

> SECOND QUARTER 2018 QUARTERLY INFORMATION STATEMENT OF THE FARM CREDIT SYSTEM

This quarterly 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 quarterly 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 (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, as amended by the supplement dated October 2, 2017.

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 quarterly information statement, (2) this quarterly information statement has been prepared in accordance with all applicable statutory or regulatory requirements, and (3) the information contained in this quarterly information statement is true, accurate, and complete to the best of the signatories' knowledge and belief.


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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 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-5 of this quarterly 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 quarterly information statement and you should not consider information contained on these websites to be part of this quarterly information statement.

## 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 individuals 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 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 and the Associations 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 agricultural and rural infrastructure cooperatives and businesses and other eligible entities. 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 designed to enhance their business, including acting as agent or broker for credit and mortgage-life insurance, disability insurance, various types of crop insurance and livestock risk protection. The insurance is made available through private insurers.

Other services offered by System institutions include estate planning, record keeping, tax planning and preparation, fee appraisal and cash management products and services. In addition, some System institutions provide leasing and related services to their customers.

As more fully discussed on page 9 in the 2017 Annual Information Statement, a limited number of Associations have entered into a contractual arrangement to provide financial support to a captive reinsurance company in specified amounts that are not material to the System's financial condition or results of operations. That company provides reinsurance for crop insurance policies.

## 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.

## 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 policies and support programs, including crop insurance, which is available to producers of certain agricultural commodities. 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 June 30, 2018, 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 funds from internally generated earnings and from the issuance of common and preferred equities.

## Associations

At June 30, 2018, the System had 69 Associations throughout the nation and the Commonwealth of Puerto Rico. There were 68 Agricultural Credit Associations with Production Credit Association and Federal Land Credit Association subsidiaries, and one Federal Land Credit Association. The Federal Land Credit Association makes 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.

## Farm Credit Insurance Fund

As more fully discussed on page 22 in the 2017 Annual Information Statement, the Farm Credit System Insurance Corporation's primary purpose is to insure 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 mandatory and discretionary 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. The insurance provided through use of the Insurance Fund is not an obligation of and is not a guarantee by the U.S. government.

## Disclosure Obligations

The Farm Credit Administration has promulgated regulations intended to ensure the appropriate disclosure of financial and other information concerning the System to investors in Systemwide Debt Securities and other interested parties. These disclosures are the responsibility of the System Disclosure Entities, which consist of the Banks and the Funding Corporation. For a description of the responsibilities of the System Disclosure Entities, see pages 17 and 18 of the 2017 Annual Information Statement.

## Governance - 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.

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 during the first six months of 2018. 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. Each Bank's code of ethics includes similar content and can be accessed through each of their respective websites listed on page 2.

## Risk Factors

There have been no material changes to the risk factors previously disclosed in the System's 2017 Annual Information Statement.

## OTHER BUSINESS MATTERS

## 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 12 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 12 of the accompanying condensed combined financial statements.

At June 30, 2018, 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.

## SELECTED COMBINED FINANCIAL DATA AND KEY FINANCIAL RATIOS

The following selected combined financial data for each of the three years in the period ended December 31, 2017 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 System combine the financial condition and operating results of each of the Banks, their affiliated Associations, the 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 intraSystem 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).

## Combined Statement of Condition Data



|  | For the Six Months Ended June 30, |  |  |  | For the Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2017 |  | 2016 |  | 2015 |  |
|  | (unaudited) |  |  |  | (in millions) |  |  |  |  |  |
| Combined Statement of Income Data |  |  |  |  |  |  |  |  |  |  |
| Net interest income | \$ | 3,932 | \$ | 3,796 | \$ | 7,712 | \$ | 7,447 | \$ | 7,015 |
| Provision for loan losses |  | (87) |  | (117) |  | (197) |  | (266) |  | (106) |
| Net noninterest expense |  | $(1,118)$ |  | $(1,112)$ |  | $(2,288)$ |  | $(2,158)$ |  | $(2,024)$ |
| Income before income taxes |  | 2,727 |  | 2,567 |  | 5,227 |  | 5,023 |  | 4,885 |
| Provision for income taxes |  | (78) |  | (101) |  | (38) |  | (175) |  | (197) |
| Net income | \$ | 2,649 | \$ | 2,466 | \$ | 5,189 | \$ | 4,848 | \$ | 4,688 |

June 30,
$\frac{2018}{\text { (unaudited) }}$

| $\begin{array}{r} \$ 260,713 \\ \quad(1,666) \\ \hline \end{array}$ | $\begin{array}{r} \$ 250,464 \\ \quad(1,588) \\ \hline \end{array}$ | $\begin{array}{r} \$ 258,777 \\ (1,596) \\ \hline \end{array}$ | $\begin{array}{r} \$ 248,768 \\ \quad(1,506) \\ \hline \end{array}$ | $\begin{array}{r} \$ 235,890 \\ (1,280) \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| 259,047 | 248,876 | 257,181 | 247,262 | 234,610 |
| 64,074 | 61,443 | 61,784 | 62,575 | 59,378 |
| 2,424 | 2,136 | 2,354 | 2,140 | 1,973 |
| 77 | 65 | 55 | 75 | 96 |
| 333,827 | 320,381 | 329,518 | 319,915 | 303,503 |
| 248,429 | 232,717 | 239,573 | 228,159 | 210,935 |
| 89 | 95 | 89 | 95 | 118 |
| 20,363 | 25,579 | 25,507 | 29,528 | 32,282 |
|  |  |  | 499 | 1,550 |
| 1,587 | 1,868 | 1,950 | 2,431 | 2,879 |
| 276,495 | 265,864 | 274,136 | 267,604 | 254,669 |
| 57,332 | 54,517 | 55,382 | 52,311 | 48,834 |


