	2015	2014
Discount rates:						
Single weighted average rate	4.45%-4.57%	3.90%-4.17%	4.60%-5.01%	4.50%-4.70%	4.05%-4.55%	4.85%-5.20%
Spot rate						
Projected benefit obligation	4.31%-4.58%	N/A	N/A	3.92%-4.60%	N/A	N/A
Service cost	4.61%-4.73%	N/A	N/A	4.84%-4.91%	N/A	N/A
Interest cost	3.44%-3.88%	N/A	N/A	3.07%-3.82%	N/A	N/A
Expected long-term return on plan assets	5.84%-7.25%	5.92%-7.50%	6.34%-8.00%	N/A	N/A	N/A
Rate of compensation increase	4.02%-5.50%	4.01%-5.50%	4.08%-5.50%	N/A	N/A	N/A

Beginning in 2016, the discount rates used by certain plans to estimate service and interest components of net periodic benefit cost are calculated using a full yield curve method developed by an independent actuary. The approach maps a high-quality bond yield curve to the duration of the plans' liabilities, thus approximating each cash flow of the liability stream to be discounted at an interest rate specifically applicable to its respective period in time. Previously, a single weighted-average discount rate was used by these plans to estimate the service and interest components of net periodic benefit cost, similar to the other plans in the System.

The expected long-term rate of return assumption is determined independently for each defined benefit pension plan. Generally, plan trustees use historical return information to establish a best-estimate range for each asset class in which the plans are invested. Plan trustees select the most appropriate rate for each plan from the best-estimate range, taking into consideration the duration of plan benefit liabilities and plan sponsor investment policies.

For measurement purposes, an annual rate increase of 6.75%-7.75% in the per capita cost of covered health benefits was assumed for 2017. The rates were assumed to step down to 4.50%-5.00% in various years beginning in 2023-2025, and remain at that level thereafter.

Assumed healthcare trend rates have a significant effect on the amounts reported for the healthcare plans. A one percentage point change in the assumed healthcare cost trend rates would have the following effects:

	1% Increase	1% Decrease
Effect on postretirement benefit obligation	$46	$(37)
Effect on total of service and interest cost	3	(2)

Plan Assets

The trustees of each defined benefit pension plan and other postretirement benefit plan set investment policies and strategies for the plan, including target allocation percentages for each category of plan asset. Generally, the funding objectives of the pension plans are to achieve and maintain plan assets adequate to cover the accumulated benefit obligations and to provide competitive investment returns and reasonable risk levels when measured against appropriate benchmarks. Plan trustees develop asset allocation policies based on plan objectives, characteristics of pension liabilities, capital market expectations, and asset-liability projections. Substantially all postretirement healthcare plans have no plan assets and are funded on a current basis by employer contributions and retiree premium payments.

	Pension Benefits Target Allocation for Next Year
Asset Category	
Equity securities	40%-75%
Debt securities	25%-62%
Other	0%-10%

(dollars in millions, except as noted)

In 2016, the System adopted FASB guidance entitled "Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share," which required retroactive reclassification of investments for which fair value is measured using the net asset value per share practical expedient, consistent with current year presentation. These assets are no longer required to be categorized within the fair value hierarchy.

The fair values of the System's pension plan assets at December 31, 2016 and 2015 by asset category are as follows:

	Fair Value Measurement Using			
December 31, 2016	**Level 1**	**Level 2**	**Level 3**	**Total Fair Value**
Cash and cash equivalents	$ 95			$ 95
Mutual Funds:				
International funds	41	$ 338		379
Fixed income funds	5	351		356
Domestic funds	96	206		302
Bond funds	90	140		230
Real estate equity funds		27		27
Other funds	25			25
Investment insurance contracts			$6	6
Total	$352	$1,062	$6	1,420
Investments measured at net asset value*				1,522
Total assets at fair value				$2,942

	Fair Value Measurement Using			
December 31, 2015	**Level 1**	**Level 2**	**Level 3**	**Total Fair Value**
Cash and cash equivalents	$ 41			$ 41
Mutual Funds:				
International funds	39	$319		358
Fixed income funds	4	334		338
Domestic funds	91	183		274
Bond funds	92	127		219
Real estate equity funds		26		26
Other funds	24			24
Investment insurance contracts			$6	6
Total	$291	$989	$6	1,286
Investments measured at net asset value*				1,446
Total assets at fair value				$2,732

* The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the net assets in the pension plans.

(dollars in millions, except as noted)

There were no material changes in Level 3 pension plan assets for the years ended December 31, 2016 and 2015. In addition, there were no plan assets for other benefits at December 31, 2016 and 2015.

Concentrations of Credit Risk

The plan assets are diversified into various investment types as shown in the preceding table. The plan assets are primarily spread among various mutual funds, with numerous fund managers. Diversification is also obtained by selecting fund managers whose funds are not concentrated in individual stock, or individual countries for the international funds.

Contributions

The Banks and Associations expect to contribute $216 million to their pension plans and $12 million to their other postretirement benefit plans in 2017.

The Banks and Associations expect to pay the following benefit payments, which reflect expected future service, as appropriate.

Year	Pension Benefits	Other Benefits
2017	$ 229	$12
2018	223	13
2019	232	14
2020	242	15
2021	254	15
2022 to 2026	1,348	83

The Banks and Associations also participate in defined contribution savings plans. Certain plans require Banks and Associations to match a percentage of employee contributions. Employer contributions to these plans were $94 million, $89 million and $91 million for the years ended December 31, 2016, 2015 and 2014.

NOTE 14 — INCOME TAXES

The provision for income taxes was comprised of the following amounts:

	For The Year Ended December 31,		
	2016	2015	2014
Current:			
Federal	$159	$130	$142
State and local	23	15	22
Deferred:			
Federal	(4)	46	52
State	(3)	6	5
Provision for income taxes	$175	$197	$221

(dollars in millions, except as noted)

The deferred income tax provision (benefit) results from differences between amounts of assets and liabilities as measured for income tax return and financial reporting purposes. The significant components of deferred tax assets and liabilities at December 31, 2016 and 2015 were as follows:

	December 31, 2016	December 31, 2015
Deferred tax assets:		
Allowance for loan losses	$ 377	$ 340
Employee benefit plan obligations	121	110
Loss carryforwards	96	86
Nonaccrual loan interest	20	20
Loan origination fees	18	17
Unrealized net losses on investments available-for-sale	15	
Other	43	47
Gross deferred tax assets	690	620
Less: valuation allowance	(220)	(201)
Deferred tax assets, net of valuation allowance	470	419
Deferred tax liabilities:		
Direct financing leases	(819)	(804)
Patronage allocated by Banks to Associations	(54)	(49)
Pensions	(23)	(21)
Depreciation	(3)	(5)
Unrealized net gains on investments available-for-sale		(3)
Other	(28)	(21)
Gross deferred tax liabilities	(927)	(903)
Net deferred tax liability	$(457)	$(484)
System entities with net deferred tax assets (included in other assets)	$ 20	$ 18
System entities with net deferred tax liabilities (included in other liabilities)	(477)	(502)
	$(457)	$(484)

The provision for income taxes differs from the amount of income tax determined by applying the applicable U.S. statutory federal income tax rate to pretax income from continuing operations as a result of the following differences:

	Year Ended December 31, 2016	2015	2014
Federal tax at statutory rate	$ 1,758	$ 1,710	$ 1,731
State tax, net	14	16	20
Effect of nontaxable entities	(1,283)	(1,235)	(1,258)
Patronage distributions allocated by taxable entities	(327)	(282)	(283)
Other	13	(12)	11
Provision for income taxes	$ 175	$ 197	$ 221

System entities have unrecognized tax benefits for which liabilities have been established. The total amount of unrecognized tax benefits were $4 million, $4 million and $6 million at December 31, 2016, 2015 and 2014.

System entities recognize interest and penalties related to unrecognized tax benefits as an adjustment to income tax expense. The amounts of interest and penalties recognized in 2016, 2015 and 2014 were not significant. At December 31, 2016, no interest or penalties were accrued. The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rates were $4 million, $3 million and $5 million at December 31, 2016, 2015 and 2014. System entities did not have any positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly increase or decrease within the next 12 months. The tax years that remain open for federal and major state income tax jurisdictions are 2013 and forward.

NOTE 15 — FAIR VALUE MEASUREMENTS

Accounting guidance defines fair value as the exchange price that would be received for an asset or paid to transfer a liability in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability. See Note 2 — Summary of Significant Accounting Policies for additional information.

(dollars in millions, except as noted)

Assets and liabilities measured at fair value on a recurring basis at December 31, 2016 and 2015 for each of the fair value hierarchy levels are summarized below:

December 31, 2016	Fair Value Measurement Using Level 1	Level 2	Level 3	Total Fair Value
Assets:				
Federal funds sold and securities purchased under resale agreements		$ 1,627		$ 1,627
Commercial paper, bankers' acceptances, certificates of deposit and other securities		5,805	$ 7	5,812
U.S. Treasury securities		15,544		15,544
U.S. agency securities		5,465		5,465
Mortgage-backed securities		24,993	687	25,680
Asset-backed securities		2,538	32	2,570
Derivative assets		226		226
Assets held in non-qualified benefits trusts	$151			151
Total assets	$151	$56,198	$726	$57,075
Liabilities:				
Derivative liabilities		$ 197		$ 197
Collateral liabilities		86		86
Standby letters of credit			$ 13	13
Total liabilities	$ 0	$ 283	$ 13	$ 296

December 31, 2015	Fair Value Measurement Using Level 1	Level 2	Level 3	Total Fair Value
Assets:				
Federal funds sold and securities purchased under resale agreements		$ 1,661		$ 1,661
Commercial paper, bankers' acceptances, certificates of deposit and other securities		5,281		5,281
U.S. Treasury securities		10,046		10,046
U.S. agency securities		6,199		6,199
Mortgage-backed securities		25,356	$807	26,163
Asset-backed securities		2,520	56	2,576
Derivative assets		301		301
Assets held in non-qualified benefits trusts	$139			139
Total assets	$139	$51,364	$863	$52,366
Liabilities:				
Derivative liabilities		$ 165		$ 165
Collateral liabilities		115		115
Standby letters of credit			$ 14	14
Total liabilities	$ 0	$ 280	$ 14	$ 294

(dollars in millions, except as noted)

The tables below summarize the activity of all Level 3 assets and liabilities measured at fair value on a recurring basis:

	Commercial paper, bankers' acceptances, certificates of deposit and other securities	Mortgage-backed securities	Asset-backed securities	Standby letters of credit
Balance at December 31, 2015		$ 807	$56	$14
Total gains or (losses) realized/unrealized:				
Included in earnings		5	5	
Included in other comprehensive loss		(12)	(8)	
Sales		(87)	(7)	
Issuances	$2			8
Settlements		(108)	(9)	(9)
Transfers from Level 3 into Level 2		(50)	(5)	
Transfers into Level 3 from Level 2	5	132		
Balance at December 31, 2016	$7	$ 687	$32	$13
The amount of losses for the period included in earnings attributable to the change in unrealized gains or losses relating to assets or liabilities still held at December 31, 2016	$0	$ 15	$ 1	$ 0

	Mortgage-backed securities	Asset-backed securities	Standby letters of credit
Balance at December 31, 2014	$1,084	$161	$13
Total gains or (losses) realized/unrealized:			
Included in earnings	(8)	14	
Included in other comprehensive loss	19	(14)	
Purchases	50	5	
Sales	(55)	(60)	
Issuances			7
Settlements	(142)	(16)	(6)
Transfers from Level 3 into Level 2	(141)	(34)	
Balance at December 31, 2015	$ 807	$ 56	$14
The amount of losses for the period included in earnings attributable to the change in unrealized gains or losses relating to assets or liabilities still held at December 31, 2015	$ 13	$ 0	$ 0

(dollars in millions, except as noted)

The transfers between Level 3 and Level 2 during 2016 and 2015 were due to a change in the sources of pricing information. There were no transfers into or out of Level 1 for both 2016 and 2015.

Assets measured at fair value on a non-recurring basis at December 31, 2016 and 2015 for each of the fair value hierarchy levels are summarized below:

December 31, 2016	Fair Value Measurement Using		Total Fair Value	Total (Losses) Gains
	Level 2	Level 3		
Assets:				
Loans	$30	$1,520	$1,550	$(76)
Other property owned		83	83	5

December 31, 2015	Fair Value Measurement Using		Total Fair Value	Total (Losses) Gains
	Level 2	Level 3		
Assets:				
Loans	$34	$1,483	$1,517	$(47)
Other property owned		107	107	1

Financial assets and financial liabilities measured at carrying amounts and not measured at fair value on the Combined Statement of Condition for each of the fair value hierarchy levels are summarized as follows:

	December 31, 2016				
	Total Carrying Amount	Fair Value Measurement Using			Total Fair Value
		Level 1	Level 2	Level 3	
Assets:					
Cash	$ 3,240	$3,240			$ 3,240
Mission-related and other investments held-to-maturity	2,637		$794	$ 1,789	2,583
Net loans	247,262		16	251,488	251,504
Total assets	$253,139	$3,240	$810	$253,277	$257,327
Liabilities:					
Systemwide Debt Securities	$257,782			$257,708	$257,708
Subordinated debt	499			478	478
Other bonds	2,431			2,431	2,431
Other interest bearing liabilities	1,243		$ 4	1,236	1,240
Total liabilities	$261,955	$ 0	$ 4	$261,853	$261,857
Other financial instruments:					
Commitments to extend credit				$ 191	$ 191

(dollars in millions, except as noted)

	December 31, 2015				
	Total Carrying Amount	Fair Value Measurement Using			Total Fair Value
		Level 1	Level 2	Level 3	
Assets:					
Cash	$ 4,974	$4,974			$ 4,974
Mission-related and other investments held-to-maturity	2,478		$897	$ 1,565	2,462
Net loans	234,610		28	239,531	239,559
Total assets	$242,062	$4,974	$925	$241,096	$246,995
Liabilities:					
Systemwide Debt Securities	$243,335			$243,861	$243,861
Subordinated debt	1,550			1,693	1,693
Other bonds	2,879			2,879	2,879
Other interest bearing liabilities	1,343		$ 6	1,335	1,341
Total liabilities	$249,107	$ 0	$ 6	$249,768	$249,774
Other financial instruments:					
Commitments to extend credit				$ 198	$ 198

Sensitivity to Changes in Significant Unobservable Inputs

For recurring fair value measurements categorized within Level 3 of the fair value hierarchy, the significant unobservable inputs used in the fair value measurement of the mortgage-backed securities are prepayment rates, probability of default, and loss severity in the event of default. Significant increases (decreases) in any of those inputs in isolation would result in a significantly lower (higher) fair value measurement.

Generally, a change in the assumption used for the probability of default is accompanied by a directionally similar change in the assumption used for the loss severity and a directionally opposite change in the assumption used for prepayment rates.

Quoted market prices are generally not available for the instruments presented below. Accordingly, fair values are based on judgments regarding anticipated cash flows, future expected loss experience, current economic conditions, risk characteristics of various financial instruments, and other factors. These estimates involve uncertainties and matters of judgment, and therefore cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

(dollars in millions, except as noted)

Quantitative Information about Recurring and Nonrecurring Level 3 Fair Value Measurements

	Fair Value		Valuation Technique(s)	Unobservable Input	Range of Inputs	
	December 31, 2016	December 31, 2015			December 31, 2016	December 31, 2015
Commercial paper, bankers' acceptances, certificates of deposit and other securities	$ 7	$ 0	Discounted cash flow	Prepayment rate	0.0%	
Mortgage-backed securities	$237	$293	Discounted cash flow	Prepayment rate	5.0%-65.0%	12.2%-77.2%
	450	514	Vendor priced			
	$687	$807				
Asset-backed securities		$ 7	Discounted cash flow	Prepayment rate		0.0%-20.0%
	$ 32	49	Vendor priced			
	$ 32	$ 56				
Standby letters of credit	$ 13	$ 14	Discounted cash flow	Rate of funding	50.0%	50.0%
				Risk-adjusted spread	0.2%-1.5%	0.2%-1.5%

With regard to nonrecurring measurements for impaired loans and other property owned, it is not practicable to provide specific information on inputs as each collateral property is unique. System institutions utilize appraisals to value these loans and other property owned and take into account unobservable inputs such as income and expense, comparable sales, replacement cost and comparability adjustments.

Information about Recurring and Nonrecurring Level 2 Fair Value Measurements

	Valuation Technique(s)	Input
Federal funds sold and securities purchased under resale agreements	Carrying value	Par/principal and appropriate interest yield
Investment securities available for sale	Discounted cash flow	Constant prepayment rate
		Probability of default
		Loss severity
	Quoted prices	Price for similar security
Interest rate swaps and caps	Discounted cash flow	Annualized volatility
		Counterparty credit risk
		Company's own credit risk

Information about Other Financial Instrument Fair Value Measurements

	Valuation Technique(s)	Input
Cash	Carrying value	Par/principal and appropriate interest yield
Mission-related and other investments held-to-maturity	Discounted cash flow	Prepayment rates Probability of default Loss severity
Loans	Discounted cash flow	Prepayment forecasts Probability of default Loss severity
Systemwide Debt Securities and other bonds	Discounted cash flow	Benchmark yield curve Derived yield spread Company's own credit risk
Subordinated debt	Discounted cash flow	Credit spreads Market trends Interest rate risks
	Broker/Dealer quotes	Price for similar security
Other interest bearing liabilities	Carrying value	Par/principal and appropriate interest yield

Valuation Techniques

As more fully discussed in Note 2 — Summary of Significant Accounting Policies, FASB guidance establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The following represents a brief summary of the valuation techniques used by the System for assets and liabilities:

Investment Securities

Where quoted prices are available in an active market, available-for-sale securities would be classified as Level 1. If quoted prices are not available in an active market, the fair value of securities is estimated using pricing models that utilize observable inputs, quoted prices for similar securities received from pricing services or discounted cash flows. Generally, these securities would be classified as Level 2. This would include U.S. Treasury, U.S. agency and certain mortgage-backed securities. Where there is limited activity or less transparency around inputs to the valuation, the securities are classified as Level 3. Securities classified within Level 3 include a small portion of asset-backed securities and certain mortgage-backed securities including private label- FHA/VA securities and those issued by Farmer Mac.

As permitted under Farm Credit Administration regulations, the Banks are authorized to hold eligible investments. The regulations define eligible investments by specifying credit rating criteria, final maturity limit, and percentage of portfolio limit for each investment type. At the time of purchase, mortgage-backed and asset-backed securities must be triple-A rated by at least one Nationally Recognized Statistical Rating Organization. The triple-A rating requirement puts the Banks in a position to hold the senior tranches of securitizations. The underlying loans for mortgage-backed securities are residential mortgages, while the underlying loans for asset-backed securities are home equity lines of credit, small business loans, equipment loans or student loans.

To estimate the fair value of the majority of the investments held, the Banks obtain prices from third party pricing services. For the valuation of securities not actively traded, including certain non-agency securities, the Banks utilize either a third party cash flow model or an internal model. The significant inputs for the valuation models include yields, probability of default, loss severity and prepayment rates.

Derivatives

Exchange-traded derivatives valued using quoted prices would be classified within Level 1 of the valuation hierarchy. However, few classes of derivative contracts are listed on an exchange; thus, the majority of the derivative positions are valued using internally developed models that use as their basis readily observable market parameters and are classified within Level 2 of the valuation hierarchy. Such derivatives include basic interest rate swaps and options.

The models used to determine the fair value of derivative assets and liabilities use an income approach based on observable market inputs, primarily the LIBOR swap curve and volatility assumptions about future interest rate movements.

Assets Held in Non-Qualified Benefits Trusts

Assets held in trust funds related to deferred compensation and supplemental retirement plans are classified within Level 1. The trust funds include investments that are actively traded and have quoted net asset values that are observable in the marketplace.

Standby Letters of Credit

The fair value of letters of credit approximate the fees currently charged for similar agreements or the estimated cost to terminate or otherwise settle similar obligations.

Loans Evaluated for Impairment

For certain loans evaluated for impairment under FASB impairment guidance, the fair value is based upon the underlying collateral since the loans are collateral-dependent loans for which real estate is the collateral. The fair value measurement process uses independent appraisals and other market-based information, but in many cases it also requires significant input based on management's knowledge of and judgment about current market conditions, specific issues relating to the collateral and other matters. As a result, a majority of these loans have fair value measurements that fall within Level 3 of the fair value hierarchy. When the value of the real estate, less estimated costs to sell, is less than the principal balance of the loan, a specific reserve is established. The fair value of these loans would fall under Level 2 of the hierarchy if the process uses independent appraisals and other market-based information.

Other Property Owned

Other property owned is generally classified as Level 3 of the fair value hierarchy. The process for measuring the fair value of other property owned involves the use of independent appraisals or other market-based information. Costs to sell represent transaction costs and are not included as a component of the asset's fair value.

Collateral Liabilities

Substantially all derivative contracts are supported by bilateral collateral agreements with counterparties requiring the posting of collateral in the event certain dollar thresholds of credit exposure are reached. The market value of collateral liabilities is its face value plus accrued interest that approximates fair value.

Cash

For cash, the carrying amount is a reasonable estimate of fair value.

Loans

Fair value is estimated by discounting the expected future cash flows using the Banks' or the Associations' current interest rates at which similar loans would be made to borrowers with similar credit risk. The discount rates are based on the Banks' or the Associations' current loan origination rates as well as managements' estimates of credit risk. Management has no basis to determine whether the fair values presented would be indicative of the value negotiated in an actual sale and could be less.

For purposes of estimating fair value of accruing loans, the loan portfolio is segregated into pools of loans with homogeneous characteristics. Expected future cash flows, primarily based on contractual terms, and interest rates reflecting appropriate credit risk are separately determined for each individual pool.

The fair value of loans in nonaccrual status that are current as to principal and interest is estimated as described above, with appropriately higher interest rates which reflect the uncertainty of continued cash flows. For collateral-dependent impaired loans, it is assumed that collection will result only from the disposition of the underlying collateral.

Bonds and Notes

Systemwide Debt Securities are not all traded in the secondary market and those that are traded may not have readily available quoted market prices. Therefore, the fair value of the instruments is estimated by calculating the discounted value of the expected future cash flows. The discount rates used are based on the sum of quoted market yields for the Treasury yield curve and an estimated yield-spread relationship between System debt instruments and Treasury securities. We estimate an appropriate yield-spread taking into consideration selling group member (banks and securities dealers) yield indications, observed new government-sponsored enterprise debt security pricing, and pricing levels in the related U.S. dollar interest rate swap market.

Subordinated Debt

The fair value of subordinated debt is estimated based upon quotes obtained from a broker/dealer or based on discounted cash flows.

Commitments to Extend Credit

The fair value of commitments is estimated using the fees currently charged for similar agreements, taking into account the remaining terms of the agreements and the creditworthiness of the counterparties. For fixed-rate loan commitments, estimated fair value also considers the difference between current levels of interest rates and the committed rates.