| For the Six Months Ended June 30, |  |  |  | For the Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2017 |  | 2016 |  | 2015 |
| (unaudited) |  |  |  | (in millions) |  |  |  |  |  |
| \$ | $\begin{array}{r} 3,932 \\ (87) \\ (1,118) \\ \hline \end{array}$ | \$ | $\begin{array}{r} 3,796 \\ (117) \\ (1,112) \\ \hline \end{array}$ | \$ |  | \$ | $\begin{array}{r} 7,447 \\ (266) \\ (2,158) \\ \hline \end{array}$ | \$ | $\begin{array}{r} 7,015 \\ (106) \\ (2,024) \\ \hline \end{array}$ |
|  | $\begin{array}{r} 2,727 \\ (78) \end{array}$ |  | $\begin{gathered} 2,567 \\ (101) \end{gathered}$ |  | $\begin{array}{r} 5,227 \\ (38) \end{array}$ |  | $\begin{gathered} 5,023 \\ (175) \end{gathered}$ |  | $\begin{gathered} 4,885 \\ (197) \end{gathered}$ |
| \$ | 2,649 | \$ | 2,466 | \$ | 5,189 | \$ | 4,848 |  | 4,688 |


| December 31, |  |  |
| :--- | :--- | :--- |
| $\frac{2017}{\text { (in millions) }}$ | 2016 | 2015 | ended June 30, 2018 and 2017 has been derived from the System's unaudited condensed combined financial statements appearing elsewhere herein, which include all adjustments necessary for a fair statement of the results for these interim periods. 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 repayment of Systemwide Debt Securities. See Note 13 to the accompanying condensed combined financial statements for combining Bank-only financial condition and results of operations. Also, copies of quarterly and annual reports of each Bank are available on each of their respective websites; see page 2 for a listing of their websites.

The combined financial data for the six months

## Combined Key Financial Ratios

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

|  | For the Six Months Ended June 30, |  | For the Year Ended December 31, |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2017 | 2016 | 2015 |
| Return on average assets | 1.59\% | 1.54\% | 1.62\% | 1.56\% | 1.64\% |
| Return on average capital | 9.41 | 9.19 | 9.49 | 9.44 | 9.87 |
| Net interest income as a percentage of average earning assets | 2.44 | 2.45 | 2.48 | 2.49 | 2.55 |
| Operating expense as a percentage of net interest income and noninterest income | 34.3 | 34.6 | 35.1 | 34.6 | 35.0 |
| Net loan charge-offs as a percentage of average loans | 0.02 | 0.01 | 0.03 | 0.02 | 0.02 |
|  | June 30, |  | December 31, |  |  |
|  | 2018 | 2017 | 2017 | 2016 | 2015 |
| Nonperforming assets as a percentage of loans and other property owned | 0.95\% | 0.84\% | 0.78\% | 0.82\% | 0.73\% |
| Allowance for loan losses as a percentage of loans outstanding | 0.64 | 0.63 | 0.62 | 0.61 | 0.54 |
| Capital as a percentage of total assets | 17.2 | 17.0 | 16.8 | 16.4 | 16.1 |
| Capital as a percentage of total assets (excluding restricted assets and capital - Insurance Fund) . . | 16.0 | 15.8 | 15.6 | 15.2 | 15.0 |
| Capital and allowance for loan losses as a percentage of loans outstanding | 22.6 | 22.4 | 22.0 | 21.6 | 21.2 |
| Debt to capital. | 4.82:1 | 4.88:1 | 4.95:1 | 5.12:1 | 5.21:1 |

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

The System's 2017 Annual Information Statement contains the December 31, 2017 combined financial statements together with commentary that explains the principal aspects of the System's combined financial position and results of operations. The following commentary represents a quarterly supplement to that information statement and includes a discussion of significant financial developments for the six months ended June 30, 2018. This commentary should be read in conjunction with the 2017 Annual Information Statement and with the condensed combined financial statements of the System beginning on page F-1 of this quarterly information statement.

## Basis of Presentation

The accompanying condensed combined financial statements and related financial information contained in this quarterly 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 condensed combined financial statements for additional information on organization and significant accounting policies and the Supplemental Combining Information on pages F-49 through F-55). This quarterly 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 System entities as discussed in the "Business" section in this quarterly information statement.

Each Bank is primarily liable for the payment of principal and interest on Systemwide Debt Securities issued to fund its operations. (See Note 7 to the accompanying condensed combined financial statements for information about the capital of the Banks, Note 13 for information related to the financial condition and results of operations of the Banks, and the Supplemental Combining Information on pages F-49 through F-51 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 Farm Credit System Insurance Corporation to the extent funds are available in the Insurance Fund. (See Note 5 to the accompanying condensed combined financial statements.)

## Forward-Looking Information

Certain sections of this quarterly 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 forecasts 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 and tax 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.


## Overview

## General

The System's combined net income increased $\$ 183$ million or $7.4 \%$ to $\$ 2.649$ billion for the first six months of 2018 , as compared with net income of $\$ 2.466$ billion for the same period of 2017. The increase resulted primarily from increases in net interest income of $\$ 136$ million and noninterest income of $\$ 43$ million and decreases in the provision for loan losses of $\$ 30$ million and the provision for income taxes of $\$ 23$ million, partially offset by an increase in noninterest expense of $\$ 49$ million.

The System's net interest income increased $3.6 \%$ to $\$ 3.932$ billion primarily from a higher level of average earning assets. The net interest margin declined one basis point to $2.44 \%$ for the first six months of 2018, as compared to the same period of the prior year, due to a 10 basis point decline in the net interest spread to $2.13 \%$ resulting primarily from increased debt costs and lower lending spreads due to competitive pressures. The net interest margin was positively impacted by a nine basis point increase in income earned on earning assets funded by noninterest-bearing sources (principally capital).

The System's loan portfolio increased $\$ 1.936$ billion or $0.7 \%$ to $\$ 260.713$ billion since year-end 2017. The increase primarily resulted from increases in real estate mortgage and processing and marketing loans offset, in part, by a decrease in production and intermediate-term loans. Continued demand by new and existing customers was the primary driver for increased real estate mortgage and processing and marketing loan volume. Production
and intermediate-term loans decreased primarily due to draws made prior to year-end 2017 for advance purchases of 2018 inputs, which resulted in significant repayments in early 2018. These paydowns were partially offset by seasonal draws on lines of credit during planting season.

The System's nonperforming loans (which consist of nonaccrual loans, accruing restructured and accruing loans 90 days or more past due) increased $\$ 434$ million to $\$ 2.401$ billion at June 30, 2018, as compared with $\$ 1.967$ billion at December 31, 2017, representing $0.92 \%$ and $0.76 \%$ of total loans for the corresponding periods. The increase was primarily due to an increase in nonaccrual loans resulting from credit quality deterioration impacting a limited number of loans in the agribusiness and rural power sectors.

## 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 the first six months of 2018, investor demand for Systemwide Debt Securities remained favorable across all products.

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 or events that occurred subsequent to its issuance. References to USDA information in this section refer to U.S. agricultural market data and not System data.

The USDA's most recent forecast (February 7, 2018) estimates farmers' net cash income (a measure of the cash income after payment of business expenses) for 2018 will be $\$ 91.9$ billion, a $\$ 5.0$ billion decrease from 2017 and $\$ 14.0$ billion below the 10-year average. The forecasted decrease in farmers' net cash income for 2018 is primarily due to an expected increase in cash expenses of $\$ 3.0$ billion and decrease in cash receipts for crops and livestock of $\$ 2.0$ billion.

The following charts set forth certain agricultural 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 June 30, 2015 to June 30, 2018:



## Other Information

Production agriculture is a cyclical business that is heavily influenced by commodity prices, weather, tax and trade policies, interest rates and various other factors. From 2010 through 2014, agriculture generally experienced favorable economic conditions driven by high commodity and livestock prices and increasing farmland values. However, since 2014, the agricultural environment has been more challenging with lower commodity prices, which slowed, or in some cases, reversed the growth in farmland values, compressed producer margins and reduced net cash income. During the 2016 and 2017 growing seasons, increased plantings and good weather led to record production and added to already large stocks of certain commodities. Currency fluctuations, large inventories and current U.S. trade policy agenda, including the retaliatory action by other countries, have begun to adversely impact demand and prices for agricultural exports. Higher interest rates could exacerbate the reduction in net cash income by increasing interest expense for farmers with floatingrate loans. While U.S. agriculture faces realignments in commodity prices and farmland values, U.S. crop producers entered this period with substantial riskbearing capacity which is affording them time to transition their operations to the new environment of lower commodity prices, compressed margins and higher interest rates. Producers who are able to realize cost of production efficiencies and market their farm products effectively are most likely to adapt to the current price environment. Optimal input usage, adoption of cost-saving technologies, negotiation of adjustments to various business arrangements, such as rental cost of agriculture real estate, and effective use of hedging and other price risk management strategies are all critical in yielding positive net cash income for producers. Certain producers who have been unable to sufficiently adjust their operations to
the current environment have experienced loan repayment challenges.

Crop producers have benefited from payments under the government support programs included in the 2014 Farm Bill, which has lessened 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 lower prices for their farm production resulting from supply/ demand changes and increased tariffs.

In a prolonged period 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, the impact of off-farm income sources supporting agricultural-related debt and any off-setting USDA assistance to producers impacted by retaliatory tariffs. However, due to the geographic territories served by Banks and Associations, System institutions have higher geographic, commodity and borrower concentrations than the System as a whole.