NOTE 16 — DERIVATIVE PRODUCTS AND HEDGING ACTIVITIES

The Banks and Associations maintain an overall interest rate risk management strategy that incorporates the use of derivative products to minimize significant unplanned fluctuations in earnings that are caused by interest rate volatility. The Banks' and Associations' goals are to manage interest rate sensitivity by modifying the repricing or maturity characteristics of certain balance sheet assets and liabilities so that movements in interest rates do not adversely affect the net interest margin. As a result of interest rate fluctuations, hedged fixed-rate assets and liabilities will appreciate or depreciate in market value. The effect of this unrealized appreciation or depreciation is expected to be substantially offset by the Banks' gains or losses on the derivative instruments that are linked to these hedged assets and liabilities. Another result of interest rate fluctuations is that the interest income and interest expense of hedged floating-rate assets and liabilities will increase or decrease. The effect of this variability in earnings is expected to be substantially offset by the Banks' gains and losses on the derivative instruments that are linked to these hedged assets and liabilities. The Banks consider the strategic use of derivatives to be a prudent method of managing interest rate sensitivity, as it prevents earnings from being exposed to undue risk posed by changes in interest rates.

In addition, the Banks enter into derivative transactions, particularly interest rate swaps, to lower funding costs, diversify sources of funding, alter interest rate exposures arising from mismatches between assets and liabilities, or better manage liquidity. The Banks may also enter into derivatives with their customers as a service to enable them to transfer, modify or reduce their interest rate risk by transferring this risk to the Bank. The Banks substantially offset the market risk by concurrently entering into offsetting agreements with non-System institutional counterparties. Interest rate swaps allow the Banks to raise long-term borrowings at fixed rates and swap them into floating rates that are lower than those available to the Bank if floating rate borrowings were made directly. These interest rate swaps also help the Banks to manage their liquidity. Under interest rate swap arrangements, the Banks agree with other parties to exchange, at specified intervals, payment streams calculated on a specified notional principal amount, with at least one stream based on a specified floating rate index.

A substantial amount of the System's assets are interest-earning assets (principally loans and investments) that tend to be medium-term floating-rate instruments, while the related interest-bearing liabilities tend to be short- or medium-term fixed rate obligations. Given this asset-liability mismatch, interest rate swaps in which a Bank pays the floating rate and receives the fixed rate (receive-fixed swaps) are used to reduce the impact of market fluctuations on a Bank's net interest income. Because the size of swap positions needed to reduce the impact of market fluctuations varies over time, a Bank also enters into swaps in which it receives the floating rate and pays the fixed rate (pay-fixed swaps) when necessary to reduce its net position.

(dollars in millions, except as noted)

The Banks may purchase interest rate options, such as caps, in order to reduce the impact of rising interest rates on their floating-rate debt, and floors, in order to reduce the impact of falling interest rates on their floating-rate assets. The primary types of derivative instruments used and the amount of activity (notional amount of derivatives) during 2016 and 2015 are summarized in the following tables:

	Receive-Fixed Swaps	Pay-Fixed and Amortizing Pay-Fixed Swaps	Floating-for-Floating and Amortizing Floating-for-Floating	Interest Rate Caps	Other Derivatives	Total
Balance at December 31, 2015	$12,197	$6,250	$2,500	$2,915	$ 5,205	$ 29,067
Additions	5,799	2,058	1,400	415	5,923	15,595
Maturities/amortization	(2,831)	(433)	(800)	(281)	(5,055)	(9,400)
Terminations	(250)	(242)			(215)	(707)
Balance at December 31, 2016	$14,915	$7,633	$3,100	$3,049	$ 5,858	$ 34,555

	Receive-Fixed Swaps	Pay-Fixed and Amortizing Pay-Fixed Swaps	Floating-for-Floating and Amortizing Floating-for-Floating	Interest Rate Caps	Other Derivatives	Total
Balance at December 31, 2014	$12,675	$5,230	$1,150	$3,309	$ 4,474	$ 26,838
Additions	5,502	2,122	1,700	185	5,471	14,980
Maturities/amortization	(5,110)	(866)	(350)	(579)	(4,427)	(11,332)
Terminations	(870)	(236)			(313)	(1,419)
Balance at December 31, 2015	$12,197	$6,250	$2,500	$2,915	$ 5,205	$ 29,067

Banks are exposed to credit and market risk through their use of derivatives. If a counterparty fails to fulfill its performance obligations under a derivative contract, the Bank's credit risk will equal the fair value gain in a derivative. Generally, when the fair value of a derivative contract is positive, this indicates that the counterparty owes a Bank, thus creating a repayment (credit) risk for a Bank. When the fair value of the derivative contract is negative, a Bank owes the counterparty and, therefore, assumes no repayment risk.

To minimize the risk of credit losses, the Banks almost exclusively deal with non-customer counterparties that have an investment grade or better credit rating from a major rating agency, and also monitor the credit standing and levels of exposure to individual counterparties. The Banks do not anticipate nonperformance by any of these counterparties. The Banks typically enter into master agreements that contain netting provisions. These provisions allow the Banks to require the net settlement of covered contracts with the same counterparty in the event of default by the counterparty on one or more contracts. A majority of derivative contracts are supported by collateral arrangements with counterparties. The System's exposure to counterparties, net of $100 million of collateral at December 31, 2016 and $150 million at December 31, 2015, was $11 million and $10 million. The collateral consisted of $86 million of cash and $7 million in securities at

December 31, 2016, as compared with $115 million of cash and $35 million in securities at December 31, 2015.

The Banks may also clear derivative transactions through a futures commission merchant (FCM) with a clearinghouse or a central counterparty (CCP). When the swap is cleared by the two parties, the single bilateral swap is divided into two separate swaps with the CCP becoming the counterparty to both of the initial parties to the swap. CCPs have several layers of protection against default including margin, member capital contributions, and FCM guarantees of their customers' transactions with the CCP. FCMs also pre-qualify the counterparties to all swaps that are sent to the CCP from a credit perspective, setting limits for each counterparty and collecting initial and variation margin daily from each counterparty for changes in the value of cleared derivatives. The margin collected from both parties to the swap protects against credit risk in the event a counterparty defaults. The initial and variation margin requirements are set by and held for the benefit of the CCP. Additional initial margin may be required and held by the FCM, due to its guarantees of its customers' trades with the CCP.

Each Bank's derivative activities are monitored by its Asset-Liability Management Committee (ALCO) as part of the Committee's oversight of the Bank's asset/liability and treasury functions. Each Bank's ALCO is responsible for approving hedging strategies that are developed within parameters established by each Bank's board of directors through the Bank's analysis of data derived from financial simulation models and other internal and industry sources. The resulting hedging strategies are then incorporated into the Bank's overall interest rate risk-management strategies.

Fair Value Hedges

For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item (principally, debt securities) attributable to the hedged risk are recognized in current earnings. The System includes the gain or loss on the hedged items in the same line item (interest expense) as the offsetting loss or gain on the related interest rate swaps. The amount of the losses on interest rate swaps recognized in interest expense for 2016, 2015 and 2014 were $170 million, $193 million and $253 million, as compared with gains on the Systemwide Debt Securities of $171 million, $196 million and $260 million.

Cash Flow Hedges

For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings.

Derivatives not Designated as Hedges

For derivatives not designated as a hedging instrument, the related change in fair value is recorded in current period earnings in "net gains on derivative and other transactions" in the Combined Statement of Income.

(dollars in millions, except as noted)

Fair Values of Derivative Instruments

The following table represents the fair value of derivative instruments:

	Balance Sheet Classification Assets	Fair Value at December 31, 2016	Fair Value at December 31, 2015	Balance Sheet Classification Liabilities	Fair Value at December 31, 2016	Fair Value at December 31, 2015
Derivatives designated as hedging instruments:						
Receive-fixed swaps	Other assets	$ 11	$124	Other liabilities	$ 60	$ 4
Pay-fixed and amortizing pay-fixed swaps	Other assets	41	3	Other liabilities	50	65
Interest rate caps	Other assets	42	37			
Floating-for-floating and amortizing floating-for-floating swaps	Other assets	2		Other liabilities	2	3
Foreign exchange contracts	Other assets	4	2	Other liabilities	1	1
Total derivatives designated as hedging instruments		$100	$166		$113	$ 73
Derivatives not designated as hedging instruments:						
Pay-fixed and amortizing pay-fixed swaps	Other assets	$ 4				
Derivatives entered into on behalf of customers	Other assets	147	$149	Other liabilities	$108	$106
Foreign exchange contracts	Other assets	2	3	Other liabilities	3	3
Total derivatives not designated as hedging instruments		$153	$152		$111	$109
Total derivatives		$253	$318		$224	$182

The following table sets forth the amount of gain recognized in the Combined Statement of Income for the years ended December 31, 2016, 2015 and 2014:

Derivatives-Fair Value Hedging Relationships	Location of Gain Recognized in Combined Statement of Income	For the Year Ended December 31, 2016	2015	2014
Receive-fixed swaps	Interest expense	$1	$3	$7

(dollars in millions, except as noted)

The following table sets forth the effect of derivative financial instruments in cash flow hedging relationships:

Derivatives-Cash Flow Hedging Relationships	Amount of Gain or (Loss) Recognized in OCI on Derivatives (Effective Portion) December 31, 2016	2015	2014	Location of Gain or (Loss) Reclassification from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion) December 31, 2016	2015	2014
Pay-fixed and amortizing pay-fixed swaps	$51	$ (1)	$(67)	Interest expense	$(1)		
Floating-for-floating and amortizing floating-for-floating swaps	3	2	2				
Interest rate caps	6	(3)	(14)	Interest expense	(5)	$(4)	$(4)
Foreign exchange contracts	(7)	(8)	(17)	Interest income	1	(1)	3
Other derivative products				Interest income			1
Total	$53	$(10)	$(96)		$(5)	$(5)	$ 0

The System had no significant gains or losses recognized in income on cash flow hedges (ineffective portion and amount excluded from effectiveness testing) for 2016, 2015 and 2014.

The following table sets forth the amount of gains or losses recognized in the Combined Statement of Income related to derivatives not designated as hedging instruments:

Derivatives Not Designated as Hedging Instruments	Location of Gain or (Loss) Recognized in Combined Statement of Income	For The Year Ended December 31, 2016	2015	2014
Pay-fixed and amortizing pay-fixed swaps	Noninterest income	$ 3		
Derivatives entered into on behalf of customers	Noninterest income	(4)	$15	$11
Other derivative products	Noninterest income		(1)	
Total		$(1)	$14	$11

(dollars in millions, except as noted)

NOTE 17 — ASSET/LIABILITY OFFSETTING

The following tables represent the offsetting of financial assets and liabilities:

December 31, 2016	Gross Amounts Recognized	Gross Amounts Offset in the Combined Statement of Condition	Net Amounts Presented in the Combined Statement of Condition	Gross Amounts Not Offset in the Combined Statement of Condition: Securities Received/Pledged	Cash Collateral Received/Pledged	Cleared Derivative Initial Margin Pledged	Net Amount
Assets:							
Interest rate swaps and other derivatives	$ 253	$(27)	$ 226	$ (7)	$(86)	$ 30	$ 163
Federal Funds sold and securities purchased under resale agreements	1,627		1,627	(263)			1,364
Liabilities:							
Interest rate swaps and other derivatives	224	(27)	197		(74)	(22)	101

December 31, 2015	Gross Amounts Recognized	Gross Amounts Offset in the Combined Statement of Condition	Net Amounts Presented in the Combined Statement of Condition	Gross Amounts Not Offset in the Combined Statement of Condition: Securities Received/Pledged	Cash Collateral Received/Pledged	Cleared Derivative Initial Margin Pledged	Net Amount
Assets:							
Interest rate swaps and other derivatives	$ 318	$(17)	$ 301	$ (35)	$(115)		$ 151
Federal Funds sold and securities purchased under resale agreements	1,661		1,661	(212)			1,449
Liabilities:							
Interest rate swaps and other derivatives	182	(17)	165		(50)	$(43)	72

NOTE 18 — RELATED PARTY TRANSACTIONS

In the normal course of business, the Banks and Associations may enter into loan transactions with their officers and directors and non-System organizations with which such persons may be associated. These loans are subject to special approval requirements contained in Farm Credit Administration regulations and are, in the view of the lending System institution's management, made on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with unrelated borrowers. As of December 31, 2016 and 2015, all related party loans were made in accordance with established policies and on the same terms as those prevailing at the time for comparable transactions, except for one loan to a company affiliated with a System institution director, which was $1.8 million and $2.0 million at December 31, 2016 and 2015. The interest rate on this loan was marginally lower than the rate on similar loans to unrelated borrowers.

(dollars in millions, except as noted)

Total loans outstanding to related parties were $2.4 billion and $2.1 billion at December 31, 2016 and 2015. During 2016 and 2015, $3.3 billion and $2.7 billion of new loans were made to such persons and repayments totaled $3.0 billion and $2.8 billion. In the opinions of Bank and Association managements, all such loans outstanding at December 31, 2016 and 2015 did not involve more than a normal risk of collectability, except for a loan to one Association director totaling $1.0 million in 2016 and loans to two Association directors totaling $10.2 million in 2015.

NOTE 19 — COMMITMENTS AND CONTINGENCIES

On June 13, 2016, a lawsuit was commenced by the filing of a complaint in the United States District Court Southern District of New York against CoBank by a number of investors (the "Plaintiffs") who had held CoBank's 7.875% Subordinated Notes due in 2018 (the "Notes"). The Notes were redeemed at par plus accrued interest by CoBank on April 15, 2016 due to the occurrence of a "Regulatory Event" (as defined under the terms of the Notes). The Plaintiffs have asserted a breach of contract claim and a breach of implied covenant of good faith and fair dealing claim alleging that CoBank impermissibly redeemed the Notes. The Plaintiffs have requested damages in an amount to be determined at trial, reasonable attorneys' fees and any other such relief as the court may deem just and proper. CoBank filed its answer on September 20, 2016 and discovery is ongoing. CoBank intends to vigorously defend against these allegations. The likelihood of any outcome of this proceeding cannot be determined at this time.

On November 4, 2016, an alleged class action complaint was filed in the Supreme Court of the State of New York against AgriBank by a purported beneficial owner of AgriBank's 9.125% subordinated notes due in 2019 ("Subordinated Notes"). AgriBank redeemed the Subordinated Notes at par plus accrued interest on July 15, 2016 due to the occurrence of a "Regulatory Event" (as defined under the Subordinated Notes). The plaintiffs have asserted a breach of contract claim and a breach of implied covenant of good faith and fair dealing claim alleging that AgriBank impermissibly redeemed the Notes. The plaintiffs have requested damages in an amount to be determined at trial, reasonable attorneys' fees, and other relief. On December 14, 2016, the case was moved to federal court and is pending in the Southern District of New York. The case is in the early pleading stage, and AgriBank intends to vigorously defend against these allegations. The likelihood of any outcome of this proceeding cannot be determined at this time.

At December 31, 2016, various other lawsuits were pending or threatened against System institutions. In the opinion of management, based on information currently available and taking into account the advice of legal counsel, the ultimate liability, if any, of pending legal actions will not have a material adverse impact on the System's combined results of operations or financial condition.

The Banks and Associations may participate in financial instruments with off-balance-sheet risk to satisfy the financing needs of their borrowers and to manage their exposure to interest-rate risk. These financial instruments include commitments to extend credit and standby letters of credit. In the normal course of business, various commitments are made to customers, such as commitments to extend credit and letters of credit, which represent credit-related financial instruments with off-balance-sheet risk.

A summary of the contractual amount of credit-related instruments is presented in the following table:

	December 31,	
	2016	2015
Commitments to extend credit	$89,283	$78,601
Standby letters of credit	2,399	2,430
Commercial and other letters of credit	313	268

Since many of these commitments are expected to expire without being drawn upon, the total commitments do not necessarily represent future cash requirements. However, these credit-related financial instruments have off-balance-sheet credit risk because their contractual amounts are not reflected on the balance sheet until funded or drawn upon. Standby letters of credits are reflected on the balance sheet at fair value of the liability. The credit risk associated with issuing commitments and letters of credit is substantially the same as that involved in extending loans to borrowers and the same credit policies are applied by management. Upon fully funding a commitment, the credit risk amounts are equal to the contract amounts, assuming that borrowers fail completely to meet their obligations and the collateral or other security is of no value. The amount of collateral obtained, if deemed necessary upon extension of credit, is based on management's credit evaluation of the borrower. No material losses are anticipated as a result of these transactions.

(dollars in millions, except as noted)

NOTE 20 — QUARTERLY FINANCIAL DATA (UNAUDITED)

The unaudited results of operations by quarter for the past three years are presented below:

	2016 Quarter Ended			
	March 31	June 30	Sept. 30	Dec. 31
Net interest income	$1,811	$1,843	$1,870	$1,923
Provision for loan losses	(69)	(91)	(58)	(48)
Net noninterest expense	(532)	(527)	(522)	(577)
Provision for income taxes	(53)	(45)	(38)	(39)
Net income	$1,157	$1,180	$1,252	$1,259

	2015 Quarter Ended			
	March 31	June 30	Sept. 30	Dec. 31
Net interest income	$1,727	$1,723	$1,767	$1,798
Provision for loan losses	(27)	(23)	(37)	(19)
Net noninterest expense	(506)	(499)	(477)	(542)
Provision for income taxes	(62)	(60)	(45)	(30)
Net income	$1,132	$1,141	$1,208	$1,207

	2014 Quarter Ended			
	March 31	June 30	Sept. 30	Dec. 31
Net interest income	$1,660	$1,688	$1,708	$1,748
Loan loss reversal (provision for loan losses)	12	23	(42)	(33)
Net noninterest expense	(462)	(450)	(394)	(513)
Provision for income taxes	(65)	(65)	(44)	(47)
Net income	$1,145	$1,196	$1,228	$1,155

(dollars in millions, except as noted)

NOTE 21 — COMBINING BANK-ONLY INFORMATION

The following condensed combining statements include the statement of condition, statement of comprehensive income and statement of changes in capital for the combined Banks without the affiliated Associations or other System institutions.

Combining Bank-Only Statement of Condition

December 31, 2016

	AgFirst Farm Credit Bank	AgriBank, FCB	Farm Credit Bank of Texas	CoBank, ACB	Combination Entries	Combined Banks
Assets						
Cash	$ 549	$ 470	$ 195	$ 1,661		$ 2,875
Federal funds sold and securities purchased under resale agreements	263	591	23	750		1,627
Investments (Note 3)(2)	8,032	14,897	4,832	27,765		55,526
Loans						
To Associations(1)	15,481	78,300	10,584	45,923		150,288
To others(2)	7,434	7,778	5,326	49,335	$(440)	69,433
Less: allowance for loan losses	(15)	(21)	(8)	(559)		(603)
Net loans	22,900	86,057	15,902	94,699	(440)	219,118
Accrued interest receivable	66	421	50	349		886
Other assets	248	127	220	907	202	1,704
Total assets	$32,058	$102,563	$21,222	$126,131	$(238)	$281,736
Liabilities and Capital						
Systemwide Debt Securities (Notes 8 and 9):						
Due within one year	$12,346	$ 33,353	$ 8,873	$ 49,200	$ (2)	$103,770
Due after one year	17,062	62,342	10,518	64,092	(2)	154,012
Total Systemwide Debt Securities	29,408	95,695	19,391	113,292	(4)	257,782
Subordinated debt (Note 10)				499		499
Accrued interest payable	59	223	50	281		613
Other liabilities	366	1,159	159	3,485	(51)	5,118
Total liabilities	29,833	97,077	19,600	117,557	(55)	264,012
Capital (Note 12)						
Preferred stock	49	250	600	1,500		2,399
Capital stock and participation certificates	302	2,184	317	3,072	(193)	5,682
Additional paid-in-capital	59					59
Accumulated other comprehensive income (loss)	(2)	(80)	(33)	(120)	(14)	(249)
Retained earnings	1,817	3,132	738	4,122	24	9,833
Total capital	2,225	5,486	1,622	8,574	(183)	17,724
Total liabilities and capital	$32,058	$102,563	$21,222	$126,131	$(238)	$281,736

(dollars in millions, except as noted)

Combining Bank-Only Statement of Condition

December 31, 2015

	AgFirst Farm Credit Bank	AgriBank, FCB	Farm Credit Bank of Texas	CoBank, ACB	Combination Entries	Combined Banks
Assets						
Cash	$ 461	$ 534	$ 545	$ 3,113		$ 4,653
Federal funds sold and securities purchased under resale agreements	212	1,427	22			1,661
Investments (Note 3)(2)	7,512	14,263	4,445	24,504		50,724
Loans						
To Associations(1)	14,891	74,697	9,578	43,284		142,450
To others(2)	7,250	8,123	5,193	45,756	$(481)	65,841
Less: allowance for loan losses	(15)	(18)	(6)	(486)		(525)
Net loans	22,126	82,802	14,765	88,554	(481)	207,766
Accrued interest receivable	62	381	48	332		823
Other assets	248	100	179	968	283	1,778
Total assets	$30,621	$99,507	$20,004	$117,471	$(198)	$267,405
Liabilities and Capital						
Systemwide Debt Securities (Notes 8 and 9):						
Due within one year	$ 9,838	$30,068	$ 7,767	$ 43,954	$ (5)	$ 91,622
Due after one year	18,135	62,281	10,440	60,860	(3)	151,713
Total Systemwide Debt Securities	27,973	92,349	18,207	104,814	(8)	243,335
Subordinated debt (Note 10)		498	50	903		1,451
Accrued interest payable	56	232	44	290		622
Other liabilities	337	1,254	149	3,654	(34)	5,360
Total liabilities	28,366	94,333	18,450	109,661	(42)	250,768
Capital (Note 12)						
Preferred stock	115	250	600	1,125		2,090
Capital stock and participation certificates	307	2,063	283	2,900	(167)	5,386
Additional paid-in-capital	40					40
Accumulated other comprehensive income (loss)	60	(85)	(27)	(60)	(16)	(128)
Retained earnings	1,733	2,946	698	3,845	27	9,249
Total capital	2,255	5,174	1,554	7,810	(156)	16,637
Total liabilities and capital	$30,621	$99,507	$20,004	$117,471	$(198)	$267,405

(1) These loans represent direct loans to Associations, not retail loans to borrowers. Since the Associations operate under regulations that require maintenance of certain minimum capital levels, adequate reserves, and prudent underwriting standards, these loans are considered to carry less risk. Accordingly, these loans typically have little or no associated allowance for loan losses. The majority of the credit risk resides with the Banks' and Associations' retail loans to borrowers. Association retail loans are not reflected in the combining Bank-only financial statements.

Further, the loans to the Associations are risk-weighted at 20% of the loan amount in the computation of each Bank's regulatory permanent capital, total surplus and core surplus ratios. Based upon the lower risk-weighting of these loans to the Associations, the Banks, especially AgFirst, AgriBank and Texas, typically operate with more leverage and lower earnings than would be expected from a traditional retail bank. In the case of CoBank, approximately half of its loans are retail loans to cooperatives and other eligible borrowers.

(2) Loans to others represent retail loans held by the Banks. The Banks may purchase participations in loans to eligible borrowers made by Associations, other Banks and non-System lenders. Three Banks (AgFirst, AgriBank and Texas) have one or more participation pool programs designed to allow Associations to sell loan participation interests to the Bank in order to more efficiently manage the capital of each Bank and its related Associations within their respective District. Within these programs, a separate patronage pool is created for each participating Association. The net income from each pool is tracked separately so that, at the Bank board's discretion, patronage can be distributed from the pool. The declared patronage generally approximates the net earnings of the respective pool. At December 31, 2016 and 2015, such participation pools outstanding were $165 million and $428 million for AgFirst, $2.839 billion and $3.324 billion for AgriBank and $37 million and $27 million for Texas.