## Results of Operations

## Net Interest Income

Net interest income increased $\$ 65$ million or $3.4 \%$ to $\$ 1.973$ billion and increased $\$ 136$ million or $3.6 \%$ to $\$ 3.932$ billion for the three and six months ended June 30, 2018, as compared with $\$ 1.908$ billion and $\$ 3.796$ billion for the same periods of the prior year. The effects of changes in volume and interest rates on net interest income for the three and six months ended June 30, 2018, as compared

|  | For the Three Months Ended June 30, 2018 vs. 2017 |  |  | For the Six Months Ended June 30, 2018 vs. 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Increase (decrease) due to |  |  | Increase (decrease) due to |  |  |
|  | Volume | Rate | Total | Volume | Rate | Total |
|  | (in millions) |  |  |  |  |  |
| Interest income: |  |  |  |  |  |  |
| Loans | \$127 | \$277 | \$404 | \$225 | \$535 | \$760 |
| Investments | 11 | 82 | 93 | 18 | 149 | 167 |
| Total interest income | 138 | 359 | 497 | 243 | 684 | 927 |
| Interest expense: |  |  |  |  |  |  |
| Systemwide Debt Securities and other | 44 | 388 | 432 | 71 | 720 | 791 |
| Changes in net interest income | \$ 94 | \$ (29) | \$ 65 | \$172 | \$(36) | \$136 |

The changes in rates earned on interest-earning assets and rates paid on interest-bearing funds are further illustrated in the following presentation of interest rate spreads:

| Three Months Ended |  |  |  | Six Months Ended |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 30, 2018 |  | June 30, 2017 |  | June 30, 2018 |  | June 30, 2017 |  |
| Average Balance | $\begin{gathered} \text { Annualized } \\ \text { Rate } \end{gathered}$ | Average Balance | $\begin{gathered} \text { Annualized } \\ \text { Rate } \end{gathered}$ | Average Balance | $\begin{gathered} \text { Annualized } \\ \text { Rate } \end{gathered}$ | Average Balance | Annualized Rate |
|  |  |  | (\$ in m | ions) |  |  |  |


| Assets |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real estate mortgage loans | \$119,234 | 4.82\% | \$113,947 | 4.53\% | \$118,702 | 4.77\% | \$113,690 | 4.46\% |
| Production and intermediate-term |  |  |  |  |  |  |  |  |
| loans | 47,333 | 4.82 | 47,879 | 4.31 | 47,430 | 4.70 | 47,325 | 4.21 |
| Agribusiness loans | 47,415 | 4.21 | 41,510 | 3.50 | 47,344 | 4.08 | 42,964 | 3.38 |
| Rural infrastructure loans | 28,393 | 4.53 | 27,730 | 4.00 | 28,414 | 4.36 | 27,616 | 3.94 |
| Rural residential real estate loans | 7,176 | 4.41 | 7,125 | 4.36 | 7,194 | 4.41 | 7,122 | 4.35 |
| Agricultural export finance loans | 5,741 | 2.75 | 5,641 | 1.93 | 5,662 | 2.54 | 5,675 | 1.85 |
| Lease receivables $\ldots \ldots \ldots \ldots$ 3,540 3.64 3,409 3.52 3,555 3.63 3,418 3.49 <br> Loans to other financing         |  |  |  |  |  |  |  |  |
| Loans to other financing institutions . . . . . . . . . | 798 | 2.40 | 813 | 1.83 | 800 | 2.28 | 793 | 1.74 |
| Nonaccrual loans | 1,879 | 5.05 | 1,626 | 4.77 | 1,762 | 5.06 | 1,596 | 5.17 |
| Total loans | 261,509 | 4.60 | 249,680 | 4.17 | 260,863 | 4.51 | 250,199 | 4.09 |
| Federal funds sold, investments an other interest-earning assets | 63,045 | 2.23 | 60,450 | 1.71 | 62,056 | 2.13 | 59,956 | 1.65 |
| Total earning assets | 324,554 | 4.14 | 310,130 | 3.69 | 322,919 | 4.05 | 310,155 | 3.62 |
| Allowance for loan losses . . . . | $(1,675)$ |  | $(1,553)$ |  | $(1,640)$ |  | $(1,542)$ |  |
| Other noninterest-earning assets | 11,439 |  | 11,034 |  | 11,612 |  | 11,428 |  |
| Total assets | \$334,318 |  | \$319,611 |  | \$332,891 |  | \$320,041 |  |

## Liabilities and Capital

| Systemwide bonds and mediumterm notes | \$248,015 | 2.07\% | \$232,169 | 1.54\% | \$245,754 | 1.97\% | \$231,437 | 1.47\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Systemwide discount notes | 22,138 | 1.68 | 25,478 | 0.82 | 22,810 | 1.53 | 26,558 | 0.75 |
| Other interest-bearing liabilities | 2,866 | 1.26 | 3,451 | 0.81 | 2,856 | 1.12 | 3,467 | 0.69 |
| Total interest-bearing liabilities | 273,019 | 2.03 | 261,098 | 1.46 | 271,420 | 1.92 | 261,462 | 1.39 |
| Noninterest-bearing liabilities | 4,521 |  | 4,319 |  | 5,170 |  | 4,936 |  |
| Capital | 56,778 |  | 54,194 |  | 56,301 |  | 53,643 |  |
| Total liabilities and capital | \$334,318 |  | \$319,611 |  | \$332,891 |  | \$320,041 |  |
| Net interest spread(1) |  | 2.11 |  | 2.23 |  | 2.13 |  | 2.23 |
| Impact of noninterest-bearing sources |  | 0.32 |  | 0.23 |  | 0.31 |  | 0.22 |
| Net interest margin(2) |  | 2.43\% |  | 2.46\% |  | 2.44\% |  | 2.45\% |

(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.

As illustrated in the above tables, net interest income increased in the three and six months ended June 30, 2018, as compared with the same periods of the prior year. The increase resulted from a higher level of average earning assets, driven largely by increased loan volume and, to a lesser extent, growth in the liquidity
investment portfolio. Average earning assets increased $\$ 14.424$ billion or $4.7 \%$ to $\$ 324.554$ billion for the three months ended June 30, 2018 and $\$ 12.764$ billion or $4.1 \%$ to $\$ 322.919$ billion for the six months ended June 30, 2018, as compared with the same periods of 2017.

The net interest margin was $2.43 \%$ for the three months ended June 30, 2018, as compared with $2.46 \%$ for the same period of 2017. The net interest spread decreased 12 basis points to $2.11 \%$ for the three months ended June 30, 2018 from the comparable prior year period and was offset by a nine basis point increase in income earned on earning assets funded by noninterest-bearing sources (principally capital). For the six-month period ended June 30, 2018, the net interest margin was $2.44 \%$, as compared with $2.45 \%$ for the same period of the prior year. The net interest margin was negatively impacted by a decrease in the net interest spread of 10 basis points to $2.13 \%$ for the six months ended June 30, 2018, as compared with $2.23 \%$ for same period of the prior year and was positively impacted by a nine basis point increase in income earned on earning assets funded by non-interest bearing sources. The declines in the net interest spread for the three- and six-month periods of 2018 were primarily the result of increased debt costs and lower lending spreads due to competitive pressures.

## Provision for Loan Losses

The System recognized provisions for loan losses of $\$ 18$ million and $\$ 87$ million for the three and six months ended June 30, 2018, as compared with provisions for loan losses of $\$ 80$ million and $\$ 117$ million for the three and six months ended June 30, 2017. The provision for loan losses for the first six months of 2018 primarily reflected specific reserves associated with a limited number of customers in the agribusiness and rural power sectors, as well as increased credit risk exposure resulting from credit quality deterioration and growth in agribusiness loan volume. The six-month 2018 provision for loan losses also included industry-specific reserves for the grain industry. The provision for loan losses for the first six months of 2017 primarily reflected industry-specific reserves for the livestock and grain industries, increased loan volume and modest deterioration in credit quality in certain sectors of the loan portfolio driven by a challenging agricultural economic environment.

## Noninterest Income

Noninterest income consisted of the following:

|  | For the Three <br> Months Ended June 30, |  | For the Six Months Ended June 30, |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2018 | 2017 |
|  | (in millions) |  |  |  |
| Loan-related fee income | \$ 52 | \$ 66 | \$107 | \$125 |
| Financially related services income | 37 | 39 | 82 | 80 |
| Mineral income | 20 | 15 | 37 | 28 |
| Income earned on Insurance Fund assets | 18 | 15 | 34 | 28 |
| Operating lease income | 7 | 8 | 18 | 13 |
| Losses on extinguishment of debt |  | (7) | (6) | (9) |
| Net gains on sales of investments and other assets | 37 | 1 | 40 | 12 |
| Net gains on derivative and other transactions | 19 | 9 | 21 | 10 |
| Other noninterest income | 7 | 5 | 21 | 24 |
| Total noninterest income | \$197 | \$151 | \$354 | \$311 |

Noninterest income increased $\$ 46$ million or $30.5 \%$ to $\$ 197$ million and $\$ 43$ million or $13.8 \%$ to $\$ 354$ million for the three and six months ended June 30, 2018, as compared with the same periods of the prior year. The increases for the three- and
six-month periods were primarily due to increases in net gains on sales of investments and other assets of $\$ 36$ million and $\$ 28$ million and net gains on derivatives and other transactions of $\$ 10$ million and $\$ 11$ million.

## Noninterest Expense

Noninterest expense increased $\$ 24$ million or $3.4 \%$ to $\$ 735$ million and increased $\$ 49$ million or $3.4 \%$ to $\$ 1.472$ billion for the three and six months ended June 30, 2018, as compared with the same periods of the prior year. Noninterest expense consisted of the following:

|  | For t Mont | Three Ended 30, | $\begin{aligned} & \text { For } \\ & \text { Month } \\ & \text { Jun } \end{aligned}$ | $\begin{aligned} & \text { e Six } \\ & \text { Ended } \\ & \text { 30, } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2018 | 2017 |
|  |  |  | ions) |  |
| Salaries and employee benefits | \$457 | \$438 | \$ 916 | \$ 878 |
| Occupancy and equipment expense | 61 | 58 | 123 | 117 |
| Purchased services | 48 | 44 | 94 | 81 |
| Other operating expense | 170 | 170 | 339 | 343 |
| Total operating expense | 736 | 710 | 1,472 | 1,419 |
| Net (gains) losses on other property owned | (1) | 1 |  | 4 |
| Total noninterest expense | \$735 | \$711 | \$1,472 | \$1,423 |