Also, the participation pool program for Texas includes investments that were sold to the Bank by its Associations of $55 million and $67 million for 2016 and 2015.

(dollars in millions, except as noted)

Combining Bank-Only
Statement of Comprehensive Income

For the year ended December 31,

	AgFirst Farm Credit Bank	AgriBank, FCB	Farm Credit Bank of Texas	CoBank, ACB	Combination Entries	Combined Banks
2016						
Interest income	$ 780	$ 1,768	$ 481	$ 2,610	$ 35	$ 5,674
Interest expense	(315)	(1,194)	(246)	(1,248)	28	(2,975)
Net interest income	465	574	235	1,362	63	2,699
(Provision for loan losses) loan loss reversal	5	(6)	(1)	(63)		(65)
Noninterest income	4	97	46	178	(111)	214
Noninterest expense	(132)	(129)	(88)	(373)	(31)	(753)
Provision for income taxes				(158)		(158)
Net income	342	536	192	946	(79)	1,937
Other comprehensive (loss) income	(62)	5	(6)	(60)	2	(121)
Comprehensive income	$ 280	$ 541	$ 186	$ 886	$ (77)	$ 1,816
2015						
Interest income	$ 703	$ 1,508	$ 428	$ 2,210	$ 28	$ 4,877
Interest expense	(249)	(988)	(199)	(937)	22	(2,351)
Net interest income	454	520	229	1,273	50	2,526
(Provision for loan losses) loan loss reversal	3	(8)	3	(10)		(12)
Noninterest income	7	91	36	169	(85)	218
Noninterest expense	(127)	(123)	(76)	(324)	(32)	(682)
Provision for income taxes				(171)		(171)
Net income	337	480	192	937	(67)	1,879
Other comprehensive (loss) income	(42)	(40)	(7)	(54)	1	(142)
Comprehensive income	$ 295	$ 440	$ 185	$ 883	$ (66)	$ 1,737
2014						
Interest income	$ 694	$ 1,405	$ 390	$ 2,075	$ 20	$ 4,584
Interest expense	(210)	(880)	(166)	(843)	14	(2,085)
Net interest income	484	525	224	1,232	34	2,499
Loan loss reversal (provision for loan losses)	9	(4)	5	15		25
Noninterest income	9	160	34	126	(62)	267
Noninterest expense	(122)	(111)	(75)	(306)	(27)	(641)
Provision for income taxes				(163)		(163)
Net income	380	570	188	904	(55)	1,987
Other comprehensive income (loss)	4	(54)	13	33	(8)	(12)
Comprehensive income	$ 384	$ 516	$ 201	$ 937	$ (63)	$ 1,975

(dollars in millions, except as noted)

Combining Bank-Only
Statement of Changes in Capital

	AgFirst Farm Credit Bank	AgriBank, FCB	Farm Credit Bank of Texas	CoBank, ACB	Combination Entries	Combined Banks
Balance at December 31, 2013	$ 2,147	$ 4,921	$ 1,393	$ 6,705	$ (88)	$ 15,078
Comprehensive income (loss)	384	516	201	937	(63)	1,975
Preferred stock issued, net				295		295
Preferred stock retired				(137)		(137)
Preferred stock dividends	(2)	(17)	(50)	(54)		(123)
Capital stock and participation certificates issued	8	113	15	36		172
Capital stock, participation certificates, and retained earnings retired	(15)	(326)	(2)	(33)		(376)
Patronage	(315)	(291)	(78)	(379)	26	(1,037)
Balance at December 31, 2014	2,207	4,916	1,479	7,370	(125)	15,847
Comprehensive income (loss)	295	440	185	883	(66)	1,737
Preferred stock retired	(10)					(10)
Preferred stock dividends	(2)	(17)	(50)	(59)		(128)
Capital stock and participation certificates issued	11	182	24	66		283
Capital stock, participation certificates, and retained earnings retired	(9)	(63)	(1)	(33)		(106)
Additional paid-in-capital	3					3
Patronage	(240)	(284)	(83)	(417)	35	(989)
Balance at December 31, 2015	2,255	5,174	1,554	7,810	(156)	16,637
Comprehensive income (loss)	280	541	186	886	(77)	1,816
Preferred stock issued, net				370		370
Preferred stock retired	(66)					(66)
Preferred stock dividends	(2)	(17)	(50)	(77)		(146)
Capital stock and participation certificates issued	17	178	29	87		311
Capital stock, participation certificates, and retained earnings retired	(25)	(57)	(1)	(29)		(112)
Additional paid-in-capital	19					19
Patronage	(253)	(333)	(96)	(473)	50	(1,105)
Balance at December 31, 2016	$ 2,225	$ 5,486	$ 1,622	$ 8,574	$(183)	$ 17,724

(dollars in millions, except as noted)

Certain Bank-only ratios and other information is as follows:

	AgFirst Farm Credit Bank	AgriBank, FCB	Farm Credit Bank of Texas	CoBank, ACB
December 31, 2016				
Return on average assets	1.08%	0.53%	0.92%	0.78%
Return on average capital	14.45%	10.12%	11.67%	11.19%
Nonperforming assets as a percentage of loans and other property owned	0.21%	0.07%	0.06%	0.26%
Allowance for loan losses as a percentage of loans	0.07%	0.02%	0.05%	0.59%
Capital as a percentage of total assets	6.94%	5.35%	7.64%	6.80%
Net collateral ratio	106.7%	105.5%	107.4%	106.9%
Permanent capital ratio	21.3%	20.6%	17.4%	15.5%
Liquidity in days	201	143	199	197
Average liquidity in days during 2016	201	145	189	192
December 31, 2015				
Return on average assets	1.14%	0.51%	1.02%	0.86%
Return on average capital	14.36%	9.52%	12.22%	12.22%
Nonperforming assets as a percentage of loans and other property owned	0.25%	0.06%	0.14%	0.18%
Allowance for loan losses as a percentage of loans	0.07%	0.02%	0.04%	0.55%
Capital as a percentage of total assets	7.36%	5.20%	7.77%	6.65%
Net collateral ratio	106.9%	105.8%	107.7%	106.9%
Permanent capital ratio	20.7%	20.8%	17.7%	14.9%
Liquidity in days	206	136	200	199
Average liquidity in days during 2015	206	169	215	181

Bank-only information is considered meaningful because only the Banks are jointly and severally liable for the payment of principal and interest on Systemwide Debt Securities (See Notes 7 and 9 for additional information.) That means that each Bank is primarily liable for the payment of principal and interest on Systemwide Debt Securities issued to fund its lending activities and is also jointly and severally liable with respect to Systemwide Debt Securities issued to fund the other Banks.

The Associations are the primary owners of the Farm Credit Banks. The Agricultural Credit Bank (CoBank) is principally owned by cooperatives, other eligible borrowers and its affiliated Associations. Due to the financial and operational interdependence of the Banks and Associations, capital at the Association level reduces the Banks' credit exposure with respect to the direct loans between the Banks and each of their affiliated Associations. However, capital of the Associations may not be available if the provisions of joint and several liability were to be invoked. There are various limitations and conditions with respect to each Bank's access to the capital of its affiliated Associations, as more fully discussed in Note 12.

In the event a Bank is unable to timely pay principal or interest on an insured debt obligation for which the Bank is primarily liable, the Insurance Corporation must expend amounts in the Insurance Fund to the extent available to insure the timely payment of principal and interest on the insured debt obligation. The provisions of the Farm Credit Act providing for joint and several liability of the Banks on the obligation cannot be invoked until the amounts in the Insurance Fund have been exhausted. However, because of other mandatory and discretionary uses of the Insurance Fund, there is no assurance that there will be sufficient funds to pay the principal or interest on the insured debt obligation.

Once joint and several liability is triggered, the Farm Credit Administration is required to make "calls" to satisfy the liability first on all non-defaulting Banks in the proportion that each non-defaulting Bank's available collateral (collateral in excess of the aggregate of the Bank's collateralized obligations) bears to the aggregate available collateral of all non-defaulting Banks. If these calls do not satisfy the liability, then a further call would be made in proportion to each non-defaulting Bank's remaining assets. On making a call on non-defaulting Banks with respect to a Systemwide Debt Security issued on behalf of a defaulting Bank, the Farm Credit Administration is required to appoint the Insurance Corporation as the receiver for the defaulting Bank. The receiver would be required to expeditiously liquidate the Bank.

NOTE 22 — SUBSEQUENT EVENTS

Effective January 1, 2017, two Associations in the CoBank District merged. The merger is accounted for in the same manner as the mergers disclosed in Note 11.

The Banks and Associations have evaluated subsequent events through March 1, 2017, which is the date the financial statements were issued and have determined that there were no other events requiring disclosure.

FARM CREDIT SYSTEM

SUPPLEMENTAL COMBINING INFORMATION

The following condensed Combining Statements of Condition and Comprehensive Income present Bank-only and Insurance Fund information, as well as information related to the other entities included in the System's combined financial statements. As part of the combining process, all significant transactions between the Banks and the Associations, including loans made by the Banks to the Associations and the interest income/interest expense related thereto, and investments of the Associations in the Banks and the earnings related thereto, have been eliminated.

COMBINING STATEMENT OF CONDITION — (Condensed)
December 31, 2016
(in millions)

	Combined Banks	Combined Associations	Eliminations	Combined without Insurance Fund	Insurance Fund	System Combined
Cash and investments	$ 60,028	$ 2,547		$ 62,575		$ 62,575
Loans	219,721	179,319	$(150,272)	248,768		248,768
Less: allowance for loan losses	(603)	(903)		(1,506)		(1,506)
Net loans	219,118	178,416	(150,272)	247,262		247,262
Other assets	2,590	8,981	(5,946)	5,625		5,625
Restricted assets					$4,453	4,453
Total assets	$281,736	$189,944	$(156,218)	$315,462	$4,453	$319,915
Systemwide Debt Securities and subordinated debt	$258,281			$258,281		$258,281
Other liabilities	5,731	$154,154	$(150,562)	9,323		9,323
Total liabilities	264,012	154,154	(150,562)	267,604		267,604
Capital						
Preferred stock	2,399	619		3,018		3,018
Capital stock and participation certificates	5,682	575	(4,457)	1,800		1,800
Additional paid-in-capital	59	1,332		1,391		1,391
Restricted capital					$4,453	4,453
Accumulated other comprehensive loss	(249)	(142)	(1,143)	(1,534)		(1,534)
Retained earnings	9,833	33,406	(56)	43,183		43,183
Total capital	17,724	35,790	(5,656)	47,858	4,453	52,311
Total liabilities and capital	$281,736	$189,944	$(156,218)	$315,462	$4,453	$319,915

FARM CREDIT SYSTEM

SUPPLEMENTAL COMBINING INFORMATION — (continued)

COMBINING STATEMENT OF CONDITION — (Condensed)
December 31, 2015
(in millions)

	Combined Banks	Combined Associations	Eliminations	Combined without Insurance Fund	Insurance Fund	System Combined
Cash and investments	$ 57,038	$ 2,340		$ 59,378		$ 59,378
Loans	208,291	169,992	$(142,393)	235,890		235,890
Less: allowance for loan losses	(525)	(755)		(1,280)		(1,280)
Net loans	207,766	169,237	(142,393)	234,610		234,610
Other assets	2,601	8,433	(5,558)	5,476		5,476
Restricted assets					$4,039	4,039
Total assets	$267,405	$180,010	$(147,951)	$299,464	$4,039	$303,503
Systemwide Debt Securities and subordinated debt	$244,786	$ 99		$244,885		$244,885
Other liabilities	5,982	146,289	$(142,487)	9,784		9,784
Total liabilities	250,768	146,388	(142,487)	254,669		254,669
Capital						
Preferred stock	2,090	652		2,742		2,742
Capital stock and participation certificates	5,386	563	(4,223)	1,726		1,726
Additional paid-in-capital	40	1,276		1,316		1,316
Restricted capital					$4,039	4,039
Accumulated other comprehensive loss	(128)	(132)	(1,187)	(1,447)		(1,447)
Retained earnings	9,249	31,263	(54)	40,458		40,458
Total capital	16,637	33,622	(5,464)	44,795	4,039	48,834
Total liabilities and capital	$267,405	$180,010	$(147,951)	$299,464	$4,039	$303,503

FARM CREDIT SYSTEM

SUPPLEMENTAL COMBINING INFORMATION — (continued)

COMBINING STATEMENT OF COMPREHENSIVE INCOME — (Condensed)
For the Year Ended December 31,
(in millions)

	Combined Banks	Combined Associations	Eliminations	Combined without Insurance Fund	Insurance Fund	Combination Entries	System Combined
2016							
Net interest income	$2,699	$ 4,739	$ 9	$ 7,447			$ 7,447
Provision for loan losses	(65)	(201)		(266)			(266)
Noninterest income	214	1,448	(1,073)	589	$418	$(373)(a)	634
Noninterest expense	(753)	(2,582)	174	(3,161)	(4)	373 (a)	(2,792)
Provision for income taxes	(158)	(17)		(175)			(175)
Net income	1,937	3,387	(890)	4,434	414	0	4,848
Other comprehensive (loss) income	(121)	(10)	44	(87)			(87)
Comprehensive income	$1,816	$ 3,377	$ (846)	$ 4,347	$414	$ 0	$ 4,761
2015							
Net interest income	$2,526	$ 4,474	$ 15	$ 7,015			$ 7,015
Provision for loan losses	(12)	(94)		(106)			(106)
Noninterest income	218	1,353	(933)	638	$292	$(261)(a)	669
Noninterest expense	(682)	(2,445)	176	(2,951)	(3)	261 (a)	(2,693)
Provision for income taxes	(171)	(26)		(197)			(197)
Net income	1,879	3,262	(742)	4,399	289	0	4,688
Other comprehensive loss	(142)	(2)	(7)	(151)			(151)
Comprehensive income	$1,737	$ 3,260	$ (749)	$ 4,248	$289	$ 0	$ 4,537
2014							
Net interest income	$2,499	$ 4,265	$ 40	$ 6,804			$ 6,804
(Provision for loan losses) loan loss reversal	25	(65)		(40)			(40)
Noninterest income	267	1,452	(1,053)	666	$257	$(223)(a)	700
Noninterest expense	(641)	(2,246)	148	(2,739)	(3)	223 (a)	(2,519)
Provision for income taxes	(163)	(58)		(221)			(221)
Net income	1,987	3,348	(865)	4,470	254	0	4,724
Other comprehensive loss	(12)	(61)	(418)	(491)			(491)
Comprehensive income	$1,975	$ 3,287	$(1,283)	$ 3,979	$254	$ 0	$ 4,233

Combination entry (a) eliminates the Insurance Fund premiums of $373 million, $261 million, and $223 million expensed by the Banks during the years ended 2016, 2015, and 2014 and the related income recognized by the Insurance Corporation.

The chartered territories of the Banks and their affiliated Associations (collectively, the District) include all or portions of the states and territories set forth below:

AgFirst Farm Credit Bank	Alabama, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Ohio, Pennsylvania, Puerto Rico, South Carolina, Tennessee, Virginia, and West Virginia
AgriBank, FCB	Arkansas, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Tennessee, Wisconsin, and Wyoming
Farm Credit Bank of Texas	Alabama, Louisiana, Mississippi, New Mexico, and Texas
CoBank, ACB	Supports eligible customers nationwide and Associations in the states of Alaska, Arizona, California, Colorado, Connecticut, Hawaii, Idaho, Kansas, Maine, Massachusetts, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, Oklahoma, Oregon, Rhode Island, Utah, Vermont, Washington, and Wyoming

Although the Banks are not commonly owned or controlled, they fund their operations primarily through the issuance of Systemwide Debt Securities for which they are jointly and severally liable. Further, each District operates in such an interdependent manner that we believe the financial results of the Banks combined with their affiliated Associations are more meaningful to investors in Systemwide Debt Securities than providing financial information of the Banks and Associations on a stand-alone basis. For the purpose of additional analysis, the following presentation reflects each District, the Insurance Fund and combination entries.

FARM CREDIT SYSTEM

SUPPLEMENTAL COMBINING INFORMATION — (continued)

COMBINING BANK AND ASSOCIATION (DISTRICT)

STATEMENT OF CONDITION — (Condensed)

December 31, 2016

(in millions)

	AgFirst District Combined	AgriBank District Combined	Texas District Combined	CoBank District Combined	Insurance Fund and Combination Entries	System Combined
Cash and investments	$ 8,966	$ 17,987	$ 5,087	$ 30,531	$ 4	$ 62,575
Loans	27,458	99,069	22,426	104,779	(4,964)	248,768
Less: allowance for loan losses	(183)	(387)	(81)	(855)		(1,506)
Net loans	27,275	98,682	22,345	103,924	(4,964)	247,262
Other assets	580	2,338	521	2,082	104	5,625
Restricted assets					4,453	4,453
Total assets	$36,821	$119,007	$27,953	$136,537	$ (403)	$319,915
Systemwide Debt Securities and subordinated debt	$29,408	$ 95,695	$19,391	$113,791	$ (4)	$258,281
Other liabilities	1,532	2,520	4,463	5,407	(4,599)	9,323
Total liabilities	30,940	98,215	23,854	119,198	(4,603)	267,604
Capital						
Preferred stock	49	350	600	2,019		3,018
Capital stock and participation certificates	175	332	98	1,458	(263)	1,800
Additional paid-in-capital	83		225	1,083		1,391
Restricted capital					4,453	4,453
Accumulated other comprehensive loss	(374)	(567)	(158)	(420)	(15)	(1,534)
Retained earnings	5,948	20,677	3,334	13,199	25	43,183
Total capital	5,881	20,792	4,099	17,339	4,200	52,311
Total liabilities and capital	$36,821	$119,007	$27,953	$136,537	$ (403)	$319,915

FARM CREDIT SYSTEM

SUPPLEMENTAL COMBINING INFORMATION — (continued)

COMBINING BANK AND ASSOCIATION (DISTRICT)

STATEMENT OF CONDITION — (Condensed)
December 31, 2015
(in millions)

	AgFirst District Combined	AgriBank District Combined	Texas District Combined	CoBank District Combined	Insurance Fund and Combination Entries	System Combined
Cash and investments	$ 8,340	$ 17,999	$ 5,048	$ 27,982	$ 9	$ 59,378
Loans	26,153	94,944	21,182	98,383	(4,772)	235,890
Less: allowance for loan losses	(179)	(285)	(70)	(746)		(1,280)
Net loans	25,974	94,659	21,112	97,637	(4,772)	234,610
Other assets	566	2,275	457	2,025	153	5,476
Restricted assets					4,039	4,039
Total assets	$34,880	$114,933	$26,617	$127,644	$ (571)	$303,503
Systemwide Debt Securities and subordinated debt	$27,973	$ 92,946	$18,257	$105,717	$ (8)	$244,885
Other liabilities	1,236	2,702	4,431	5,800	(4,385)	9,784
Total liabilities	29,209	95,648	22,688	111,517	(4,393)	254,669
Capital						
Preferred stock	115	350	600	1,677		2,742
Capital stock and participation certificates	161	319	90	1,383	(227)	1,726
Additional paid-in-capital	64		225	1,027		1,316
Restricted capital					4,039	4,039
Accumulated other comprehensive loss	(325)	(616)	(157)	(334)	(15)	(1,447)
Retained earnings	5,656	19,232	3,171	12,374	25	40,458
Total capital	5,671	19,285	3,929	16,127	3,822	48,834
Total liabilities and capital	$34,880	$114,933	$26,617	$127,644	$ (571)	$303,503

FARM CREDIT SYSTEM

SUPPLEMENTAL COMBINING INFORMATION — (continued)

COMBINING BANK AND ASSOCIATION (DISTRICT)

STATEMENT OF COMPREHENSIVE INCOME — (Condensed)

For the Year Ended December 31,
(in millions)

	AgFirst District Combined	AgriBank District Combined	Texas District Combined	CoBank District Combined	Insurance Fund and Combination Entries	System Combined
2016						
Net interest income	$1,036	$ 2,869	$ 723	$ 2,750	$ 69	$ 7,447
Provision for loan losses		(142)	(12)	(112)		(266)
Noninterest income	40	309	69	299	(83)	634
Noninterest expense	(515)	(1,193)	(347)	(1,075)	338	(2,792)
Provision for income taxes		(11)		(164)		(175)
Net income	561	1,832	433	1,698	324	4,848
Other comprehensive (loss) income	(49)	49	(1)	(86)		(87)
Comprehensive income	$ 512	$ 1,881	$ 432	$ 1,612	$324	$ 4,761
2015						
Net interest income	$1,004	$ 2,695	$ 694	$ 2,571	$ 51	$ 7,015
Provision for loan losses		(72)	(6)	(28)		(106)
Noninterest income	41	353	57	283	(65)	669
Noninterest expense	(494)	(1,125)	(318)	(982)	226	(2,693)
Provision for income taxes	(1)	(19)		(177)		(197)
Net income	550	1,832	427	1,667	212	4,688
Other comprehensive (loss) income	(28)	(66)	10	(69)	2	(151)
Comprehensive income	$ 522	$ 1,766	$ 437	$ 1,598	$214	$ 4,537
2014						
Net interest income	$1,033	$ 2,631	$ 652	$ 2,451	$ 37	$ 6,804
Loan loss reversal (provision for loan losses)	12	(25)	6	(33)		(40)
Noninterest income	47	388	52	252	(39)	700
Noninterest expense	(462)	(1,061)	(270)	(919)	193	(2,519)
Provision for income taxes	(2)	(45)	(1)	(173)		(221)
Net income	628	1,888	439	1,578	191	4,724
Other comprehensive loss	(122)	(235)	(56)	(71)	(7)	(491)
Comprehensive income	$ 506	$ 1,653	$ 383	$ 1,507	$184	$ 4,233

FARM CREDIT SYSTEM

SUPPLEMENTAL COMBINING INFORMATION — (continued)

COMBINING BANK AND ASSOCIATION (DISTRICT)

STATEMENT OF CHANGES IN CAPITAL — (Condensed)
(in millions)

	AgFirst District Combined	AgriBank District Combined	Texas District Combined	CoBank District Combined	Insurance Fund and Combination Entries	System Combined
Balance at December 31, 2013	$5,175	$16,514	$3,574	$13,973	$3,365	$42,601
Comprehensive income	506	1,653	383	1,507	184	4,233
Preferred stock issued, net				224		224
Preferred stock dividends	(2)	(24)	(50)	(60)		(136)
Capital stock and participation certificates issued	34	38	8	6	(17)	69
Capital stock, participation certificates, and retained earnings retired	(38)	(29)	(7)	(39)	9	(104)
Equity issued or recharacterized upon Association mergers			130	242		372
Equity retired or recharacterized upon Association mergers			(130)	(229)		(359)
Recharacterization of other comprehensive loss due to fair value adjustments related to the Association mergers				1		1
Patronage	(273)	(303)	(165)	(486)	32	(1,195)
Balance at December 31, 2014	5,402	17,849	3,743	15,139	3,573	45,706
Comprehensive income	522	1,766	437	1,598	214	4,537
Preferred stock issued (retired), net	(10)			54		44
Preferred stock dividends	(2)	(24)	(50)	(67)		(143)
Capital stock and participation certificates issued	48	43	10	7	(22)	86
Capital stock, participation certificates, and retained earnings retired	(45)	(33)	(8)	(39)	16	(109)
Additional paid-in-capital	3					3
Equity issued or recharacterized upon Association mergers			77	134		211
Equity retired or recharacterized upon Association mergers			(79)	(142)		(221)
Recharacterization of other comprehensive loss due to fair value adjustments related to the Association mergers				1		1
Patronage	(247)	(316)	(201)	(558)	41	(1,281)
Balance at December 31, 2015	5,671	19,285	3,929	16,127	3,822	48,834
Comprehensive income	512	1,881	432	1,612	324	4,761
Preferred stock issued (retired), net	(66)			337		271
Preferred stock dividends	(2)	(24)	(50)	(85)		(161)
Capital stock and participation certificates issued	45	52	10	8	(28)	87
Capital stock, participation certificates, and retained earnings retired	(34)	(39)	(8)	(36)	19	(98)
Additional paid-in-capital	19					19
Equity issued or recharacterized upon Association mergers				57		57
Equity retired or recharacterized upon Association mergers				(56)		(56)
Patronage	(264)	(363)	(214)	(625)	63	(1,403)
Balance at December 31, 2016	$5,881	$20,792	$4,099	$17,339	$4,200	$52,311

FARM CREDIT SYSTEM

SUPPLEMENTAL FINANCIAL INFORMATION

COMBINED BANK AND ASSOCIATION (DISTRICT)

SELECTED KEY FINANCIAL RATIOS
(unaudited)

The following combined key financial ratios related to each combined Bank and its affiliated Associations is intended for the purpose of additional analysis.