The increase in noninterest expense for the three and six months ended June 30, 2018 was primarily due to increases in salaries and employee benefits and purchased services. Salaries and employee benefits increased $\$ 19$ million and $\$ 38$ million for the three and six months ended June 30, 2018, as compared to the same periods of the prior year, as a result of annual merit increases and higher staffing levels at certain System institutions. Purchased services increased $\$ 4$ million and $\$ 13$ million for the three and six months ended June 30, 2018, as compared to the same periods of the prior year, due to increases in technology consulting and other services for various business initiatives. Operating expense statistics are as follows:

|  | For the Six Months Ended June 30, |  |
| :---: | :---: | :---: |
|  | 2018 | 2017 |
|  | (\$ in millions) |  |
| Excess of net interest income over operating expense | \$2,460 | \$2,377 |
| Operating expense as a percentage of net interest income and noninterest income | 34.3\% | 34.6\% |
| Annualized operating expense as a percentage of average earning assets | 0.91\% | 0.92\% |

## Provision for Income Taxes

Provisions for income taxes were $\$ 34$ million and $\$ 78$ million for the three and six months ended June 30, 2018, as compared with $\$ 46$ million and
$\$ 101$ million for the same periods of the prior year. The effective tax rate decreased to $2.9 \%$ for the first six months of 2018 from $3.9 \%$ for the first six months of 2017 due to the decrease in the federal corporate tax rate from $35 \%$ to $21 \%$ beginning in January 2018.

## 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, credit risk, interest rate risk, liquidity risk, operational risk, reputational risk and political risk.

## 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. (See Notes 7 and 13 to the accompanying condensed combined financial statements for additional information.)

In order to monitor the financial strength of each Bank and mitigate the risks of non-performance by each Bank of its obligations under the Systemwide Debt Securities, we utilize two integrated intraSystem financial performance agreements - the Amended and Restated Contractual Interbank Performance Agreement, or CIPA, and the Third 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 Tier 1 Leverage ratio of a Bank, and
- the Total Capital ratio of a Bank.

For additional information on the regulatory capital ratios, see page 32 .

If a Bank fails to meet the MAA performance criteria, 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 Tier 1 Leverage ratio and the Total Capital ratio are:

|  | 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\% |

During the first six months of 2018, all Banks met the agreed-upon standards of financial condition and performance required by the CIPA and none of the Banks was placed in any of the three categories designated for Banks failing to meet MAA's specified financial criteria. (See Note 13 for each Bank's Tier 1 Leverage and Total Capital ratios.) For additional information regarding the CIPA or the MAA, see pages 21, 22, 46 and 47 in the 2017 Annual Information Statement.

## 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 pages 26 and 27 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.

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 both June 30, 2018 and December 31, 2017, one exposure was above $\$ 1$ billion but less than $\$ 1.5$ billion. Additionally, eight exposures at both June 30, 2018 and December 31, 2017 exceeded $\$ 750$ million.

For a detailed discussion of our credit risk management practices, see pages 47 through 49 in the 2017 Annual Information Statement.

## Loan Portfolio

The System's loan portfolio consists only of retail loans. For additional information on the types of loans we make, see pages 7 through 9 in the 2017 Annual Information Statement. Bank loans to affili-
ated Associations have been eliminated in the condensed combined financial statements. Loans outstanding consisted of the following:

|  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |
| :---: | :---: | :---: |
|  | (in | illions) |
| Real estate mortgage | \$121,381 | \$119,450 |
| Production and intermediate-term | 49,206 | 51,724 |
| Agribusiness: |  |  |
| Processing and marketing | 23,519 | 21,582 |
| Loans to cooperatives | 17,145 | 17,335 |
| Farm-related business | 3,549 | 3,293 |
| Rural infrastructure: |  |  |
| Power | 19,728 | 19,689 |
| Communication | 6,646 | 6,311 |
| Water/waste water | 2,056 | 1,965 |
| Rural residential real estate | 7,185 | 7,261 |
| Agricultural export finance | 5,891 | 5,645 |
| Lease receivables | 3,580 | 3,665 |
| Loans to other financing institutions | 827 | 857 |
| Total loans | \$260,713 | \$258,777 |

Loan volume increased \$1.936 billion or 0.7\% to $\$ 260.713$ billion at June 30, 2018, as compared with $\$ 258.777$ billion at December 31, 2017, primarily as a result of increases in real estate mortgage and processing and marketing loans offset, in part, by a decrease in production and intermediate-term loans.

Real estate mortgage loans increased $\$ 1.931$ billion or $1.6 \%$ during the first six months of 2018, primarily from continued demand by new and existing customers.

Production and intermediate-term loans decreased $\$ 2.518$ billion or $4.9 \%$, as compared with December 31, 2017, primarily due to draws made prior to year-end 2017 for advance purchases of 2018 inputs, which resulted in significant repayments in early 2018. These paydowns were partially offset by seasonal draws on lines of credit during planting season.

Processing and marketing loans increased $\$ 1.937$ billion or $9.0 \%$ during the first six months of 2018, primarily due to new loan growth and advances on existing loans within certain industries.

System institutions have reduced, to some extent, the credit risk of certain real estate mortgage loans by entering into agreements that provide longterm standby commitments to purchase System loans and other credit guarantees. The amount of loans under credit guarantees was $\$ 3.267$ billion at June 30, 2018 and $\$ 3.343$ billion at December 31, 2017, of which $\$ 2.021$ billion and $\$ 2.016$ billion was provided by Farmer Mac at June 30, 2018 and at December 31, 2017. For additional information on Farmer Mac, see page 12 in the 2017 Annual Information Statement.