	AgFirst District Combined	AgriBank District Combined	Texas District Combined	CoBank District Combined
December 31, 2016				
Return on average assets	1.55%	1.57%	1.58%	1.29%
Return on average capital	9.44%	9.13%	10.42%	9.87%
Net interest margin	2.96%	2.51%	2.71%	2.14%
Operating expense as a % of net interest income and noninterest income	47.73%	37.46%	43.51%	35.36%
Net loan (recoveries) charge-offs as a % of average loans	(0.02)%	0.03%	(0.01)%	0.02%
Nonperforming assets as a % of loans and other property owned	1.48%	0.80%	0.91%	0.61%
Allowance for loan losses as a % of loans	0.67%	0.39%	0.36%	0.82%
Capital as a % of total assets	15.97%	17.47%	14.66%	12.70%
Capital and allowance for loan losses as a % of loans	22.08%	21.38%	18.64%	17.36%
Debt to capital	5.26:1	4.72:1	5.82:1	6.87:1
December 31, 2015				
Return on average assets	1.63%	1.68%	1.70%	1.40%
Return on average capital	10.34%	9.87%	10.82%	10.43%
Net interest margin	3.08%	2.52%	2.84%	2.22%
Operating expense as a % of net interest income and noninterest income	47.01%	36.82%	42.80%	34.16%
Net loan (recoveries) charge-offs as a % of average loans	(0.02)%	0.03%	(0.02)%	0.02%
Nonperforming assets as a % of loans and other property owned	1.59%	0.64%	0.87%	0.53%
Allowance for loan losses as a % of loans	0.68%	0.30%	0.33%	0.76%
Capital as a % of total assets	16.26%	16.78%	14.76%	12.63%
Capital and allowance for loan losses as a % of loans	22.37%	20.61%	18.88%	17.15%
Debt to capital	5.15:1	4.96:1	5.77:1	6.91:1

The table below reflects the combined results of each Bank and its affiliated Associations (District) measurement under market value of equity and net interest income sensitivity analysis in accordance with their respective asset/liability management policies and District limits.

	Change in Market Value of Equity			Change in Net Interest Income		
	December 31, 2016			December 31, 2016		
District	**-25**	**+100**	**+200**	**-25**	**+100**	**+200**
AgFirst	0.89%	-4.03%	-8.47%	-0.30%	1.69%	2.29%
AgriBank	1.00	-3.93	-7.73	-0.60	-0.13	0.70
Texas	1.44	-5.81	-11.49	-0.31	1.51	2.93
CoBank	0.71	-2.79	-5.59	-0.85	3.09	6.09

	Change in Market Value of Equity			Change in Net Interest Income		
	December 31, 2015			December 31, 2015		
District	**-8**	**+100**	**+200**	**-8**	**+100**	**+200**
AgFirst	0.24%	-3.67%	-8.14%	-0.27%	2.13%	3.24%
AgriBank	0.30	-3.75	-7.32	-0.28	-0.38	0.49
Texas	0.00	-4.63	-10.34	-0.44	1.69	2.45
CoBank	0.21	-2.42	-4.72	-0.36	4.04	7.85

SELECTED ASSOCIATION KEY FINANCIAL INFORMATION

The Banks serve as financial intermediaries between the capital markets and the retail lending activities of their related Associations. Accordingly, in addition to the supplemental combining Bank and Association (District) information provided on pages F-76 to F-79, selected financial information regarding Associations with asset size greater than $1 billion is provided below for the purpose of additional analysis.

December 31, 2016
($ in millions)

	Total Assets	Gross Loans	Return on Average Assets	Return on Average Capital	Net Interest Margin	Allowance for Loan Losses as a % of Gross Loans	Nonperforming Assets as a % of Gross Loans and Other Property Owned	Permanent Capital Ratio
AgFirst District								
MidAtlantic Farm Credit, ACA	$ 2,677	$ 2,607	2.23%	10.26%	2.65%	0.93%	1.32%	20.05%
First South Farm Credit, ACA	1,974	1,859	1.88	9.71	2.73	0.67	0.89	17.48
AgCredit, ACA	1,881	1,797	2.80	17.11	2.75	0.75	0.48	20.49
Farm Credit of the Virginias, ACA	1,859	1,799	2.43	11.25	2.95	0.81	2.25	20.75
AgChoice Farm Credit, ACA	1,858	1,802	2.30	11.66	2.68	0.65	1.36	18.02
AgSouth Farm Credit, ACA	1,723	1,632	2.40	12.21	3.58	0.87	1.73	20.55
Carolina Farm Credit, ACA	1,502	1,413	2.18	10.01	3.40	0.52	1.39	21.88
AgCarolina Farm Credit, ACA	1,142	1,092	2.17	9.37	2.70	1.11	1.92	23.22
Farm Credit of Florida, ACA	1,076	1,033	2.04	8.58	3.09	0.64	1.44	21.49
AgriBank District								
Farm Credit Services of America, ACA	26,375	25,171	2.03	11.25	2.80	0.41	0.71	15.59
Farm Credit Mid-America, ACA	22,612	20,475	1.31	7.42	2.08	0.46	1.32	17.62
AgStar Financial Services, ACA	8,981	8,152	1.57	10.14	2.51	0.44	1.07	14.15
GreenStone FCS, ACA	8,079	7,802	1.74	9.27	2.61	0.59	0.66	16.08
1st Farm Credit, ACA	5,958	5,510	1.74	9.52	2.30	0.32	0.63	16.73
AgCountry, ACA	5,462	5,050	1.98	9.41	2.63	0.28	0.28	17.17
Badgerland Financial, ACA	4,166	3,988	1.91	9.09	2.58	0.23	0.47	16.98
Farm Credit of Illinois, ACA	4,114	3,943	1.80	8.59	2.54	0.16	0.18	17.20
FCS Financial, ACA	3,815	3,659	1.70	8.44	2.54	0.45	0.23	17.48
United Farm Credit Services, ACA	1,728	1,671	1.49	8.13	2.71	0.34	1.53	15.53
Farm Credit Services of Western Arkansas, ACA	1,212	1,162	1.67	7.85	3.13	0.15	0.87	18.66
Farm Credit Services of North Dakota, ACA	1,201	1,153	1.91	8.75	2.61	0.25	0.59	16.90
AgHeritage Farm Credit Services, ACA	1,123	1,073	1.95	8.62	3.04	0.49	1.00	20.05
Farm Credit Services of Mandan, ACA	1,091	1,048	1.84	9.23	2.77	0.26	0.18	15.66
Texas District								
Capital Farm Credit, ACA	7,136	6,976	2.18	13.37	3.19	0.43	1.51	14.61
AgTexas Farm Credit Services	1,696	1,623	1.77	13.36	2.68	0.39	1.20	13.24
Lone Star, ACA	1,687	1,669	1.63	7.87	2.75	0.42	0.56	18.86
Texas Farm Credit Services, ACA	1,199	1,161	1.79	11.82	2.93	0.32	0.31	14.90
Southern AgCredit, ACA	1,021	988	1.69	11.39	2.58	0.08	1.28	14.32
CoBank District								
Northwest Farm Credit Services, ACA	10,983	10,434	2.33	11.52	2.96	0.75	0.59	16.76
Farm Credit West, ACA	10,041	9,470	2.14	10.75	2.75	0.59	1.66	17.55
American AgCredit, ACA	8,549	8,009	1.31	5.67	2.84	0.24	0.47	17.94
Farm Credit East, ACA	6,541	6,288	2.38	12.40	3.02	1.23	0.90	17.16
Yosemite Farm Credit, ACA	2,661	2,512	1.79	10.24	2.68	0.26	0.22	14.26
Frontier Farm Credit, ACA	2,021	1,895	1.90	9.97	2.73	0.40	0.60	15.94
Farm Credit of New Mexico, ACA	1,732	1,644	1.42	6.33	2.68	0.69	0.34	20.97
Golden State, ACA	1,452	1,376	1.80	8.90	2.72	0.31	0.06	16.36
Oklahoma AgCredit, ACA	1,202	1,136	1.49	7.21	2.81	0.22	1.29	18.09
Fresno-Madera Farm Credit, ACA	1,121	1,057	1.84	8.24	2.64	0.55	0.00	18.48
Southern Colorado, ACA	1,013	943	1.44	6.35	2.72	0.16	1.11	20.17

SELECTED ASSOCIATION KEY FINANCIAL INFORMATION
December 31, 2015
($ in millions)

	Total Assets	Gross Loans	Return on Average Assets	Return on Average Capital	Net Interest Margin	Allowance for Loan Losses as a % of Gross Loans	Nonperforming Assets as a % of Gross Loans and Other Property Owned	Permanent Capital Ratio
AgFirst District								
MidAtlantic Farm Credit, ACA	$ 2,525	$ 2,457	2.23%	9.88%	2.79%	1.01%	1.68%	20.58%
AgCredit, ACA	1,802	1,716	2.86	18.02	2.72	0.81	0.54	19.85
Farm Credit of the Virginias, ACA	1,758	1,693	2.62	12.40	3.06	0.86	2.56	20.07
AgChoice Farm Credit, ACA	1,749	1,694	2.51	12.45	2.79	0.59	1.38	18.01
First South Farm Credit, ACA	1,720	1,598	1.87	9.30	2.85	0.67	0.91	17.78
AgSouth Farm Credit, ACA	1,651	1,558	2.52	12.60	3.72	0.84	1.65	20.68
Carolina Farm Credit, ACA	1,483	1,384	2.10	9.62	3.51	0.53	1.50	21.62
AgCarolina Farm Credit, ACA	1,068	1,021	2.20	9.26	2.71	1.17	1.74	23.00
AgriBank District								
Farm Credit Services of America, ACA	24,773	23,639	2.22	12.59	2.82	0.27	0.31	15.38
Farm Credit Mid-America, ACA	22,105	20,004	1.30	7.40	2.16	0.31	1.11	16.98
AgStar Financial Services, ACA	8,360	7,572	1.60	10.44	2.65	0.36	0.94	14.75
GreenStone FCS, ACA	7,527	7,293	2.00	10.71	2.66	0.47	0.66	16.05
1st Farm Credit, ACA	5,575	5,245	1.79	9.55	2.42	0.34	0.67	16.42
AgCountry, ACA	5,193	4,812	2.01	9.47	2.65	0.28	0.55	16.64
Farm Credit of Illinois, ACA	3,991	3,824	1.70	8.19	2.47	0.14	0.15	16.61
Badgerland Financial, ACA	3,941	3,776	2.02	9.63	2.71	0.31	0.51	16.58
FCS Financial, ACA	3,592	3,452	1.79	8.88	2.67	0.46	0.32	17.52
United Farm Credit Services, ACA	1,686	1,633	1.50	8.38	2.72	0.27	0.59	15.35
Farm Credit Services of North Dakota, ACA	1,175	1,129	1.70	8.73	2.81	0.22	0.25	15.90
Farm Credit Services of Western Arkansas, ACA	1,132	1,087	1.81	8.16	3.18	0.11	0.95	19.23
Farm Credit Services of Mandan, ACA	1,056	1,015	1.81	9.53	3.04	0.20	0.25	15.04
AgHeritage Farm Credit Services, ACA	1,029	977	2.18	9.66	3.15	0.16	0.26	19.91
Texas District								
Capital Farm Credit, ACA	6,677	6,537	2.21	12.97	3.31	0.36	1.16	14.82
AgTexas Farm Credit Services	1,591	1,529	2.07	15.36	3.02	0.35	1.41	13.05
Lone Star, ACA	1,583	1,562	1.83	8.35	2.96	0.44	0.42	19.74
Texas Farm Credit Services, ACA	1,080	1,047	1.99	12.47	3.02	0.27	0.42	16.13
CoBank District								
Northwest Farm Credit Services, ACA	10,619	10,104	2.50	12.80	3.05	0.76	0.55	16.14
Farm Credit West, ACA	9,495	8,951	1.99	9.84	2.76	0.50	1.53	17.54
American AgCredit, ACA	7,798	7,292	1.41	5.55	2.81	0.12	0.80	19.70
Farm Credit East, ACA	6,326	6,095	2.37	12.64	3.04	1.25	1.06	16.35
Yosemite Farm Credit, ACA	2,368	2,231	1.90	10.60	2.73	0.24	0.19	14.72
Frontier Farm Credit, ACA	1,947	1,832	1.67	8.92	2.62	0.23	0.34	15.05
Farm Credit of New Mexico, ACA	1,593	1,514	1.72	7.15	2.69	0.50	0.20	21.89
Golden State, ACA	1,287	1,216	1.82	8.57	2.72	0.27	0.02	18.04
Fresno-Madera Farm Credit, ACA	1,131	1,073	1.60	7.09	2.51	0.58	0.37	17.54

Young, Beginning and Small Farmers and Ranchers

In line with our mission, we have policies and programs for making credit available to young, beginning and small farmers and ranchers.

The definitions of young, beginning and small farmers and ranchers (YBS) are:

- Young: A farmer, rancher, or producer or harvester of aquatic products who is age 35 or younger as of the date the loan was originally made.
- Beginning: A farmer, rancher, or producer or harvester of aquatic products who has 10 years or less farming or ranching experience as of the date the loan was originally made.
- Small: A farmer, rancher or producer or harvester of aquatic products who normally generates less than $250 thousand in annual gross sales of agricultural or aquatic products at the date the loan was originally made.

It is important to note that farmers/ranchers may be included in multiple categories since they are included in each category in which the definition is met.

The following table summarizes information regarding loans to young and beginning farmers and ranchers:

	At December 31, 2016	
	Number of loans	Volume
	($ in millions)	
Total loans and commitments	1,062,364	$252,582
Loans and commitments to young farmers and ranchers	193,601	$ 27,806
% of loans and commitments to young farmers and ranchers	18.2%	11.0%
Loans and commitments to beginning farmers and ranchers	281,812	$ 42,840
% of loans and commitments to beginning farmers and ranchers	26.5%	17.0%

The following table summarizes information regarding new loans made during 2016 to young and beginning farmers and ranchers:

	For The Year Ended December 31, 2016	
	Number of new loans	Volume
	($ in millions)	
Total new loans and commitments	381,078	$79,464
New loans and commitments to young farmers and ranchers	64,376	$ 9,269
% of new loans and commitments to young farmers and ranchers	16.9%	11.7%
New loans and commitments to beginning farmers and ranchers	81,742	$12,728
% of new loans and commitments to beginning farmers and ranchers	21.5%	16.0%

The following table summarizes information regarding loans to small farmers and ranchers at December 31, 2016:

	Loan Size				
	$50 thousand or less	$50 to $100 thousand	$100 to $250 thousand	Over $250 thousand	Total
			($ in millions)		
Total number of loans and commitments	520,413	166,276	198,057	177,618	1,062,364
Number of loans and commitments to small farmers and ranchers	272,981	93,661	98,445	40,088	505,175
% of loans and commitments to small farmers and ranchers	52.5%	56.3%	49.7%	22.6%	47.6%
Total loan and commitment volume	$ 11,689	$ 11,974	$ 31,302	$197,617	$ 252,582
Total loan and commitment volume to small farmers and ranchers	$ 4,896	$ 6,612	$ 14,827	$ 21,388	$ 47,723
% of loan and commitment volume to small farmers and ranchers	41.9%	55.2%	47.4%	10.8%	18.9%

The following table summarizes information regarding new loans made during 2016 to small farmers and ranchers:

	Loan Size				
	$50 thousand or less	$50 to $100 thousand	$100 to $250 thousand	Over $250 thousand	Total
			($ in millions)		
Total number of new loans and commitments	223,646	44,650	52,424	60,358	381,078
Number of new loans and commitments to small farmers and ranchers	102,305	22,181	20,436	10,401	155,323
% of new loans and commitments to small farmers and ranchers	45.7%	49.7%	39.0%	17.2%	40.8%
Total new loan and commitment volume	$ 3,453	$ 3,356	$ 8,732	$63,923	$ 79,464
Total new loan and commitment volume to small farmers and ranchers	$ 1,559	$ 1,644	$ 3,268	$ 5,759	$ 12,230
% of loan and commitments volume to small farmers and ranchers	45.1%	49.0%	37.4%	9.0%	15.4%

INDEX TO SUPPLEMENTAL INFORMATION
(unaudited)

DIRECTORS AND MANAGEMENT

Boards of Directors

Each Bank is governed by a board of directors that is responsible for establishing policies and procedures for the operation of the Bank. Each Bank's bylaws provide for the number, term, manner of election and qualifications of the members of the Bank's board. Farm Credit Administration regulations require at least two members of each Bank's board of directors be appointed by the other directors. Appointed members cannot be a director, officer, employee or stockholder of a System institution.

The following information sets forth the directors of each Bank as of December 31, 2016. The information includes the director's name, age, and business experience, including principal occupation and employment during the past five years. For additional discussion and information on the compensation of each Bank's board of directors, see the Bank's annual report.

AgFirst Farm Credit Bank

Jack W. Bentley, Jr., 59, from Tignall, Georgia, owns and operates A&J Dairy, a dairy, pasture, crop and timberland operation. Mr. Bentley is a director of AgGeorgia Farm Credit, ACA. Mr. Bentley also serves on the boards of the following agricultural and dairy trade and promotion organizations: Southeast United Dairy Industry Association, American Dairy Association, Lone Star Milk Producers and the Wilkes County Farm Bureau. Mr. Bentley has a BS in Ag Mechanics and Business from Clemson University. He served on the Board Governance Committee in 2016 and will serve on the Board Compensation Committee in 2017. Mr. Bentley is also the Board appointed member of both the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee. Mr. Bentley became a director in 2010 and his term expires on December 31, 2017.

James C. Carter, Jr., 70, from McDonough, Georgia, owns and operates Southern Belle Farm, Inc., a beef cattle and hay farm that includes fruit and vegetable crops and provides agriculturally related educational activities. Mr. Carter also operates a feed business from the farm and provides artificial insemination services and supplies for cattle. Mr. Carter is a director of AgSouth Farm Credit, ACA, and the national Farm Credit Council, a trade organization. He serves as chairman of the Henry County Water and Sewage Authority, a provider of water and sewer services and he is a representative on the Ocmulgee River Basin Advisory Council, a water resource management council. Mr. Carter serves as vice president of the Henry County Farm Bureau which focuses on the promotion of agriculture. He is a member of the board for the Henry County Cattleman's Association, a cattle industry trade association. Mr. Carter has a BS in Agriculture and an MS in Animal Nutrition from the University of Georgia. Mr. Carter served on the Board Compensation Committee in 2016 and will serve on the Board Governance Committee in 2017. Mr. Carter became a director in 2011 and his term expires on December 31, 2018.

Bonnie V. Hancock, 55, outside director for the Board, is from Wake Forest, North Carolina. Ms. Hancock is Executive Director of the Enterprise Risk Management Initiative at North Carolina State University (NCSU), and she teaches courses in financial management, enterprise risk management, and strategy and financial statement analysis. Prior to joining NCSU, Ms. Hancock worked with Progress Energy as senior vice president of finance and information technology and later as president of Progress Fuels, a subsidiary that produced and marketed gas, coal and synthetic fuels. Ms. Hancock has a Bachelor of Business Administration with an accounting major from the College of William and Mary and a Master of Science in Taxation from Georgetown University. She is a member of the boards of Powell Industries, designer and manufacturer of electrical equipment systems for industrial facilities, where she serves on the compensation committee; the Office of Mortgage Settlement Oversight, which monitors servicers' obligations related to distressed borrowers, where she serves as chair of the audit committee; and the North Carolina Coastal Pines Girl Scout Council, a leadership development organization for girls, where she serves as chair of the audit committee. Ms. Hancock served as chair of the Board Risk Policy Committee in 2016 and will serve on the Board Governance Committee in 2017. Ms. Hancock became a director in 2010 and her term expires on December 31, 2017.

Curtis R. Hancock, Jr., 69, from Fulton, Kentucky, is owner and operator of Hancock Farms. His operations consist of row crops including corn, wheat and soybeans. He serves on the board of River Valley, ACA; the national Farm Credit Council, a trade organization; Farm Credit Council Services, a Farm Credit System service provider; and Kentucky Small Grain Growers, a grain cooperative. Mr. Hancock received a BS in Agriculture from the University of Tennessee-Martin and an MS in Agricultural Economics from the University of Tennessee. Mr. Hancock served on the Board Governance Committee in 2016 and will serve on the Board Compensation Committee in 2017. He was elected Vice Chairman of the Board for 2017. Mr. Hancock became a director in 2013 and his term expires on December 31, 2020.

Dale R. Hershey, 69, Chairman of the Board, is from Manheim, Pennsylvania, where he is a partner in Hershey Brothers Dairy Farms, and manages the operations' real estate and cropping enterprises. The operations include a dairy operation and corn, alfalfa, soybeans, barley, and rye and grass hay. He serves on the board of directors of MidAtlantic Farm Credit, ACA, and the national Farm Credit Council, a trade organization. Mr. Hershey has a BS in Community Development and an MS in Ag Economics and Rural Sociology from Penn State University. As Chairman of the Board for 2016, Mr. Hershey served as an ex-officio member of all Board Committees and will serve as chair of the Board Governance Committee in 2017. Mr. Hershey became a director in 2008 and his term expires on December 31, 2019.

Walter C. Hopkins, Sr., 69, from Lewes, Delaware, is the owner and operator of Green Acres Farm, a dairy and grain farming operation. He also manages Lyons LLC, a land holding company. He serves on the board of directors of MidAtlantic Farm Credit, ACA, and is chair of both the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee. Mr. Hopkins has a BS in Agricultural Engineering from the University of Delaware. Mr. Hopkins served as chair of the Board Compensation Committee in 2016 and will serve as a member of the committee in 2017. Mr. Hopkins became a director in 2013 and his term expires on December 31, 2020.

William K. Jackson, 61, from New Salem, Pennsylvania, is a partner in Jackson Farms, a dairy operation with other farming interests, including corn and alfalfa. He is president of Jackson Farms 2, LLC, a small dairy processing facility that produces milk and makes ice cream marketed to area stores and sold via an on-site convenience store. Mr. Jackson is also president of Jackson Farms 3, LLC and Jackson Farms Limited Partnership, which are involved in the production of natural gas. He serves on the boards of AgChoice Farm Credit, ACA; the Fay Penn Economic Development Council, a local economic development committee; the Fayette County Fair Board, a local county fair; and the Penn State Fayette, Eberly Campus Advisory Board, which oversees campus community involvement. Mr. Jackson has a BS in Agricultural Business Management from Penn State University. Mr. Jackson served as chair of the Board Governance Committee in 2016 and will serve as chair of the Board Risk Policy Committee in 2017. Mr. Jackson became a director in 2013 and his term expires on December 31, 2020.

John S. Langford, 67, Vice Chairman of the Board, is from Lakeland, Florida and owns and operates John Langford, Inc., a citrus farming operation. Mr. Langford also owns and operates John Langford Realty, Inc., which specializes in the sale of agricultural lands. He currently serves as a director on the boards of Farm Credit of Central Florida, ACA, Lake Wales Citrus Growers Association, a citrus growers' cooperative. Mr. Langford also serves as a member of the System Audit Committee. Mr. Langford obtained his BA of History and Accounting from Emory University, his MBA from Harvard Business School, and graduated from the Graduate School of Banking at Louisiana State University in 2014. He served on the Board Compensation Committee in 2016. Mr. Langford was elected as Chairman of the Board for 2017 and will serve as an ex-officio member of all Board Committees in 2017. Mr. Langford became a director in 2012 and his term expires on December 31, 2019.

S. Jerry Layman, 68, from Kenton, Ohio, assists with Layman Farms LLC, a no-till corn and soybean operation, and Layman Farm Drainage, an agricultural tile installation business. Mr. Layman currently serves as a board member of AgCredit, ACA. He represents AgCredit on the Independent Associations' Retirement Plan Sponsor Committee and is a member of both the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee. Mr. Layman is a stockholder in the agricultural cooperative Heritage Farm Coop. Mr. Layman has a BS in Agriculture Education from the Ohio State University and a MS of Education Leadership from the University of Dayton. Mr. Layman served on the Board Compensation Committee in 2016 and will serve on the Board Governance Committee in 2017. Mr. Layman became a director in 2015 and his term expires on December 31, 2018.

S. Alan Marsh, 62, from Madison, Alabama, is a partner in Marsh Farms, an operation consisting of row crops including cotton, soybeans, wheat and corn. Mr. Marsh is a director of First South Farm Credit, ACA and Limestone County Farmers Federation, an agricultural trade organization, and he is president and stockholder of South Limestone Co-op Gin, a cotton ginning operation and an association borrower. He is also an advisory board member for Staplecotn, a cotton cooperative association. Mr. Marsh received a Business Management Certification from Stratford Career Institute. Mr. Marsh serves on the Board Governance Committee. Mr. Marsh became a director in 2010 and his term expires on December 31, 2017.

James L. May, 67, from Waynesburg, Kentucky, is owner and operator of Mayhaven Farm. His cattle program consists of a beef cow herd and a back grounding program of feeder cattle. The farming operation also includes alfalfa hay, corn, soybeans and wheat. He also operates Mayhaven Seed Sales, an agricultural seed sales business. He currently serves on the board of Central Kentucky Ag Credit, ACA, Lincoln County Extension Council, an education organization and the Lincoln County Farm Bureau, an agricultural promotion organization. Mr. May has a BS in Agricultural Economics from the University of Kentucky. Mr. May serves on the Board Audit Committee. Mr. May became a director in 2006 and his term expires on December 31, 2017.

Fred R. Moore, Jr., 64, from Eden, Maryland is president of Fred R. Moore & Sons, Inc. d/b/a Collins Wharf Sod, a turf and grain operation, which grows sod (turf), corn, soybeans and wheat. He is also partner of F&E Properties, LLC, a rental business. He currently serves on the boards of MidAtlantic Farm Credit, ACA, Wicomico Soil Conservation District, an environmental and conservation entity and Wicomico County Farm Bureau, an agricultural promotion organization. He currently serves as an active life member of the Allen Volunteer Fire Company. Mr. Moore has a BS in Agriculture Education from the University of Maryland Eastern Shore. He serves on the Board Audit Committee. Mr. Moore became a director in 2014 and his term expires December 31, 2017.

James M. Norsworthy, III, 66, from Jackson, Louisiana, runs 100 Cedars Cattle Farm, a cow-calf operation with other farming interests including a commercial hay operation and a pine and hardwood timber operation. He is a member of the board of directors of First South Farm Credit, ACA. He is a member of the board of directors for Centreville Academy, an educational institution, and served as a former mayor of the town of Jackson, Louisiana. Mr. Norsworthy has a BS of Vocational Agriculture Education from Louisiana State University. He serves on the Board Risk Policy Committee. Mr. Norsworthy became a director in 2008 and his term expires on December 31, 2019.

Katherine A. Pace, 55, outside director for the Board, is from Orlando, Florida. Ms. Pace is a certified public accountant and principal of Family Business Consulting, LLC, which provides financial and strategic planning for closely held businesses. Prior to forming her company, she was a tax partner with KPMG, LLP, from 1985-2005. While at KPMG, her practice included a variety of cooperative and agribusiness clients as well as participation in trade associations such as the National Society of Accountants for Cooperatives. Ms. Pace obtained her BS in Accounting from Furman University. She is a member of the American Institute of Certified Public Accountants and the Florida Institute of Certified Public Accountants, and she is a current and past member and director of numerous trade and charitable organizations. Ms. Pace is the board designated financial expert and serves on the Board Audit Committee. Ms. Pace became a director in 2006 and her term expires on December 31, 2019.

Thomas E. Porter, Jr., 62, from Concord, North Carolina, is president of Porter Farms Inc., a farming operation consisting of a sow farrow unit and a wean swine operation, pullet houses, layer houses and a cow / calf operation. He also manages The Farm at Brush Arbor, LLC, an agritourism business on his farm. He currently serves on the Carolina Farm Credit, ACA, board of directors. Mr. Porter also holds board and leadership positions with the following agricultural trade and promotion organizations: board member on the Cabarrus County Ag Advisory Board, president of Cabarrus County Farm Bureau and as chairman of the Cabarrus County Extension Advisory Board. He also serves on the Commissioners Circle for the North Carolina Commissioner of Agriculture. Mr. Porter served on the Board Governance Committee in 2016 and will serve on the Board Risk Policy Committee in 2017. He became a director in 2014, and his term expires December 31, 2017.

William T. Robinson, 49, from St. Matthews, South Carolina, is the owner/operator of Robinson Family Farm which consists of hay, cattle, and timber. Mr. Robinson is currently employed as Executive Director for the

SEFA group, an engineering, construction, and transportation company, and he retired from the department of Treasury and Corporate Financial Planning at Santee Cooper, South Carolina's state owned electric and water utility. He serves on the Parent Advisory Council for Wofford College, South Carolina Palmetto Agribusiness Council, and the Lexington County Chamber of Commerce. Mr. Robinson obtained a Bachelor of Science and a Master of Science in Civil Engineering from Clemson University and a Master of Business Administration from Charleston Southern University. He currently serves as chairman of the board of AgSouth Farm Credit, ACA. Mr. Robinson is a member of both the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee. Mr. Robinson served on the Board Audit Committee in 2016 and will serve as chair of the committee in 2017. He became a director in 2016, and his term expires December 31, 2019

Robert G. Sexton, 57, from Vero Beach, Florida, is President of Oslo Citrus Growers Association, co-owner of Lost Legend, LLC, and owner of Orchid Island Juice Company. He serves as a director of Farm Credit of Florida, ACA, and the following citrus grower's organizations: Oslo Citrus Growers Association; Lost Legend, LLC; Florida Citrus Packers; Indian River Citrus League. Mr. Sexton also serves on the following boards: Highland Exchange Service Co-op, a packinghouse supply cooperative; McArthur Management Company, a management company for a large dairy, cattle and citrus agribusiness, and an association borrower; Sexton Grove Holdings, a family citrus company; Sexton Properties, Oslo Packing Company and Sexton, Inc., family commercial real estate companies. In addition, he is treasurer of the Citizens Scholarship Foundation of Indian River County, a non-profit organization. He obtained both his BS in Business Administration and his MBA in Finance from the University of Florida. Mr. Sexton served on the Board Risk Policy Committee. Mr. Sexton became a director in 2013 and his term expired on December 31, 2016.

Robert H. Spiers, Jr., 71, is from Stony Creek, Virginia. Mr. Spiers is the owner/operator of Spiers Farms, LLC, with a tobacco, corn, soybeans, milo, wheat and timber operation. He currently serves on the boards of Colonial Farm Credit, ACA; the national Farm Credit Council, a trade organization; Tobacco Associates, Inc., promotes export of US tobacco; and Dinwiddie County Farm Bureau, promotes agriculture. He is also a governor-appointed director on the Virginia Flue-cured Tobacco Board, and the Virginia Tobacco Revitalization Commission. Mr. Spiers has a BS in Ag Economics from Virginia Tech University. He is Vice Chair of the AgFirst Plan Sponsor Committee and a member of the AgFirst/FCBT Plan Sponsor Committee. Mr. Spiers serves on the Board Risk Policy Committee. He became a director in 2006 and his term expires on December 31, 2017.

Michael T. Stone, 45, from Rowland, North Carolina, owns and operates P & S Farms, Inc. and Bo Stone Farms, LLC. The row crop units produce corn, wheat, and soybeans and the operations include a swine finishing unit under contract with Murphy Brown, a cow/calf herd, timber management and small produce for a roadside stand. Mr. Stone is a director of Cape Fear Farm Credit, ACA, a director of Southeastern Health hospital, and a director of Dillon Christian School. Mr. Stone has a BS in Agricultural Business Management with a minor in Animal Science and a MS in Agriculture from North Carolina State University. He serves on the Board Compensation Committee in 2016 and will serve as chair of the committee in 2017. Mr. Stone became a director in 2015 and his term expires on December 31, 2018.

Ellis W. Taylor, 47, from Roanoke Rapids, North Carolina, is the owner/operator of a row crop operation, Mush Island Farms, LLC, which consists of cotton, soybeans, wheat, corn and timber. He is also part owner of Roanoke Cotton Company, LLC, which operates cotton gins and a warehouse. He is a director on the boards of AgCarolina Farm Credit, ACA, and Northampton County Farm Bureau, which promotes agriculture. Mr. Taylor has a BS in Agronomy, a BS in Agricultural Business Management and a MS in Economics from North Carolina State University. Mr. Taylor served as chair of the Board Audit Committee in 2016 and will serve as a member of the committee in 2017. He became a director in 2012 and his term expires on December 31, 2019.

In 2016, each member of AgFirst FCB's board of directors received base compensation of $57,391 plus expenses. Additional honorarium was paid to some members for leadership positions on the board.

AgriBank, FCB

Ed Breuer, 52, is a self-employed grain and livestock farmer in Mandan, North Dakota. His current term began in 2015 and expires in 2019. Mr. Breuer serves as the chair of the Governance Committee. He also serves on the AgriBank District Farm Credit Council Board in St. Paul, Minnesota and the National Farm Credit Council Board in Washington, D.C.

Stan Claussen, 63, is a self-employed grain, cattle, sugar beet and vegetable farmer in Montevideo, Minnesota. His current term began in 2016 and expires in 2020. Mr. Clausen serves on the Governance Committee. Mr. Clausen also serves on the Bushmills Ethanol Board in Atwater, Minnesota and Fairland Management Company Board in Windom, Minnesota.

Richard Davidson, 72, is a self-employed grain and livestock farmer in Washington Court House, Ohio. His current term began in 2013 and expires in 2017. Mr. Davidson serves on the Risk Management Committee and on the Finance Committee. Mr. Davidson also serves as Director on the Board of the Federal Agricultural Mortgage Corporation (Farmer Mac), an agriculture secondary market real estate lending corporation in Washington, D.C.

Ernie Diggs, 64, is a self-employed crop farmer in Paris, Tennessee. His current term began in 2016 and expires in 2020. Mr. Diggs serves as vice chair on the Governance Committee.

Dan Flanagan, 74, is a self-employed grain farmer in Campbellsville, Kentucky. His current term began in 2014 and expires in 2018. Mr. Flanagan serves on the Governance Committee. He also serves as President of 4-E Flanagan Farms, Inc. and Saloma Chick Litter Company, Inc., two farming related businesses in Campbellsville, Kentucky. Mr. Flanagan serves on the AgriBank District Farm Credit Council Board in St. Paul, Minnesota and the National Farm Credit Council Board in Washington, D.C.

Thomas Klahn, 67, is a self-employed grain farmer in Lodi, Wisconsin. His current term began in 2013 and expires in 2017. Mr. Klahn serves on the Human Resources Committee.

Natalie Laackman, 57, appointed director, Scottsdale, Arizona, is chief financial officer of The Shamrock Food Company, Phoenix, Arizona, a food manufacturing and distribution company. Her current term began in 2013 and expires in 2017. Ms. Laackman serves as the chair and financial expert of the Audit Committee.

Brian Peterson, 58, is a self-employed dairy and crop farmer in Trenton, Missouri. His current term began in 2016 and expires in 2020. Mr. Peterson serves as the vice chair of the Human Resources Committee and the Strategic Planning Committee. He also serves as Treasurer on the Rural Dale Cemetery Association Board in Trenton, Missouri and serves on the AgriBank District Farm Credit Council Board in St. Paul, Minnesota.

John Schable, 69, is a self-employed grain farmer in Tuscola, Illinois. His current term began in 2013 and expires in 2017. Mr. Schable serves on the Audit Committee.

John Schmitt, 60, is a self-employed grain and beef cattle farmer in Quincy, Illinois. His current term began in 2015 and expires in 2019. Mr. Schmitt serves as the vice chair of the Finance Committee and Risk Management Committee and as a chair of the Strategic Planning Committee. Mr. Schmitt also serves on the AgriBank District Farm Credit Council Board in St. Paul, Minnesota. He is also a director of Adams County Illinois Farm Bureau in Quincy, Illinois.

Dan Shaw, 61, is a self-employed livestock and grain farmer and grain merchandiser in Edgar, Nebraska. He is also the owner/operator of Shaw Grain LLC, a local grain elevator in Edgar, Nebraska and of Shaw Farms LLC, a poultry breeding operation in Edgar, Nebraska. His term began in 2014 and expires in 2018. Mr. Shaw serves as a chair of the Risk Management Committee and also serves on the Finance Committee and Strategic Planning Committee. He also serves as the board chair on the Edgar Township Board in Edgar, Nebraska.

William Stutzman, 69, is a full-time farmer and President of Farm Resource Management, Inc., a grain marketing and consulting company in Blissfield, Michigan. He is also President and CEO of Ogden Communications, Inc., a communication company in Ogden, Michigan. His current term began in 2014 and expires in 2018. Mr. Stutzman serves on the Human Resources Committee. He also serves as the director of the Farm Credit Foundations Board, an employer benefits provider, in St. Paul, Minnesota and a member of the Farm Credit Foundations Plan Sponsor Committee in St. Paul, Minnesota.

Roy Tiarks, 66, is a self-employed grain and livestock farmer in Council Bluffs, Iowa. His current term began in 2013 and expires in 2017. Mr. Tiarks serves on the Audit Committee. He is also a chair of the Federal Farm Credit Banks Funding Corporation in Jersey City, New Jersey.

Nick Vande Weerd, 35, is a self-employed dairy, livestock and grain farmer in Brookings, South Dakota. His current term began in 2015 and expires in 2019. Mr. Vande Weerd serves as chair of the Human Resources Committee and also serves on the Strategic Planning and Risk Management Committees.

Keri Votruba, 57, Board Vice Chair, is a self-employed grain and livestock farmer in Hemingford, Nebraska. His current term began in 2016 and expires in 2020. Mr. Votruba serves on the Audit and Risk Management Committees.

Matt Walther, 45, Board Chair, is a self-employed crop and cow/calf herd and finished cattle farmer in Centerville, Indiana. His current term began in 2015 and expires in 2019. Mr. Walther is a member of Buell Drainage, LLC, Centerville, Indiana, which is a tile drainage company and serves on the AgriBank District Farm Credit Council Board. He also serves as Ex officio on AgriBank Board Committees.

Leon Westbrock, 69, appointed director**,** retired from CHS Inc., a U.S.-based diversified energy, grains and foods company headquartered in Inver Grove Heights, Minnesota. His current term began in 2015 and expires in 2019. Mr. Westbrock serves on the Strategic Planning Committee and is chair of the Finance Committee. He is also a director of the Southern Minnesota Sugar Beet Cooperative, a farmer-owned producer of beet sugar in Renville, Minnesota.

Thomas Wilkie, III, 71, is a self-employed grain farmer and owner of a drainage supply company in Forrest City, Arkansas. His current term began in 2014 and expires in 2018. Mr. Wilkie serves as the vice chair of the Audit Committee and also serves on the Strategic Planning Committee. Mr. Wilkie also serves on the AgriBank District Farm Credit Council Board in St. Paul, Minnesota, the Farm Credit Council Services Board in Denver, Colorado, and as the vice chair of the National Farm Credit Council Board in Washington, D.C.

In 2016, each member of AgriBank, FCB's board of directors received an annual retainer which was paid quarterly for attendance at meetings and other official activities. Director compensation was $57,391 per director for 2016, plus expenses. Certain directors were paid additional compensation for extraordinary service in 2016 as well as participation on the CEO Search Committee.

CoBank, ACB

Robert M. Behr, 62, is the Chief Executive Officer of Citrus World, Inc. (CWI), which produces and markets Florida's Natural brand citrus juices, and is located in Lake Wales, Florida. Mr. Behr is also the Chief Executive Officer of the following CWI subsidiaries: Citrus World Services, Inc., Florida's Natural Food Services, Inc., Florida's Natural Growers, Inc., Hickory Branch Corporation and World Citrus West, Inc., which produce, package and market Florida's Natural brand citrus juices and are all located in Lake Wales, Florida. He became Chief Executive Officer of CWI and its subsidiaries in September 2015 after serving as Citrus World, Inc.'s Chief Operating Officer from December 2009 until August 2015. Mr. Behr is a director of Fresh N Natural Foods (PTE LTD), a distributor of Florida's Natural juice products in the Republic of Singapore, and chairman of Florida's Natural Growers Foundation, Inc. a nonprofit foundation. He is also an owner of Behr-Nolte, CPI 3034 LLC, MBN Property and Summer Breeze, owners of citrus groves. He became a director in 2013 and served on the Board's Audit Committee in 2016. His term expires in 2020.

M. Dan Childs, 66, is the owner and operator of a wheat and stocker cattle farming operation in Johnston County, Oklahoma. He is also a Senior Agricultural Consultant for the Noble Foundation, a nonprofit institution to support agriculture. Mr. Childs is a director of The Farm Credit Council and Farm Credit Council Services. Additionally, he sits on the board of Oklahoma AgCredit, ACA and is a Vice President and director of the Foundation for Livestock and Grain Marketing, a nonprofit organization, and the Johnston County Industrial Authority, an economic development association. He became a director in 2015 and served on the Board's Audit Committee in 2016. His term expires in 2018.

Everett M. Dobrinski, 70, is the owner and operator of Dobrinski Farm, a cereal grain and oilseed farming operation in Makoti, North Dakota. He is a director of The Farm Credit Council and a member of Farm Credit Services of North Dakota, ACA. He is also a director of the North Dakota Coordinating Council for Cooperatives and a member of the Nationwide Insurance Advisory Council. Mr. Dobrinski became a director in 1999, was elected Board chairman in 2008 and also served as chairman of the Board's Executive Committee in 2016. His term expires in 2019.

William M. Farrow, III, 61, is the founding director, President and Chief Executive Officer of the Urban Partnership Bank serving Chicago and Detroit. In addition, he is the owner of Winston and Wolfe, LLC, a privately held technology development company and a director of the Chicago Board of Options Exchange, the Federal Reserve Bank of Chicago and NorthShore University Health System. He was appointed to the Board as an outside director in 2007 and served on the Board's Audit Committee in 2016. His term expires in 2018.

Benjamin J. Freund, 61, is the owner and operator of Freund's Farm, Inc., a dairy farm, and an owner and director of Cow Pots, LLC, a manufacturer of biodegradable plantable pots, both located in East Canaan, Connecticut. He is a member of Farm Credit East, ACA, and previously served on their board. He is a founding member and officer of Canaan Valley Agricultural Cooperative, Inc., a manure management cooperative. He became a director in 2014 and served on the Board's Executive Committee in 2016. Mr. Freund is a member of the Connecticut Farmland Advisory Board located in Hartford, Connecticut, which advises the State Commissioner of Agriculture. His term expires in 2017.

Andrew J. Gilbert, 58, retired in March 2016 as the owner and operator of Adon Farms Operations, LLC, a dairy farm and grain operation, of Adon Farms Real Estate Holdings, LLC, a real estate LLC, and of Parishville Sand & Gravel, a sand and gravel supplier, each located in Potsdam, New York. He is a member and immediate past board chairman of Farm Credit East, ACA. Mr. Gilbert is a member of the St. Lawrence County Development Study Advisory Board, a promoter of economic development. He became a director in 2016 and served on the Board's Risk Committee. His term expires in 2019.

John L. (Less) Guthrie, 72, is the owner and operator of Guthrie Ranches, a diversified cattle and farming operation, a partner in McGruder Partners, a farming operation and investments, and a director of Guthrie Investment Co., Inc., a diversified farming operation and financial investments, each located in Porterville, California. He is a member of Farm Credit West, ACA. He is a director and immediate past board chairman of the Federal Farm Credit Banks Funding Corporation. He also serves as a director of the California Cattlemen's Association. He became a director of the former U.S. AgBank in 1997 and joined the CoBank Board in 2012 following the merger of the two banks. Mr. Guthrie served on the Board's Executive Committee in 2016 and his term expired in 2016.

Daniel T. Kelley, 68, is the owner and operator of Kelley Farms, a corn and soybean farming operation in Normal, Illinois, and is a member of 1st Farm Credit Services, ACA. Mr. Kelley serves as chairman of the Illinois Agricultural Leadership Foundation. He is a director of Midwest Grain, LLC, Nationwide Mutual Insurance Company, Nationwide Bank, and Global Farmer Network. Mr. Kelley became a director in 2004 and served as a vice chairman of the Board since 2007 and as first vice chairman from 2013 through 2016. He served as chairman of the Board's Compensation Committee in 2016. His term expires in 2017.

James A. Kinsey, 67, is the owner and operator of Kinsey's Oak Front Farms, a purebred Angus seed-stock farming operation in Flemington, West Virginia. He is a member of Farm Credit of the Virginias, ACA. Mr. Kinsey became a director in 2001 and served on the Board's Executive Committee in 2016. His term expired in 2016.

David J. Kragnes, 64, is the owner and operator of a corn and bean row crop farming operation in Felton, Minnesota. He serves as a director of The Farm Credit Council and as an advisory board member for the Quentin Burdick Center for Cooperatives in Fargo, North Dakota. Mr. Kragnes became a director in 2009 and served on the Board's Governance Committee in 2016. His term expires in 2020.