## Nonperforming Assets

Nonperforming assets (including related accrued interest) and related credit quality statistics are as follows:

|  | $\begin{aligned} & \text { June 30, } \\ & 2018 \end{aligned}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |
| :---: | :---: | :---: |
|  |  | millions) |
| Nonaccrual loans: |  |  |
| Real estate mortgage | \$ 912 | \$ 867 |
| Production and intermediate-term | 503 | 492 |
| Agribusiness | 439 | 169 |
| Rural infrastructure | 85 | 34 |
| Rural residential real estate | 50 | 51 |
| Agricultural export finance | 4 | 4 |
| Lease receivables | 43 | 43 |
| Total nonaccrual loans | 2,036 | 1,660 |
| Accruing restructured loans: |  |  |
| Real estate mortgage | 175 | 179 |
| Production and intermediate-term | 100 | 96 |
| Agribusiness | 4 | 4 |
| Rural residential real estate | 8 | 7 |
| Total accruing restructured loans | 287 | 286 |
| Accruing loans 90 days or more past due: |  |  |
| Real estate mortgage | 31 | 4 |
| Production and intermediate-term | 39 | 11 |
| Agribusiness | 6 | 4 |
| Rural residential real estate | 1 | 1 |
| Lease receivables | 1 | 1 |
| Total accruing loans 90 days or more past due | 78 | 21 |
| Total nonperforming loans | 2,401 | 1,967 |
| Other property owned | 77 | 55 |
| Total nonperforming assets | \$2,478 | \$2,022 |
|  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |
| Nonaccrual loans as a percentage of total loans | 0.78\% | 0.64\% |
| Nonperforming assets as a percentage of total loans and other property owned | 0.95 | 0.78 |
| Nonperforming assets as a percentage of capital | 4.32 | 3.65 |
| The following table presents the nonaccrual loan activity: |  |  |
|  |  | the Six hs Ended ne 30, |
|  | 2018 | 2017 |
|  |  | nillions) |
| Balance at beginning of period | \$1,660 | \$1,591 |
| Additions: |  |  |
| Gross amounts transferred into nonaccrual | 915 | 587 |
| Recoveries | 13 | 18 |
| Advances | 309 | 162 |
| Reductions: |  |  |
| Charge-offs | (39) | (34) |
| Transfers to other property owned (book value) | (42) | (13) |
| Returned to accrual status | (93) | (69) |
| Repayments | (680) | (570) |
| Other, net | (7) | (1) |
| Balance at end of period | \$2,036 | \$1,671 |

Nonaccrual loans increased $\$ 376$ million or $22.7 \%$ to $\$ 2.036$ billion at June 30, 2018, primarily due to loans transferred into nonaccrual status and advances in excess of repayments on nonaccrual loans. The increase was primarily due to credit quality deterioration impacting a limited number of loans in the agribusiness and rural power sectors. Nonaccrual loans that were current as to principal and interest were $60.7 \%$ of total nonaccrual loans at both June 30, 2018 and December 31, 2017. Accruing loans 90 days or more past due increased $\$ 57$ million to $\$ 78$ million at June 30, 2018. These loans are considered well secured and in the process of collection.

Loan delinquencies (accruing loans 30 days or more past due) as a percentage of accruing loans was $0.26 \%$ at June 30, 2018, as compared with $0.23 \%$ at June 30, 2017. Loans classified under the Farm Credit Administration's Uniform Loan Classification System as a percentage of total loans and accrued interest receivable was as follows:

|  | $\begin{aligned} & \text { June 30, } \\ & 2018 \end{aligned}$ | $\underset{2017}{\text { December } 31, ~}$ |
| :---: | :---: | :---: |
| Acceptable | 93.5\% | 93.9\% |
| Other assets especially mentioned | 3.2 | 3.0 |
| Substandard/doubtful | 3.3 | 3.1 |
| Total | 100.0\% | 100.0\% |

## Allowance for Loan Losses

The allowance for loan losses was $\$ 1.666$ billion at June 30, 2018 and $\$ 1.596$ billion at December 31, 2017. Net loan charge-offs of $\$ 18$ million and $\$ 25$ million were recorded during the three and six
months ended June 30, 2018, respectively, as compared with net loan charge-offs of $\$ 12$ million and $\$ 16$ million for the same periods of the prior year. The System's 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 System's condensed combined financial statements, the allowance for loan losses of each System entity is specific 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.

Although certain System borrowers have faced challenges due to reduced net farm income in certain sectors, their financial positions remain sufficiently capitalized given the past decade of favorable U.S. farm economic conditions. System underwriting standards require strong collateral support for loans. By regulation, real estate mortgage loans must have a loan-to-value ratio of $85 \%$ or less at origination or up to $97 \%$ if guaranteed by federal, state or other governmental agency. Most of the System's real estate mortgage loans at origination had a loan-to-value ratio below the statutory maximum of $85 \%$. These factors help to mitigate the System's exposure to loan losses. At June 30, 2018, $\$ 666$ million of the System's $\$ 2.401$ billion of nonperforming loans had specific reserves (representing probable losses) of $\$ 222$ million. The remaining $\$ 1.735$ billion of nonperforming loans were evaluated and determined not to need a specific reserve.