James R. Magnuson, 63, is the General Manager and Chief Executive Officer of Key Cooperative, an agricultural grain marketing and farm supply cooperative in Roland, Iowa. He serves as a director of Agricultural Cooperative Employment Services (ACES), Roland Transport, Inc. and ACDI-VOCA. Mr. Magnuson joined the CoBank Board in 2013 and served on the Board's Governance Committee in 2016. His term expires in 2018.

Jon E. Marthedal, 60, is the owner and operator of Marthedal Farms, a grapes, raisins and blueberries farming operation, and of Keystone Blue Farms, LLC, a blueberries farming operation, both located in Fresno, California. He is also an owner and officer of Marthedal Enterprises, Inc., a provider of farm management and custom agriculture services, in Fresno, California. Mr. Marthedal serves as a director of The Farm Credit Council and is a member of the Fresno-Madera Farm Credit, ACA and Golden State Farm Credit, ACA. Mr. Marthedal is a director and past chairman of Sun-Maid Growers of California. He serves as President of the California Blueberry Association, vice chairman of the California Raisin Marketing Board and of the Raisin Administrative

Committee, and as a director of the California Blueberry Commission. He joined the CoBank Board in 2013 and served as chairman of the Board's Governance Committee in 2016. His term expires in 2017.

Gary A. Miller, 56, is the President and Chief Executive Officer of GreyStone Power Corporation, an electric distribution cooperative in Douglasville, Georgia. Mr. Miller serves as a director and the immediate past chairman of Wellstar Health System, a director of GRESCO Utility Supply, Inc., an alternate director of Georgia EMC, and the Treasurer for the Douglas County Development Authority. Mr. Miller became a director in 2006 and served on the Board's Audit Committee in 2016. His term expires in 2017.

Catherine Moyer, 41, is Chief Executive Officer and General Manager for The Pioneer Telephone Association, Inc. (d/b/a Pioneer Communications) and Chief Executive Officer of High Plains Telecommunications, Inc., telecommunications providers, both located in Ulysses, Kansas. She serves as chair of the Kansas Rural Independent Telecommunications Coalition, the Telcom Insurance Group and the Kansas Lottery Commission. She is also a director of the State Independent Telephone Association of Kansas and of the Rural Trust Insurance Company, and serves on the advisory council of the Washburn University School of Law Alumni Association board of governors. Ms. Moyer joined the Board in 2010 as an appointed director and served on the Board's Compensation Committee in 2016. Her term expires in 2018.

Alarik Myrin, 70, is the owner, operator and President of Myrin Ranch, Inc., a ranching and farming operation, a managing member of Myrin Livestock Co., LLC, a cattle ranching operation, of Canyon Meadows Ranch, LLC, a retail and wholesale seller of grass fed beef, and of Myrin Investment Co. LLC, a real estate and rental income business, all located in Altamont, Utah. He is a member of Western AgCredit, ACA. He is also the chairman of Uintah Basin Medical Center and serves as a director of Western Agrihaul, LLC and Lake Fork Irrigation Co. Mr. Myrin became a director of the former U.S. AgBank in 2011, and joined the CoBank Board in 2012 following the merger of the two banks. He served on the Board's Governance Committee in 2016. His term expires in 2018.

Ronald J. Rahjes, 65, is an officer of Wesley J. Rahjes & Sons, Inc., a diversified family farming corporation producing wheat, corn, soybeans, and grain sorghum, located in Kensington, Kansas, and is a partner in R&D Farms, a farming partnership. He is also the owner of R&C Tax Service, a tax preparation services firm in Kensington, Kansas. Mr. Rahjes is a member of High Plains Farm Credit, ACA. He also serves as a director of Rural Telephone/Nextech, Inc., a telecommunications company. Mr. Rahjes became a director of the former U.S. AgBank in 2009, and joined the CoBank Board in 2012 following the merger of the two banks. He served on the Board's Executive Committee in 2016. His term expires in 2019.

David L. Reinders, 60, retired in August 2016 as the Chief Executive Officer of Ag Producers Co-op, a grain and farm supply cooperative in Sunray, Texas, and served as a consultant to the cooperative through year-end 2016. He is a member of Farm Credit Services of America, ACA. He is a director of the Texas Agricultural Cooperative Council. Mr. Reinders became a director in 2011 and served on the Board's Compensation Committee in 2016. His term expires in 2018.

Kevin G. Riel, 51, is the President and Chief Executive Officer of Double 'R' Hop Ranches, Inc., a diversified farming operation primarily growing hops, together with apples, grapes and other row crops, in Harrah, Washington. He is also President and Chief Executive Officer of Tri-Gen Enterprises, Inc., an agricultural marketing operation, and managing partner of WLJ Investments, LLC, a land holding and management company, both in Harrah, Washington. He is a director of Northwest Farm Credit Services, ACA and board President of Hop Growers of America, a trade association. Mr. Riel became a director in 2014 and served on the Board's Compensation Committee in 2016. His term expires in 2017.

Clint E. Roush, 69, is the President of Clint Roush Farms, Inc., a wheat, alfalfa, and stocker/feeder cattle farming operation in Arapaho, Oklahoma. He is a member of Farm Credit of Western Oklahoma, ACA. Dr. Roush serves as chairman of the Farmers Cooperative Association of Clinton, Oklahoma, an agricultural marketing and supply cooperative. He also serves as a director for the Custer County Cattlemen's Association and the Custer County Rural Water District, and on the advisory board for the Bill Fitzwater Endowed Cooperative Chair in the Agricultural Economics Department of Oklahoma State University. Dr. Roush became a director of the former U.S. AgBank in 2009, and joined the CoBank Board in 2012 following the merger of the two banks. He served on the Board's Risk Committee in 2016. His term expires in 2018.

Barry M. Sabloff, 70, retired in 2001 as Executive Vice President of Bank One, N.A. (which subsequently merged with J.P. Morgan Chase & Co.). During a 30-year career with Bank One and First Chicago, he headed a variety of areas including: the International Group; Global Risk Management; Europe, Middle East and Africa; Syndications and Placements; Training and Education; and Electric & Gas (utility company banking). Mr. Sabloff is currently the general partner of the Sabloff Family Limited Partnership, L.P., vice chairman/director of Marquette National Corporation, a bank holding company, and of Marquette Bank, a community bank, both in Chicago, Illinois. Mr. Sabloff is also a director and President of the American School in London Foundation and a director of the American School in London Foundation (UK). He serves as Trustee/Treasurer of Columbia College Chicago, and as a director of the Marquette Bank Affordable Housing Foundation and the Marquette Bank Education Foundation. Mr. Sabloff was appointed to the Board in 2005 as an outside director. He is the Board's financial expert and served as chairman of the Board's Audit Committee in 2016. His term expired in 2016.

Stephanie Herseth Sandlin, 46, is the General Counsel and Vice President for Corporate Development for Raven Industries, Inc., a publicly traded diversified technology and manufacturing company serving agriculture, aerospace and energy markets based in Sioux Falls, South Dakota. Ms. Herseth Sandlin is also a former four-term member of Congress from the State of South Dakota. During her tenure in the U.S. House of Representatives, she served on the Agriculture, Natural Resources and Veterans' Affairs Committees as well as the Select Committee on Energy Independence and Global Warming. After leaving Congress in 2011, she worked as a principal in the Washington, D.C. law firm of Olsson Frank Weeda Terman Matz until June 2012. She joined the Board in 2014 as an appointed director and served on the Board's Risk Committee in 2016. Her term expires in 2017.

Karen L. Schott, 49, is the owner, operator and Secretary/Treasurer of Bar Four F Ranch, Inc., a dryland, small grains and lease pasture farming operation in Broadview, Montana. She is a member and a director of Northwest Farm Credit Services, ACA and formerly served as board chair. She became a director in 2016 and served on the Board's Governance Committee. Her term expires in 2019.

Kenneth W. Shaw, 66, is the owner and operator of a cow/calf/yearling stocker ranching operation in Mountainair, New Mexico. He is a member of Farm Credit of New Mexico, ACA. Mr. Shaw serves as director of the Central New Mexico Electric Cooperative, Inc., an electric distribution cooperative. He became a director of the former U.S. AgBank in 1999, and joined the CoBank Board in 2012 following the merger of the two banks. He rejoined the CoBank Board in 2015 and served on the Board's Governance Committee in 2016. His term expires in 2017.

Richard W. Sitman, 63, retired in July 2013 as owner and operator of Jos. M. Sitman, Inc., a retail business in Greensburg, Louisiana. Mr. Sitman serves as the board chairman of Dixie Electric Membership Corporation, an electric distribution cooperative, DEMCO Energy Services, LLC, and Dixie Business Center, and as an ex officio director of the DEMCO Foundation. He is also a director of First Guaranty Bank, the Louisiana Council of Farmer Cooperatives and the Zachary Taylor Parkway Association. Mr. Sitman served on the Board from 1995-1996 and rejoined the Board in 1999. He served on the Board's Executive Committee in 2016. His term expires in 2019.

Kevin A. Still, 59, is the President and Chief Executive Officer of Co-Alliance, LLP, a partnership of five cooperatives supplying energy, agronomy and animal nutrition, producing swine, and marketing grain in Avon, Indiana. He is also Chief Executive Officer and Treasurer of Excel Co-op, Inc., Frontier Co-op, Inc., IMPACT Co-op, Inc., LaPorte County Farm Bureau Cooperative Association and Midland Co-op, Inc., agricultural retail cooperatives in Avon, Indiana. Mr. Still is President of Northwind Pork, LLC, a pork producing operation in Kewanna, Indiana and of Michiana Agra, LLC, an agricultural retail cooperative in Constantine, Michigan. He is also Vice President and director of Connexities, LLC, a technology provider, owner and President of Still Farms, LLC and board chairman of Local Harvest Food, a food broker in Avon, Indiana. Mr. Still became a director in 2002. In 2016, he served as the Board's second vice chairman and as chairman of the Board's Risk Committee. His term expires in 2018.

Edgar A. Terry, 57, is the owner and President of Terry Farms, Inc., a vegetable and strawberry farming operation in Ventura. California. He is an owner and officer of Amigos Fuerza, Inc., a provider of farm labor contracting, and Moonridge Management, Inc., a provider of back office and human resources consulting, and an owner and President of Willal, Inc., a sales and marketing company, all in Ventura, California. Mr. Terry is also an owner and Vice President of Rancho Adobe, Inc. and an owner and partner in Central AP, LLC, and JJE, LLC, farmland real estate businesses in Ventura, California. He is a senior adjunct professor at California Lutheran University. Mr. Terry is a member and former director of Farm Credit West, ACA, and serves on the Farm Credit System Audit Committee. He also serves as chairman of the Center for Economic Research and Forecasting. He became a director in 2016 and served on the Board's Risk Committee. His term expires in 2019.

Scott H. Whittington, 64, is the General Manager of Lyon-Coffey Electric Cooperative, Inc., an electric distribution cooperative in Burlington, Kansas. He is a director of The Farm Credit Council. He also serves as a director of the First National Bank of Kansas and as an advisory board member of Central National Bank. Mr. Whittington is a director and immediate past Board President of the Kansas Electric Power Cooperative Inc., and an Alternate Trustee for the Kansas Electric Cooperatives. He became a director in 2013 and served on the Board's Compensation Committee in 2016. His term expires in 2020.

In 2016, each member of CoBank, ACB's Board of Directors was compensated for attendance at meetings and other official activities. Director compensation ranged from $57,391 to $74,608, plus expenses.

Farm Credit Bank of Texas

Brad C. Bean, 56, is from Gillsburg, Mississippi. He is a dairy farmer with other farming interests, including corn, sorghum and timber. Mr. Bean is chairman of the bank's Audit Committee and is also a member of the bank's Compensation Committee. In January 2017, he was elected chairman of the Tenth District Farm Credit Council and was also elected to the National Farm Credit Council (FCC) Board of Directors as a district representative. Mr. Bean serves on the boards of the Amite County Farm Bureau and the Amite County Cooperative, both of which are trade organizations. Mr. Bean is a former chairman of the Southern AgCredit, ACA board of directors and a former vice chairman of the Texas District's Stockholders Advisory Committee. Mr. Bean became a director in 2013 and his term expires at the end of 2018.

Ralph W. "Buddy" Cortese, 70, is from Fort Sumner, New Mexico. He is president of Cortese Farm and Ranch Inc., a farming and ranching operation. He is chairman of the bank's Compensation Committee and is a member of the bank's Audit Committee. Mr. Cortese is a member of the Tenth District Farm Credit Council. He currently serves on the board of the Federal Farm Credit Banks Funding Corporation. Mr. Cortese served as chairman of the board of directors of the bank from 2000 through 2011. He is a member of the Texas Agricultural Cooperative Council board of directors, an industry association. From 2003 to 2008, he served on the board of the Federal Agricultural Mortgage Corporation (Farmer Mac), a government agency chartered to create a secondary market for agricultural loans, and is a former board member of the American Land Foundation, a property rights organization. Prior to joining the bank board, he was chairman of the PCA of Eastern New Mexico board of directors. Mr. Cortese became a director in 1995 and his term expired at the end of 2016. He was re-elected to another three-year term effective January 1, 2017.

James F. "Jimmy" Dodson, 63, chairman of the board of directors, is from Robstown, Texas. He grows cotton, corn, wheat and milo on four family farm operations and owns a seed sales business. Mr. Dodson serves on the bank's Audit and Compensation Committees and was chairman of the Tenth District Farm Credit Council for 2016. In January 2017, he was elected vice chairman of the Tenth District Farm Credit Council. He is one of the board's designated financial experts on the board Audit Committee for the bank. He also serves on the National Farm Credit Council Board of Directors, where he is a member of the Executive Committee. Mr. Dodson joined the board of directors of FCC Services, an integrated services firm, in January 2017. He is also president of Dodson Farms, Inc. and Dodson Ag, Inc., and is a partner in Legacy Farms and 3-D Farms. He is a manager of Weber Station LLC, which is the managing partner of Weber Greene, Ltd., both of which are family farm real estate management firms. Mr. Dodson is a founding member of Cotton Leads, a responsible cotton production initiative of U.S. and Australian Cotton Producer organizations. He also serves on the boards of Gulf Coast Cooperative, an agricultural retail cooperative, and the Texas Agricultural Cooperative Council, an industry trade association. He is past chairman of the National Cotton Council of America, the American Cotton Producers and the Cotton Foundation, and formerly served as a director of Cotton Incorporated. He is past chairman of the

Texas AgFinance, FCS board of directors and a former member of the Texas District's Stockholders Advisory Committee. Mr. Dodson became a director of the bank in 2003 and his current term expires at the end of 2017.

Linda C. Floerke, 55, was elected to her first term on the board of directors effective January 1, 2017, and her current term expires December 31, 2019. She is a member of the bank's Audit and Compensation committees and is also a member of the Tenth District Farm Credit Council. Ms. Floerke lives near Lampasas, Texas, where she and her husband, Benton, raise cattle, whitetail deer and hay as Buena Vista Ranch, FLP. They also own and manage Agro-Tech Services, Inc., a family business in which she has been involved for over 30 years and has owned and managed for the past 18 years, which provides services such as liquid fertilizer, crop chemicals, custom application and cattle protein supplements to area farmers and ranchers. They also own and manage rental property in Uvalde, Real and Williamson counties. She is a co-owner of Casa Floerke LLC, a rental property business, and is the secretary/treasurer and co-owner of Jarrell Farm Supply, Inc. Ms. Floerke serves on the Staff Parish Relations Committee for the Lampasas United Methodist Church and serves on the Texas A&M AgriLife Extension Leadership Advisory Board, which provides oversight of agricultural extension services. She previously served as a trustee of the Lampasas Independent School District. Ms. Floerke was a director of Lone Star Ag Credit, formerly Texas Land Bank, from 2012 through the end of 2016.

Elizabeth G. "Betty" Flores, 72, is from Laredo, Texas, where she served as city mayor from 1998 to 2006. Ms. Flores is one of the two appointed members on the board and serves on the bank's Audit Committee. In January 2017, she was elected vice chairman of the bank's Compensation Committee. She is also a member of the Tenth District Farm Credit Council. Previously, she was senior vice president of the Laredo National Bank. Ms. Flores serves on the boards of the Texas Agricultural Cooperative Council, an industry association; Mercy Ministries of Laredo, a domestic violence nonprofit corporation; and Laredo Main Street, a nonprofit organization; and Texas A&M International University Dustdevils, an athletics promotion organization. In 2016, she was appointed by the Texas A&M University Chancellor, John Sharp, to serve on the selection committee to identify a new president for Texas A&M University. She is a graduate of Leadership Texas 1995, a leadership program for women professional and community leaders for the state of Texas, and Leadership America 2008, a national leadership program for women professional and community leaders. In 2010, she was appointed to serve as a member of the Farm Credit System Diversity Workgroup. Ms. Flores is a partner in a ranching and real estate partnership, E.G. Ranch, Ltd. She is a former member of the Federal Reserve Board Consumer Advisory Council. Ms. Flores became a director in 2006 and her term expires at the end of 2018.

Jon M. "Mike" Garnett, 72, is from Spearman, Texas. Mr. Garnett raises grain and forage crops and runs stocker cattle, and is president of Garnett Farms, Inc., a farming operation. During 2016, he was vice chairman of the bank's Compensation Committee and a member of the bank's Audit Committee. He was also a member of the Tenth District Farm Credit Council. In January 2003, Garnett joined the National Farm Credit Council (FCC) Board of Directors as a district representative, became vice chairman of the FCC Board of Directors in 2009 and served as chairman from 2011 to 2013. In addition, he was vice chairman of the FCC Board's compensation and benefits committee and a member of the board's executive, governance and coordinating committees. He also is vice chairman of the Hansford County Soil and Water Conservation District, a county organization in Texas with the role of conservation of natural resources. Mr. Garnett is a former director of a consumer cooperative; a director on the Spearman Chamber of Commerce, a trade organization; and a former member of the Spearman Independent School District Board of Trustees. Prior to joining the bank board, he was chairman of the Panhandle-Plains Land Bank, FLCA board of directors from 1995 to 1998. Mr. Garnett became a director in 1999 and he retired from the bank's board of directors upon the expiration of his term at the end of 2016.

M. Philip Guthrie, 71, was appointed effective July 1, 2015, to a term on the board expiring at the end of 2017. He is vice chairman of the bank's Audit Committee and also serves on the bank's Compensation Committee. He is also a member of Tenth District Farm Credit Council. He is one of the board's designated financial experts on the board Audit Committee for the bank. Mr. Guthrie is the chief executive officer of Denham Partners LLC, a Dallas-based private investment firm, and the chief executive officer and director for Neuro Holdings International LLC, which is a medical devices firm. He also serves as a director for Neuro Resource Group, a medical devices firm, and as a director for Direct General Corporation, an insurance firm. Early in his career, he was chief financial officer of Southwest Airlines, and later served as chief financial officer of Braniff International during that airline's reorganization. Mr. Guthrie also was managing director of Mason Best Co., a Dallas-based investment firm, for 10 years, and has served as chairman, director or chief executive officer of several private and public financial service companies, both in banking and insurance. A Certified Public Accountant and a Chartered Global Management Accountant, Mr. Guthrie is Audit Committee —qualified under the guidelines of the Securities and Exchange Commission, the New York Stock Exchange and Nasdaq. He earned his bachelor's degree in accounting from Louisiana Tech University and his MBA from the University of Michigan. Mr. Guthrie is a stockholder of his family-managed 125-year-old livestock and crop operation in northern Louisiana.

Lester Little, 66, vice chairman of the board of directors, is from Hallettsville, Texas. He owns and operates a farm and offers custom-farming services, primarily reclaiming farms and handling land preparation. His principal crops are corn, milo, hay and wheat. Mr. Little is a member of the bank's Audit and Compensation Committees. He is also a member of the Tenth District Farm Credit Council. In addition, he is a member of the Farm Bureau, an agriculture trade organization, and served on the Lavaca Regional Water Planning Group, a regional water planning authority in Texas during 2016. He previously was a board member of the Lavaca Central Appraisal District, a county organization in Texas that hires the chief appraiser for the county for purposes of assigning real estate values for tax assessments, and board chairman of the Hallettsville Independent School District Board of Trustees. He is former chairman of the Capital Farm Credit board of directors and previously served as vice chairman of the Texas District's Stockholders Advisory Committee. Mr. Little became a director in 2009 and his term expires at the end of 2017.

In 2016, each member of the FCB of Texas' board of directors was compensated for attendance at meetings and other official activities. Each director's regular compensation totaled $57,391 for 2016. Expenses are paid by the bank and additional compensation will be paid by the bank if approved by the board of directors if directors serve additional days on other official assignments and under exceptional circumstances where extraordinary time and effort are involved. During 2016, no additional compensation was paid to a board member.

Federal Farm Credit Banks Funding Corporation

The following sets forth the directors and those individual nominated to serve on the board of directors.

Leon T. Amerson, 54, vice chairman, is president and CEO of AgFirst Farm Credit Bank in Columbia, South Carolina. Mr. Amerson serves as Chairman of the Presidents Planning Committee of the Farm Credit System, a member of both the AgFirst/FCBT and AgFirst Plan Sponsor Committees, a Council member of the National Council of Farmer Cooperatives, a member of the Midlands Business Leadership Group and a member of the Board of Directors of the Palmetto Agribusiness Council serving on the Executive Committee. He also is a member of the Board of Trustees of the National 4-H Council, the Farm Credit System Coordinating Committee, the Finance Committee for United Way of the Midlands, and the University of South Carolina Risk and Uncertainty Management Advisory Board. Mr. Amerson serves as the Chairman of the Funding Corporation Compensation Committee. Mr. Amerson became a director in 2012 and his term expires in 2019.

Maureen Corcoran, 59, is from Chestnut Hill, Massachusetts, and is a retired Executive Vice President of the State Street Corporation. Ms. Corcoran serves as Chair of the Funding Corporation Audit Committee and as Vice Chair of the System Audit Committee. Ms. Corcoran became a director in 2014 and her term expires in 2017.

Ralph W. "Buddy" Cortese, 70, is from Fort Sumner, New Mexico. He is president of Cortese Farm and Ranch Inc., a farming and ranching operation. He is a member of the board of directors of the Farm Credit Bank of Texas. Mr. Cortese is vice chairman of the Tenth District Farm Credit Council board. He is a member of the Texas Agricultural Cooperative Council board of directors, an industry association. He also serves on the Funding Corporation Audit Committee. Mr. Cortese became a director in 2012 and his term expires in 2020.

Larry R. Doyle, 64, is CEO of the Farm Credit Bank of Texas in Austin, Texas. He serves as Chairman of the Finance Committee and is a member of the Executive and Business Practices Committees of the Presidents Planning Committee of the Farm Credit System. Mr. Doyle also serves on the National Council of Farmer Cooperatives Executive Council. Mr. Doyle serves on the Funding Corporation Governance Committee. Mr. Doyle became a director in September 2016 and his term expires in 2020.

Robert B. Engel, 63, stepped down as the CEO of CoBank, ACB in Denver, Colorado as of December 31, 2016, and now serves as a Senior Advisor to the CEO. In addition, he serves on the Board of Trustees of Niagara University and as chairman of the Board of Trustees at Regis University and served on the Executive Council of the National Council of Farmer Cooperatives and as Chairman of the Graduate Institute of Cooperative Leadership through February 15, 2017. Mr. Engel served on the Funding Corporation Governance Committee and Compensation Committee. He is a recipient of the Ellis Island Medal of Honor. Mr. Engel became a director in 2003 and his term expired on December 31, 2016.

J. Less Guthrie, 72, is from Porterville, California. He owns and operates a cow/calf and stocker cattle ranch and a diversified farming operation and is a partner in McGruder Partners, a farming operation. He is a member of Farm Credit West, ACA. Mr. Guthrie serves on the board of directors of Guthrie Investment Co., Inc., (farming and investments). He also serves on the board of directors of the California Cattlemen's Association (trade association). Mr. Guthrie serves as Chairman on the Funding Corporation Governance Committee. Mr. Guthrie became a director of the former U.S. AgBank, FCB in 1997 and joined the CoBank board in 2012. Mr. Guthrie became a director in 2000 and his term expires in 2018.

M. Wayne Lambertson, 70, is from Pocomoke City, Maryland. He owns and operates with his son a 2,700-acre farm of corn, soybeans, and wheat, and a 300,000 capacity pullet operation. He is co-owner of a restaurant, Don's Seafood and Chicken House, and partner in a development and construction company, J.W.L. Enterprise, LLC. Mr. Lambertson is a former member of the board of directors of AgFirst, FCB, and a current member of the board of directors of MidAtlantic Farm Credit, ACA. He is a former chairman and director of The Farm Credit Council Board and Delmarva Poultry Industry (DPI) board of directors, a trade organization. He also serves on the Funding Corporation Compensation Committee. Mr. Lambertson became a director in 2012 and his term expires in 2017.

Robert S. Marjan, 62, is from Chicago, Illinois. He is a senior advisor to Urban Partnership Bank, where he was previously Chief Operating Officer. He is Chair of the Board of Trustees for Christ the King Jesuit School in Chicago and on the board of the Community Investment Corporation. Mr. Marjan was a Managing Director at JPMorgan for much of his career. He serves on the Funding Corporation Audit Committee and the System Audit Committee. Mr. Marjan became a director in 2015 and his term expires in 2018.

Theresa E. McCabe, 55, is President and CEO of the Federal Farm Credit Banks Funding Corporation in Jersey City, New Jersey. Prior to joining the Funding Corporation, Ms. McCabe was a Partner with Goldman, Sachs & Co. Ms. McCabe is a non-voting member of the board. She became a director in 2012 and her term will expire upon her separation of service.

Roy Tiarks, 66, chairman, is a self-employed grain and livestock farmer in Council Bluffs, Iowa. Mr. Tiarks is a member of the board of directors of AgriBank, FCB. He also serves on the Funding Corporation Compensation Committee. Mr. Tiarks became a director in 2001 and his term expires in 2019.

Funding Corporation Bank director members and appointed members are compensated for their time served and for travel and related expenses, while Bank CEOs or presidents are only compensated for travel and related expenses. In 2016, the directors eligible for compensation were paid between $54,467 and $95,360 for the year, plus expenses.

Certain Relationships and Related Transactions

The System is a cooperatively owned network of agricultural lending institutions. Agricultural producers typically become members of an Association when they establish a borrowing/financing relationship with the Association. In CoBank's case, its Associations, together with other borrowers of the Bank, own CoBank, as well as borrow from the Bank. Accordingly, most Bank directors are agricultural producers who are member/borrowers of an Association and, in the case of CoBank, its other member/borrowers.

As discussed in Note 18 to the accompanying combined financial statements, Banks and Associations may, in the ordinary course of business, enter into loan transactions with their officers and directors and other organizations with which officers and directors are associated. These loans are subject to special approval requirements contained in the Farm Credit Administration regulations.

The following is a list of aggregate loan balances outstanding at December 31, 2016 to the directors of each Bank and its affiliated Associations and other organizations with which the directors are associated:

	(in millions)
AgFirst Farm Credit Bank	$ 303
AgriBank, FCB	415
Farm Credit Bank of Texas	198
CoBank, ACB	1,511

Senior Officers

The chief executive officer and all other senior officers of each Bank and the Funding Corporation, together with their age and length of service at their present position as of December 31, 2016, as well as prior positions held if in the current position less than five years, are as follows:

Name, Age and Title	Time in Position	Prior Experience
AgFirst Farm Credit Bank:		
Leon T. Amerson, 54, *President and Chief Executive Officer*	4.5 years	President from April 2010 to present.
Charl L. Butler, 59, *Senior Vice President and Chief Financial Officer*	10 years	
Benjamin F. Blakewood, 68, *Senior Vice President and Chief Information Officer*	18 years	
Christopher L. Jones, 59, *Senior Vice President and Chief Credit Officer*	6 years	
Daniel E. LaFreniere, 53, *Senior Vice President, Chief Audit Executive*	3.5 years	Director of Audit Services from 2007 to 2013 at SCANA Corporation
Isvara M.A. Wilson, 46, *Senior Vice President and General Counsel*	4 years	Managing Director and Associate General Counsel at the Bank of America from 2010 until December 2012.
AgriBank, FCB:		
William J. Thone, 63, *Chief Executive Officer*	1 month	Vice President and General Counsel
Brian J. O'Keane, 48, *Executive Vice President, Banking and Finance and Chief Financial Officer*	9.5 years	
Jeffrey R. Swanhorst, 54, *Executive Vice President, Credit and Chief Credit Officer*	5 years	
Jeffrey L. Moore, 56, *Senior Vice President, Finance*	4 years	Vice President, Controller
Ruth L. Anderson, 52, *Vice President, Business Services*	6 years	
Patricia G. Jones, 56, *Senior Vice President, Human Resources and Communications*	7 years	
Barbara K. Stille, 51, *Senior Vice President and General Counsel*	2 years	Executive Vice President — Operations and General Counsel, 1st Farm Credit Services, ACA
James B. Jones, 51, *Senior Vice President, Chief Risk Officer*	1.4 years	Vice President, Chief Risk Officer
Jerry M. Lehnertz, 60, *Senior Vice President, Credit*	10 months	Vice President, Lending
CoBank, ACB:		
Robert B. Engel, 63, *Chief Executive Officer*	10.5 years	

Name, Age and Title	Time in Position	Prior Experience
Mary E. McBride, 61, *Strategic Advisor*	4 months	President since 2013; Chief Banking Officer 2010 — 2013; Chief Operating Officer 2009 — 2010; Executive Vice President, Communications and Energy Banking Group 2003 — 2009
Ann E. Trakimas, 60, *Chief Operating Officer*	6 years	
Thomas E. Halverson, 52, *Chief Banking Officer*	3.5 years	Managing Director and Chief of Staff, Goldman Sachs Bank USA
Lori L. O'Flaherty, 57, *Strategic Advisor*	4 months	Chief Risk Officer since July 2013; Chief Business Process and Accountability Officer 2013; Chief Credit Officer 2010 — 2013; Executive Vice President, Credit Approval and Administration 2009 — 2010; Senior Vice President, Credit Administration 2006 — 2009; Senior Vice President, Corporate Finance 2002 — 2006
David P. Burlage, 53, *Chief Financial Officer*	7.1 years	
John Svisco, 58, *Chief Business Services Officer*	3.5 years	Chief Administrative Officer since 2010; Senior Vice President, Human Resources and Administrative Services Divisions 2009 — 2010; Senior Vice President, Human Resources Division April 2009 — September 2009; Senior Vice President, Operations Division 2003 — 2009
Andrew D. Jacob, 56, *Chief Legislative, Regulatory, and Compliance Officer and Interim Chief Risk Officer*	4 months	Chief Regulatory, Legislative, and Compliance Officer since 2015; Executive Vice President, Compliance since September 2013; Executive Vice President, Regulatory, Legislative and Compliance 2011 — 2013
Robert L. O'Toole, 54, *Chief Human Resources Officer*	2 years	Senior Vice President, Human Resources since September 2010; Vice President, Human Resources 2006 — 2010
Daniel L. Key, 60, *Chief Credit Officer*	3.5 years	Chief Credit Officer — In Charge since March 2013; Senior Vice President, Credit Approval 2011 — 2013; Vice President, Risk Management Division 2009 — 2011
M. Mashenka Lundberg, 49, *Senior Vice President and General Counsel*	3 years	Partner, Bryan Cave LLP 2012 —2014; General Counsel and Partner, Holme Roberts & Owen LLP 1994 — 2011
Farm Credit Bank of Texas:		
Larry R. Doyle, 64, *Chief Executive Officer*	13.5 years	
Kurt Thomas, 61, *Senior Vice President, Chief Credit Officer*	6.6 years	
Carolyn Owen, 65, *Senior Vice President, Corporate Affairs, General Counsel and Corporate Secretary*	3.8 years	Vice President, Corporate Affairs, Deputy General Counsel, FCBT
Amie Pala, 59, *Chief Financial Officer*	6.4 years	
Michael Elliott, 48, *Chief Information Officer*	3 years	Vice President of Information Technology 2011 — 2013, FCBT
Stan Ray, 52, *Chief Administrative Officer*	6.4 years	
Susan Wallar, 56, *Chief Audit Executive*	5 years	

Name, Age and Title	Time in Position	Prior Experience
Federal Farm Credit Banks Funding Corporation:		
Theresa E. McCabe, 55, *President and Chief Executive Officer*	5 years	
Karen R. Brenner, 52, *Managing Director — Financial Management Division*	3.8 years	Senior Vice President — Financial Management Division September, 2007 — March, 2013
Glenn R. Doran, 54, *Managing Director — Finance*	9.5 years	
Katherine Falconi, 39, *Managing Director — Risk & Research*	2.4 years	Vice President — Securities Division Counterparty Risk Management; Goldman Sachs & Co.
Allison M. Finnegan, 45, *Managing Director — Human Resources, General Counsel and Corporate Secretary*	7.6 years	
Scott C. Pearson, 54, *Senior Vice President and Director — Information Services*	9.5 years	

Membership, Farm Credit System Audit Committee

The Farm Credit System Audit Committee is comprised of five members, all of whom are appointed by the board of directors of the Funding Corporation. The Funding Corporation Board has determined that each member of the System Audit Committee is financially literate and has designated at least one member to be the financial expert as defined by the Farm Credit Administration regulations. All members of the Committee are independent of management of the Funding Corporation or any System Bank or Association.

The membership of the Farm Credit System Audit Committee at December 31, 2016 is as follows:

Timothy Clayton, 62, is from Plymouth, Minnesota. Mr. Clayton is an outside member of the Committee and serves as chairman of the Committee. He is a Principal of the management consulting firm Emerging Capital, LLC and previously served as Chief Financial Officer of Tile Shop Holdings, Inc., which is a retail ceramic and stone tile business. He previously served as an Appointed Director on the AgriBank, FCB Board of Directors from 2005 through 2013. The Funding Corporation board has designated Mr. Clayton as an Audit Committee financial expert. Mr. Clayton became a member of the Audit Committee in September 2013 and his term expires in 2017.

Maureen Corcoran, 59, is from Chestnut Hill, Massachusetts, and is a retired Executive Vice President of the State Street Corporation. Ms. Corcoran serves on the board of the Funding Corporation and as Chair of the Funding Corporation Audit Committee. Ms. Corcoran became a member of the Audit Committee in 2014 and her term expires in 2017.

John S. Langford, 67, is from Lakeland, Florida, and owns and operates John Langford, Inc., a citrus farming operation. Mr. Langford also owns and operates John Langford, Realty, Inc., which specializes in the sale of agricultural lands. He currently serves as a director on the boards of Farm Credit of Central Florida, ACA, Lake Wales Citrus Growers Association, a citrus grower's cooperative. He is Vice Chairman of the AgFirst board and serves on the AgFirst board Compensation Committee. Mr. Langford became a member of the Audit Committee in 2015 and his term expires in 2018.

Robert S. Marjan, 62, is from Chicago, Illinois and is a senior advisor to Urban Partnership Bank (UPB), where he was previously Chief Operating Officer. He is Chair of the Board of Trustees for Christ the King Jesuit School in Chicago and on the board of the Community Investment Corporation. Prior to joining UPB, Mr. Marjan was a Managing Director at JPMorgan. He also serves on the Funding Corporation Audit Committee. Mr. Marjan became a member of the Audit Committee in 2015 and his term expires in 2017.

Edgar A. Terry, 57, is from Ventura, California and is the President of Terry Farms, Inc., a vegetable and strawberry farming operation. He is owner and officer of Amigos Fuerza, Inc., a provider of farm labor contracting, and Moonridge Management, Inc., a provider of back office and human resources consulting, and owner and President of Willal, Inc., a sales and marketing company, all in Ventura, California. Mr. Terry is also an owner and Vice President of Rancho Adobe, Inc. and owner and partner in Central AP, LLC, and JJE, LLC, farmland real estate businesses also in Ventura, California. He is a senior adjunct professor at California Lutheran University. Mr. Terry is a director of CoBank, ACB and serves on the Board's Risk Committee. He also serves as chairman of the Center for Economic Research and Forecasting. Mr. Terry became a member the Audit Committee in 2014 and his term expires in 2017.

The Committee held six meetings during 2016 and all members were in attendance for each of the meetings.

Each System Audit Committee member was compensated for attendance at meetings as follows:

Timothy Clayton, Chairman	$80,000
Maureen Corcoran, Vice Chairman	48,000
John S. Langford	48,000
Robert S. Marjan	48,000
Edgar A. Terry	48,000

No member of the System Audit Committee received non-monetary compensation for the year ended December 31, 2016.

COMPENSATION OF CHIEF EXECUTIVE OFFICERS

Compensation Discussion and Analysis

Overview

The philosophy of System institutions with respect to compensating each institution's senior officers is to attract, develop and retain senior officers who are highly qualified and proficient at executing each institution's strategic objectives and operational activities, and deliver performance results that optimize the return to the shareholders. In the case of the Banks, each Bank emphasizes:

- Establishing a clear link between the financial performance (e.g., earnings, capital, asset quality, liquidity, sensitivity to changes in interest rates, and customer satisfaction) of the Bank and each senior officer's total compensation package, including rewarding appropriate risk-taking with the Bank's capital to generate returns for the shareholders, while avoiding unnecessary risks, and
- Providing a total compensation package to each senior officer that is competitive within the financial services industry and their local market. The total compensation philosophy of System institutions seeks to achieve the appropriate balance between market-based base salary and benefits, and variable incentive compensation that is designed to incent and reward both the current and long-term achievement of System institutions' strategic business objectives and business plans. System institutions believe that this philosophy fosters a performance-oriented, results-based culture wherein compensation varies on the basis of results achieved.

All System institutions are cooperatives with no publicly traded stock. Therefore, no stock options or other equity- or stock-based compensation programs have been, or can be, granted to senior officers of System institutions. However, it is a general practice across the System to reward the performance of an institution's senior officers with some form of non-equity incentive compensation.

The operations of the Funding Corporation are different than the Banks' operations. While the Banks generate income through loans, investments, and related operations, the primary functions of the Funding Corporation are to raise funds as an agent for the Banks in the debt markets and to issue the combined financial statements of the System. The performance of the Funding Corporation in these two areas is used to gauge the performance of each Funding Corporation senior officer for purposes of determining his or her total compensation package. All operating expenses of the Funding Corporation are reimbursed by the Banks through the assessment of fees; there are no revenues generated by the Funding Corporation.

In addition to compensation, System institutions provide a comprehensive and market-based package of employee benefits for health and welfare and for retirement purposes. Some retirement benefits are restored or enhanced for certain senior officers through one or more non-qualified retirement plans. In other words, while the benefits may be limited as the result of Internal Revenue Code limitations, the benefits that would have been accrued had the Internal Revenue Code limits not been in place are made up for certain senior officers through certain non-qualified retirement plans. In addition, certain institutions have provided for enhanced retirement benefits for named executives.

CEO Compensation Policy

The following discussion regarding compensation policy, summary compensation tables, and related disclosures focuses on the CEOs of the Banks and the Funding Corporation since they are the CEOs of the System entities responsible for the Systemwide disclosures.

The Bank and Funding Corporation CEOs generally have three primary forms of compensation: base pay in the form of a salary, non-equity incentive compensation, and retirement benefits.

Base Pay in the Form of a Salary

The base salary component of each Bank's and the Funding Corporation's CEO recognizes the individual's particular experience, skills, responsibilities, and knowledge. Each Bank's and the Funding Corporation's compensation committee or executive committee serving as the compensation committee of each entity's board of directors reviews the appropriate level of base salary and benefits generally on an annual basis. Each committee takes into consideration industry factors and the local market place. Each committee may also use independent consultants or other means to obtain external comparative data for the CEOs of similar financial institutions, based upon asset size and other factors.

Non-Equity Incentive Compensation

Each Bank and the Funding Corporation has some form of non-equity incentive compensation for its CEO. The overall objective of the incentive compensation is to align each CEO's performance objectives with the interests of the shareholders. The receipt of incentive compensation by each Bank CEO is based upon the performance of the Bank in achieving certain strategic and financial goals. In some cases, the Banks may have both short-term incentive compensation, which focuses on the current performance of the Bank, such as profitability, credit quality, capital adequacy and operating efficiency, and long-term incentive compensation, which focuses on the long-term success of the Bank, such as profitability, credit quality and capital adequacy. In the case of the Funding Corporation, the receipt of incentive compensation is based upon the performance of its specific functions noted previously. In addition, a portion of the incentive compensation may be based upon individual goals and performance. Also, in certain instances, the CEOs may be able to defer payment of a portion of the incentive compensation by directing the deferred amounts be invested in accordance with available options selected by retirement trust committees of the Banks or the Funding Corporation. For each Bank's and the Funding Corporation's CEO, a significant portion of their total compensation is "at-risk" in the form of incentive compensation.

Retirement Benefits

Each Bank and the Funding Corporation CEO participates in a defined benefit retirement plan or a defined contribution plan. However, most of the defined benefit retirement plans are closed to new participants. In addition, some of the Banks provide supplemental executive retirement plans or pension restoration plans for their CEOs. These plans provide for a portion of the CEO's benefit that cannot be paid from the retirement plan due to the pay and benefit limitations set by the Internal Revenue Code or provide enhanced retirement benefits to the CEO. Additional discussions of the retirement benefits for each Bank's and the Funding Corporation's CEO are set forth below.

Additional discussion of each Bank's compensation policies can be obtained by reference to the discussions provided in the Bank's annual report.

Summary Compensation Table

Name	Year	Salary	Non-Equity Incentive Plan Compensation	Change in Pension Value*	All Other Compensation	Total
AgFirst Farm Credit Bank						
Leon T. Amerson, President and CEO(1)	2016	$ 735,028	$ 717,691	$1,016,907	$ 50,558	$2,520,184
	2015	700,027	704,920	575,111	46,371	2,026,429
	2014	668,026	641,878	1,522,025	39,358	2,871,287
AgriBank, FCB						
William J. Thone, CEO(2)	2016	258,333	36,750		23,940	319,023
L. William York, CEO(3)	2016	386,927	(31,956)	271,012	1,313,674	1,939,657
	2015	646,494	791,917	302,530	78,751	1,819,692
	2014	627,664	925,051	260,567	71,627	1,884,909
CoBank, ACB						
Robert B. Engel, CEO(4)	2016	925,000	3,308,800	603,857	715,413	5,553,070
	2015	895,000	3,199,669	695,184	501,838	5,291,691
	2014	880,000	3,568,400	108,526	512,853	5,069,779
Farm Credit Bank of Texas						
Larry R. Doyle, CEO(5)	2016	1,250,048	1,375,000	102,812	960	2,728,820
	2015	1,250,048	1,250,000	(29,609)	9,294	2,479,733
	2014	1,250,048	1,250,000	274,628	21,523	2,796,199
Federal Farm Credit Banks Funding Corporation						
Tracey E. McCabe, President and CEO(6)	2016	975,000	975,000		551,940	2,501,940
	2015	900,000	850,000		519,275	2,269,275
	2014	850,000	825,000		497,250	2,172,250

* While preferential earnings on nonqualified deferred compensation are required to be reported with the change in pension value, the CEOs did not receive any preferential earnings in 2016, 2015 and 2014.

(1) The Compensation Committee of the Board of Directors reviews Mr. Amerson's performance annually, and the Board of Directors annually approves his compensation level, including base salary and incentive compensation. Mr. Amerson was employed pursuant to an employment and retention agreement that expired on June 30, 2014. There is currently no employment agreement for Mr. Amerson.

(2) Mr. Thone was named interim CEO on August 1, 2016. Subsequently, he was named permanent CEO on December 1, 2016. The compensation reflected in the table includes compensation received since August 1, 2016. The Compensation Committee of the Board of Directors reviews Mr. Thone's performance annually, and the Board of Directors annually approves his compensation level, including base salary and incentive compensation. There is currently no employment agreement for Mr. Thone. Prior to assuming CEO duties at AgriBank, Mr. Thone retired from AgriBank in 2015, at which time his pension benefits ceased to accrue. Refer to the Pension Benefits for the year ended December 31, 2016 for additional information.

(3) On July 25, 2016, Mr. York left the position of CEO. All compensation is disclosed in the year it is earned. As the long-term incentive is on a rolling three-year basis, adjustments for earnings plan-to-date in a particular plan year may be reduced so the cumulative earned long-term compensation reflects the actual payments received at the end of the three-year period. All other compensation includes severance earned in 2016 including that paid in 2016 and will be paid in 2017 and 2018.

(4) The Compensation Committee of the Board of Directors reviews Mr. Engel's performance semi-annually, and the Board of Directors annually approves his compensation level, comprised of salary and supplemental compensation, including short-term and long-term incentive compensation. Mr. Engel is employed pursuant to an employment agreement that provides for employment during a fixed term, through June 30, 2017. In the event that his employment is terminated, except for termination for cause, the employment agreement provides for the payment of the prorated base salary and incentives through the date of the termination. The employment agreement also provides certain limited payments upon death or disability. The CEO employment agreement, which was restated and amended in 2013, provides for (a) a fixed term through June 30, 2017, (b) a reduction in the amount and term of severance payments and benefits at the end of each completed service year during the term of the agreement, resulting in no eligibility for severance during the last year of the original and extended term, (c) an indexed increase in the annual retirement benefit cap, reaching a maximum of $900,000 in the last year of the agreement, for each completed service year over the term of the agreement to retain the present value of the total lump sum calcu-

lation at each year end, and (d) eligibility for incentive payments totaling $2,000,000 paid in installments over the term of the agreement based on the achievement of certain additional performance and retention objectives as established and measured by the Board of Directors. The agreement for the CEO has allowed for a flexible and effective CEO retention and succession process, including providing for the CEO to serve as CEO through December 31, 2016, and as a Senior Advisor through the remainder of the term of the agreement. Additionally, a consulting agreement has been established between the CEO and the Bank to include provisions that will allow the CEO to provide services to the Bank in an advisory status, as requested by the Bank beginning on July 1, 2017. The consulting agreement will expire on June 30, 2018. As a condition of the agreement, Mr. Engel must sign a release agreeing to give up any claims, actions or lawsuits against CoBank related to his employment. The agreement also provides for non-competition and non-solicitation by the CEO over the term of the payments.

(5) The Compensation Committee of the Board of Directors reviews Mr. Doyle's performance annually, and the Board of Directors annually approves his compensation level, including base salary and incentive compensation.

In December 2016, a memorandum of understanding between the bank and the CEO was executed with an effective date of January 1, 2017, which supersedes the previous memorandum of understanding effective January 2, 2014. The memorandum of understanding was effective for a term of three years, until December 31, 2019. The base salary for each year of the three-year term for the CEO will be $1,375,000. Bonus payments, if any, are at the sole discretion of the Compensation Committee. The employment relationship between the bank and CEO remains at-will, meaning the bank may terminate the CEO's employment at any time, and the CEO may choose to leave at any time.

(6) The Compensation Committee of the Board of Directors reviews Ms. McCabe's performance annually and the Board of Directors annually approves the compensation level, including base salary and incentive compensation. Ms. McCabe is a participant in a defined contribution retirement plan subject to a five-year cliff-vesting period from employment date. While being employed at will, with no specified term of employment, the agreement provides that if Ms. McCabe is terminated for any reason other than "for cause", she will receive a severance benefit of not more than six months severance pay equal to her base salary.

Pensions Benefits for the Year Ended December 31, 2016

Additional information on each Bank's pension benefits can be obtained by reference to the discussions provided in the Bank's annual report.

Name	Plan Name	Number of Years Credited Service	Present Value of Accumulated Benefit
AgFirst Farm Credit Bank			
Leon T. Amerson, President and CEO(1)	AgFirst Farm Credit Retirement Plan	30.42	$2,245,572
	AgFirst Farm Credit Bank Supplemental Retirement Plan	30.42	4,563,564
AgriBank, FCB			
William J. Thone, CEO(2)	AgriBank District Retirement Plan	38.0	1,386,490
	AgriBank District Restoration Plan	38.0	217,902
L. William York, CEO(3)	AgriBank District Retirement Plan	26.5	727,792
	AgriBank District Restoration Plan	26.5	1,140,182
CoBank, ACB			
Robert B. Engel, CEO(4)	CoBank, ACB Retirement Plan	16.58	790,367
	Supplemental Executive Retirement Plan	16.58	6,457,546
	Executive Retirement Plan	16.58	3,426,912
Farm Credit Bank of Texas			
Larry R. Doyle, CEO(5)	Farm Credit Bank of Texas Pension Plan	43.14	1,743,166

(1) Mr. Amerson participates in a defined benefit retirement plan. He is eligible to retire and begin drawing unreduced pension benefits at age 65 or when years of credited service plus age equal "85." Upon retirement, annual payout is equal to 2% times years of credited service times the high three-year average compensation, subject to the Internal Revenue Code limitation of $395,000 for 2016. For purposes of determining the payout, "average compensation" is defined as regular salary (i.e., does not include bonuses or non-equity incentive plan compensation). Benefits under the plan are payable as a five-year certain and life annuity. Benefits under the plan are not subject to an offset for Social Security. Benefits that would have accrued in the absence of IRS limits are made up through a non-qualified supplemental executive retirement plan. Mr. Amerson also participates in a 401(k) defined contribution plan which has an employer matching contribution, and in a nonqualified deferred compensation plan that allows Mr. Amerson to defer compensation and which restores the benefits limited in the 401(k) plan as a result of restrictions in the Internal Revenue Code.

(2) Prior to assuming CEO duties, Mr. Thone retired as vice president and general counsel from AgriBank in 2015, at which time his pension benefits ceased to accrue. During 2016, Mr. Thone received pension benefit payments of $82,552 and $27,523 from the Agribank District Retirement Plan and AgriBank District Restoration Plan, respectively. Upon his rehire on December 1, 2016, Mr. Thone's pension benefit payments ceased and will resume at a future retirement date.

(3) On July 25, 2016, Mr. York left the position of CEO, at which time his pension benefits ceased to accrue. Mr. York had a frozen benefit that he earned under the final average pay formula of the defined benefit retirement plan for his prior service with the AgriBank District. Upon his rehire in 2005, he began earning benefits under the cash balance defined benefit retirement plan formula; however, credit was provided for his prior service. His benefit was based on the Internal Revenue Code limitation of $395,000 for 2016 at the contribution rate of 10%. In addition, he will receive an integrated contribution of 5% for all pay over the social security wage base of $118,500 for 2016 up to the IRS compensation limit. Pay in excess of the IRS limit was excluded from his qualified retirement benefit.

(4) The CoBank CEO participates in a final average pay defined benefit retirement plan (a noncontributory plan), an unfunded supplemental executive retirement plan ("SERP") and an unfunded executive retirement plan ("ERP") and is eligible to participate in the 401(k) retirement savings plan, which includes a matching contribution by the Bank. The CEO is also eligible to participate in a nonqualified deferred compensation plan that allows him to defer all or a portion of his incentive compensation. Additionally, the Bank makes contributions to this plan when his benefits under the 401(k) plan are limited due to Internal Revenue Code limits. Eligible compensation, as defined under the defined benefit plan final average pay formula, is the highest 60 consecutive-month average, which includes salary and incentive compensation measured over a period of one year or less, but excludes long-term incentive awards, expense reimbursements, taxable fringe benefits, relocation allowance, short- and long-term disability payments, nonqualified deferred compensation distributions, lump sum vacation payouts, and all severance payments. Compensation in excess of the Internal Revenue Code limits is covered through participation in the unfunded nonqualified supplemental executive retirement plan. Retirement benefits are calculated assuming payment in the form of a single life annuity with five years certain and retirement at Normal Retirement Age of 65. However, the actual form and timing of payments are based on participant elections. The plan requires five years of service to become vested. The benefit formula is the sum of 1.5 percent of eligible compensation up to Social Security covered compensation plus 1.75 percent of eligible compensation in excess of Social Security covered compensation, multiplied by years of eligible benefit service. Social Security covered compensation is the 35 year average of the Social Security taxable wage bases up to the participant's Social Security retirement age. In addition, an unfunded executive retirement plan has been adopted for the CEO. The CEO's agreement provides for a retirement benefit of 55% of eligible compensation as of December 31, 2016, with no reduction for early retirement, but subject to a maximum benefit amount. The ERP is limited such that benefits provided under that plan are payable only if retirement benefits payable per year from the defined benefit retirement plan and SERP are less than the indexed retirement benefit cap, expressed as a single life annuity with five years certain. The CEO is also eligible for other postretirement benefits, primarily access to medical plans coverage. Participants in postretirement medical plans pay the premiums related to those plans.

(5) The CEO participates in the Farm Credit Bank of Texas Pension Plan (the "Pension Plan"), which is a qualified defined benefit retirement plan. Compensation, as defined in the Pension Plan, includes wages, incentive and bonus compensation and deferrals to the 401(k) and flexible spending account plans, but excludes annual leave or sick leave that may be paid in cash at the time of termination, retirement or transfer of employment; severance payments; retention bonuses; taxable fringe benefits; and any other payments. Pension Plan benefits are based on the average of monthly eligible compensation over the 60 consecutive months that produce the highest average after 1996 ("FAC60"). The Pension Plan's benefit formula for a Normal Retirement Pension is the sum of (a) 1.65 percent of FAC60 times "Years of Benefit Service" and (b) 0.50 percent of (i) FAC60 in excess of Social Security covered compensation times (ii) "Years of Benefit Service" (not to exceed 35). The CEO's Pension Plan benefit is offset by the CEO's pension benefits from another Farm Credit System institution. The present value of the CEO's accumulated Pension Plan benefit is calculated assuming retirement had occurred at the measurement date used for financial statement reporting purposes with retirement at age 65. The Pension Plan's benefit formula for the Normal Retirement Pension assumes that the CEO is married on the date the annuity begins, that the spouse is exactly 2 years younger than the CEO, and that the benefit is payable in the form of a 50 percent joint and survivor annuity. If any of those assumptions are incorrect, the benefit is recalculated to be the actuarial equivalent benefit.

AUDIT COMMITTEE REPORT

The Farm Credit Administration regulations with respect to disclosure to investors in Systemwide Debt Securities require the board of directors of the Funding Corporation to establish and maintain a System Audit Committee. These regulations specify that the System Audit Committee may not consist of less than three members and at least one member must be a financial expert. A financial expert must be the chairman of the System Audit Committee. Every member must be free from any relationship that, in the opinion of the board of directors of the Funding Corporation, would interfere with the exercise of independent judgment as a System Audit Committee member. The System Audit Committee reports to the board of directors of the Funding Corporation. The charter can be found on the Funding Corporation's website at www.farmcreditfunding.com. The responsibilities of the System Audit Committee include:

- the oversight of the Funding Corporation's system of internal controls related to the preparation of the System's quarterly and annual information statements,
- the integrity of the System's quarterly and annual information statements,
- the review and assessment of the impact of accounting and auditing developments on the System's combined financial statements,
- the review and assessment of the impact of accounting policy changes related to the preparation of the System's combined financial statements,
- the appointment, compensation, retention and oversight of the System's independent auditors with the agreement of the Funding Corporation's board of directors,
- the pre-approval of allowable non-audit services at the System level,
- the receipt, retention and treatment of complaints regarding accounting, internal accounting controls or auditing matters at the System level,
- the receipt of various reports from management on internal controls, off-balance sheet arrangements, critical accounting policies, and material alternative accounting treatments that may impact the System's combined financial statements,
- the review and approval of the scope and planning of the annual audit by the System's independent auditors,
- the approval of policies and procedures for the preparation of the System's quarterly and annual information statements, and
- the review and approval of the System's quarterly and annual information statements and financial press releases, after discussions with management and the independent auditors.

The System Audit Committee has reviewed and discussed the System's 2016 combined financial statements and the System's report on internal control over financial reporting, which were prepared under the oversight of the System Audit Committee, with senior management of the Funding Corporation and the independent auditors. In addition, the System Audit Committee discussed with the independent auditors the matters required to be discussed by PCAOB Auditing Standard No. 16, *Communications with Audit Committees*.

The System Audit Committee has also received written disclosures and has discussed with the independent auditors their independence.

Based on the review and discussions referred to above, the System Audit Committee recommended that the audited combined financial statements be included in the System's *2016 Annual Information Statement.*

Timothy Clayton (Chairman)
Maureen Corcoran (Vice Chairman)
John S. Langford
Robert S. Marjan
Edgar A. Terry

AUDIT AND OTHER FEES

Audit Fees

The following table sets forth the aggregate fees billed for professional services rendered for the System by its independent auditor, PricewaterhouseCoopers LLP, in the years ended December 31, 2016 and 2015:

	2016	2015
	(in thousands)	
Audit	$11,948	$12,549
Audit-related	543	408
Tax	409	287
All Other	862	288
Total	$13,762	$13,532

The *Audit* fees were for professional services rendered for the audits of System entities and the audit of the System's internal control over financial reporting.

The *Audit-related* fees were for issuances of comfort letters for preferred stock offerings and subordinated debt issuances, and employee benefit plan audits.

Tax fees were for services related to tax compliance, including the preparation of tax returns and claims for refunds, and tax planning and tax advice.

All Other fees were for services rendered for other advisory and assistance services, which were approved by the appropriate audit committee.

Other Fees

As required by the Farm Credit Administration regulations, any monetary and nonmonetary resources used by the System Audit Committee in fulfilling their duties are to be reported on an annual basis. Administrative expenses for the System Audit Committee totaled $28,000 for 2016 and $29,000 for 2015. No resources, other than administrative expenses and fees paid to the auditor as described above, were used during 2016 and 2015.

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

As of December 31, 2016, managements of System institutions carried out an evaluation with the participation of the Funding Corporation's management, including the President and CEO and the Managing Director — Financial Management Division, of the effectiveness of the design and operation of the their respective disclosure controls and procedures[1] with respect to this annual information statement. This evaluation is based on testing of the design and effectiveness of key internal controls, certifications and other information furnished by the principal executive officer and principal financial officer of each System institution, as well as incremental procedures performed by the Funding Corporation over the combining process. Based upon and as of the date of the Funding Corporation's evaluation, the President and CEO and the Managing Director — Financial Management Division concluded that the disclosure controls and procedures are effective in alerting them on a timely basis of any material information relating to the System that is required to be disclosed by the System in the annual and quarterly information statements it files or submits to the Farm Credit Administration. There have been no significant changes in the System's internal control over financial reporting[2] that occurred during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, the System's internal control over financial reporting.

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[1] For purposes of this discussion, "disclosure controls and procedures" are defined as controls and procedures of the System that are designed to ensure that the financial information required to be disclosed by the System in this annual information statement is recorded, processed, summarized and reported, within the time periods specified under the rules and regulations of the Farm Credit Administration.

[2] For purposes of this discussion, "internal control over financial reporting" is defined as a process designed by, or under the supervision of, the System's principal executive officers and principal financial officers, or persons performing similar functions, and effected by the System's boards of directors, managements and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the System's combined financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that: (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the System; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the System's combined financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the System are being made only in accordance with authorizations of managements and directors of the System; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the System's assets that could have a material effect on the System's combined financial statements.

CERTIFICATION

I, Theresa E. McCabe, certify that:

1. I have reviewed the *2016 Annual Information Statement* of the Farm Credit System.

2. Based on my knowledge, this annual information statement does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual information statement.

3. Based on my knowledge, the financial statements, and other financial information included in this annual information statement, fairly present in all material respects the financial condition, results of operations and cash flows of the System as of, and for, the periods presented in this annual information statement.

4. The System's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures[1] and internal control over financial reporting[2] for the System and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the System, including its combined entities, is made known to us by others within those entities, particularly during the period in which this annual information statement is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the System's disclosure controls and procedures and presented in this annual information statement our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual information statement based on such evaluation; and

(d) disclosed in this annual information statement any change in the System's internal control over financial reporting that occurred during the System's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the System's internal control over financial reporting.

5. The System's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the System's auditors and the System Audit Committee:

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the System's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the System's internal control over financial reporting.

Theresa E. McCabe

Theresa E. McCabe
President and CEO

Date: March 1, 2017

(1) See footnote 1 on page S-26.

(2) See footnote 2 on page S-26.

CERTIFICATION

I, Karen R. Brenner, certify that:

1. I have reviewed the *2016 Annual Information Statement* of the Farm Credit System.

2. Based on my knowledge, this annual information statement does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual information statement.

3. Based on my knowledge, the financial statements, and other financial information included in this annual information statement, fairly present in all material respects the financial condition, results of operations and cash flows of the System as of, and for, the periods presented in this annual information statement.

4. The System's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures[1] and internal control over financial reporting[2] for the System and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the System, including its combined entities, is made known to us by others within those entities, particularly during the period in which this annual information statement is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the System's disclosure controls and procedures and presented in this annual information statement our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual information statement based on such evaluation; and

(d) disclosed in this annual information statement any change in the System's internal control over financial reporting that occurred during the System's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the System's internal control over financial reporting.

5. The System's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the System's auditors and the System Audit Committee:

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the System's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the System's internal control over financial reporting.

Karen R. Brenner

Karen R. Brenner
Managing Director — Financial
Management Division

Date: March 1, 2017

(1) See footnote 1 on page S-26.

(2) See footnote 2 on page S-26.

INDEX TO ANNUAL INFORMATION STATEMENT

* As used herein, the references to "Notes" mean the Notes to Combined Financial Statements found on pages F-10 through F-71 of this annual information statement.

FARM CREDIT SYSTEM ENTITIES (As of January 1, 2017)

BANKS

AgFirst Farm Credit Bank
P.O. Box 1499
Columbia, SC 29202-1499
(803) 799-5000

AgriBank, FCB
30 East 7th Street
Suite 1600
St. Paul, MN 55101-4914
(651) 282-8800

CoBank, ACB
P.O. Box 5110
Denver, CO 80217-5110
(303) 740-4000

Farm Credit Bank of Texas
P.O. Box 202590
Austin, TX 78720-2590
(512) 465-0400

CERTAIN OTHER ENTITIES

Farm Credit Leasing Services Corporation
600 Highway 169 South, Suite 300
Minneapolis, MN 55426-1219
(952) 417-7800

Federal Farm Credit Banks
Funding Corporation
101 Hudson Street, Suite 3505
Jersey City, NJ 07302-3913
(201) 200-8000

FCS Building Association
1501 Farm Credit Drive
McLean, VA 22102-5090
(703) 883-4000

The Farm Credit Council
50 F Street, N.W., Suite 900
Washington, DC 20001-1530
(202) 626-8710

ASSOCIATIONS

AgFirst District

Ag Credit, ACA
610 W. Lytle Street
Fostoria, OH 44830-3422

AgCarolina Farm Credit, ACA
4000 Poole Road
Raleigh, NC 27610

AgChoice Farm Credit, ACA
300 Winding Creek Blvd
Mechanicsburg, PA 17050

AgGeorgia Farm Credit, ACA
468 Perry Parkway
Perry, GA 31069

AgSouth Farm Credit, ACA
26 South Main Street
Statesboro, GA 30458

ArborOne, ACA
800 Woody Jones Blvd.
Florence, SC 29501

Cape Fear Farm Credit, ACA
333 East Russell Street
Fayetteville, NC 28301

Carolina Farm Credit, ACA
146 Victory Lane
Statesville, NC 28625

Central Kentucky, ACA
640 S. Broadway, Room 108
Lexington, KY 40588

Colonial Farm Credit, ACA
7104 Mechanicsville Turnpike
Mechanicsville, VA 23111

Farm Credit of Central Florida, ACA
115 S. Missouri Avenue, Suite 400
Lakeland, FL 33815

Farm Credit of Florida, ACA
11903 Southern Blvd.
Suite 200
Royal Palm Beach, FL 33411

Farm Credit of Northwest Florida, ACA
5052 Highway 90
East Marianna, FL 32446

Farm Credit of the Virginias, ACA
106 Sangers Lane
Staunton, VA 24401

First South Farm Credit, ACA
574 Highland Colony Parkway,
Suite 100
Ridgeland, MS 39157

MidAtlantic Farm Credit, ACA
45 Aileron Court
Westminster, MD 21157

Puerto Rico Farm Credit, ACA
213 Manuel V. Domenech Avenue
Hato Rey, PR 00918

River Valley AgCredit, ACA
328 East Broadway
MayField, KY 42066

Southwest Georgia Farm Credit, ACA
305 Colquitt Highway
Bainbridge, GA 39817

AgriBank District

1st Farm Credit Services, ACA
2000 Jacobssen Drive
Normal, IL 61761

AgCountry Farm Credit Services, ACA
1900 44th Street South
Fargo, ND 58108

AgHeritage Farm Credit Services, ACA
119 East Third Street, Suite 200
Little Rock, AR 72201

AgStar Financial Services, ACA
1921 Premier Drive
Mankato, MN 56001

Badgerland Financial, ACA
1430 North Ridge Drive
Prairie du Sac, WI 53578

Delta Agricultural Credit Association
118 E. Speedway
Dermott, AR 71638

Farm Credit Midsouth, ACA
3000 Prosperity Drive
Jonesboro, AR 72404

Farm Credit Services of America, ACA
5015 South 118th Street
Omaha, NE 68137

Farm Credit Illinois, ACA
1100 Farm Credit Drive
Mahomet, IL 61853

Farm Credit Mid-America, ACA
1601 UPS Drive
Louisville, KY 40223

Farm Credit Services of Mandan, ACA
1600 Old Red Trail
Mandan, ND 58554

Farm Credit Services of North Dakota, ACA
3100 10th Street, S.W.
Minot, ND 58702-0070

Farm Credit Services of Western Arkansas, ACA
3115 West 2nd Court
Russellville, AR 72801

FCS Financial, ACA
1934 East Miller Street
Jefferson City, MO 65101-3881

GreenStone Farm Credit Services, ACA
3515 West Road
East Lansing, MI 48823

Progressive Farm Credit Services, ACA
1116 N. Main Street
Sikeston, MO 63801

United Farm Credit Services, ACA
4401 Highway 71 South
P.O. Box 1330
Willmar, MN 56201-1330

CoBank District

AgPreference, ACA
3120 North Main
Altus, OK 73521

American AgCredit, ACA
400 Aviation Boulevard
Suite 100
Santa Rosa, CA 95403

Farm Credit East, ACA
240 South Road
Enfield, CT 06082

Farm Credit of Enid, ACA
1605 W. Owen K. Garriott Road
Enid, OK 73703

Farm Credit of Ness City, FLCA
101 Eagle Drive
Ness City, KS 67560

Farm Credit of New Mexico, ACA
5651 Balloon Fiesta Parkway NE
Albuquerque, NM 87113

Farm Credit of Southern Colorado, ACA
5110 Edison Avenue
Colorado Springs, CO 80915

Farm Credit of Western Kansas, ACA
1190 South Range Avenue
Colby, KS 67701

Farm Credit of Western Oklahoma, ACA
3302 Williams Avenue
Woodward, OK 73801

Farm Credit Services of Colusa-Glenn, ACA
605 Jay Street
Colusa, CA 95932

Farm Credit Services of Hawaii, ACA
99-860 Iwaena Street, Suite A
Aiea, HI 96701

Farm Credit West, ACA
3755 Atherton Road
Rocklin, CA 95765

Fresno-Madera Farm Credit, ACA
4635 West Spruce Ave.
Fresno, CA 93722

Frontier Farm Credit, ACA
2009 Vanesta Place
Manhattan, KS 66503

Golden State Farm Credit, ACA
1580 Ellis Street
Kingsburg, CA 93631

High Plains Farm Credit, ACA
605 Main Street
Larned, KS 67550

Idaho AgCredit, ACA
188 West Judicial
Blackfoot, ID 83221

Northwest Farm Credit Services, ACA
2001 South Flint Road, Suite 102
Spokane, WA 99224

Oklahoma AgCredit, ACA
601 E. Kenosha Street
Broken Arrow, OK 74012

Premier Farm Credit, ACA
202 Poplar Street
Sterling, CO 80751

Western AgCredit, ACA
10980 South Jordan Gateway
South Jordan, UT 84095

Yankee Farm Credit, ACA
289 Hurricane Lane, Suite 102
Williston, VT 05495

Yosemite Farm Credit, ACA
806 West Monte Vista Avenue
Turlock, CA 95382

Texas District

Ag New Mexico, Farm Credit Services, ACA
4501 N. Prince Street
Clovis, NM 88101

AgTexas Farm Credit Services
6901 Quaker Avenue, Suite 300
Lubbock, TX 79413

Alabama Ag Credit, ACA
2660 EastChase Lane, Suite 401
Montgomery, AL 36117

Alabama Farm Credit, ACA
1740 Eva Road NE
Cullman, AL 35055

Capital Farm Credit, ACA
3000 Briarcrest Drive, Suite 601
Bryan, TX 77802

Central Texas Farm Credit, ACA
1026 Early Boulevard
Early, TX 76802

Heritage Land Bank, ACA
4608 Kinsey Drive, Suite 100
Tyler, TX 75703

Legacy Ag Credit, ACA
303 Connally Street
Sulphur Springs, TX 75482

Lone Star, ACA
1612 Summit Avenue, Suite 300
Fort Worth, TX 76102

Louisiana Land Bank, ACA
2413 Tower Drive
Monroe, LA 71201

Mississippi Land Bank, ACA
5509 Highway 51 North
Senatobia, MS 38668

Plains Land Bank, FLCA
5625 Fulton Drive
Amarillo, TX 79109

Southern AgCredit, ACA
402 West Parkway Place
Ridgeland, MS 39157

Texas Farm Credit Services
545 South Highway 77
Robstown, TX 78380