The following table presents the activity in the allowance for loan losses:

|  | For the Three Months Ended June 30, |  | For the Six Months Ended June 30, |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2018 | 2017 |
|  | (\$ in millions) |  |  |  |
| Balance at beginning of period | \$1,674 | \$1,543 | \$1,596 | \$1,506 |
| Charge-offs: |  |  |  |  |
| Real estate mortgage | (5) | (7) | (6) | (9) |
| Production and intermediate-term | (12) | (9) | (23) | (20) |
| Agribusiness | (4) | (3) | (5) | (3) |
| Rural infrastructure | (3) |  | (3) |  |
| Rural residential real estate | (1) |  | (1) | (1) |
| Lease receivables | (1) | (1) | (2) | (1) |
| Total charge-offs | (26) | (20) | (40) | (34) |
| Recoveries: |  |  |  |  |
| Real estate mortgage | 3 | 2 | 5 | 4 |
| Production and intermediate-term | 4 | 5 | 8 | 8 |
| Agribusiness |  | 1 | 1 | 4 |
| Rural infrastructure |  |  |  | 2 |
| Rural residential real estate | 1 |  | 1 |  |
| Total recoveries | 8 | 8 | 15 | 18 |
| Net charge-offs | (18) | (12) | (25) | (16) |
| Provision for loan losses | 18 | 80 | 87 | 117 |
| Adjustment due to Association mergers* |  |  |  | (3) |
| Reclassification (to) from reserve for unfunded commitments** | (8) | (23) | 8 | (16) |
| Balance at end of period | \$1,666 | \$1,588 | \$1,666 | \$1,588 |
| Annualized ratio of net charge-offs during the period to average loans outstanding during the period | 0.03\% | 0.02\% | 0.02\% | 0.01\% |

[^0]Allowance for loan losses by loan type is as follows:

|  | June 30, 2018 |  | December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amount | \% | Amount | \% |
|  | (\$ in millions) |  |  |  |
| Real estate mortgage | \$ 462 | 27.7\% | \$ 450 | 28.2\% |
| Production and intermediate-term | 438 | 26.3 | 437 | 27.4 |
| Agribusiness | 468 | 28.1 | 420 | 26.3 |
| Rural infrastructure | 205 | 12.3 | 200 | 12.5 |
| Rural residential real estate | 20 | 1.2 | 20 | 1.3 |
| Agricultural export finance | 18 | 1.1 | 16 | 1.0 |
| Lease receivables | 54 | 3.2 | 52 | 3.2 |
| Loans to other financing institutions | 1 | 0.1 | 1 | 0.1 |
| Total | $\underline{\underline{\$ 1,666}}$ | $\underline{\underline{100.0}}$ \% | $\underline{\underline{\$ 1,596}}$ | $\underline{100.0 \%}$ |

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

|  | $\begin{aligned} & \text { June 30, } \\ & 2018 \end{aligned}$ | $\underset{2017}{\text { December 31, }}$ |
| :---: | :---: | :---: |
| Allowance for loan losses as a percentage of: |  |  |
| Total loans | 0.64\% | 0.62\% |
| Nonperforming loans | 69.4 | 81.1 |
| Nonaccrual loans | 81.8 | 96.1 |

## 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 adjustablerate 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.

Interest rate floors are also embedded options that may be present in certain investments and floating- and adjustable-rate loans. Interest rate floors prevent the loan or investment rate from decreasing below a certain defined limit. In a declining rate environment, the spread may be widened if the floor limits the downward adjustments to a floating-rate investment or loan rate as underlying debt costs continue to decrease below the floor rate.

- 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 stable earnings and preserve the long-term market value of equity. 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 associated 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 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.

Approximately $75 \%$ 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, net interest income sensitivity analysis and market value of equity sensitivity analysis and duration gap analysis. These measures are calculated on a monthly basis and the assumptions used in these analyses are monitored routinely and adjusted as necessary.

## Interest Rate Risk Management Results <br> Interest Rate Gap Analysis

The interest rate gap analysis presents a comparison of interest-sensitive assets and liabilities in defined time segments as of June 30, 2018. The interest rate gap analysis 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 interest 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 earning 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 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0-6 \\ \text { Months } \end{gathered}$ | 6 Months to 1 Year |  | Over <br> 5 Years | Total |
|  |  |  | in millions) |  |  |
| Floating-rate loans: |  |  |  |  |  |
| Indexed/adjustable-rate loans | \$ 48,924 | \$ 375 | \$ 975 | \$ 781 | \$ 51,055 |
| Administered-rate loans | 51,366 |  |  |  | 51,366 |
| Fixed-rate loans: |  |  |  |  |  |
| Fixed-rate with prepayment or conversion fees | 4,364 | 3,312 | 13,940 | 15,949 | 37,565 |
| Fixed-rate without prepayment or conversion fees | 20,269 | 9,888 | 50,287 | 38,247 | 118,691 |
| Nonaccrual loans |  |  |  | 2,036 | 2,036 |
| Total gross loans | 124,923 | 13,575 | 65,202 | 57,013 | 260,713 |
| Federal funds sold, investments and other interest-earning assets | 28,968 | 4,143 | 20,919 | 9,086 | 63,116 |
| Total earning assets | 153,891 | 17,718 | 86,121 | 66,099 | 323,829 |
| Interest-bearing liabilities: |  |  |  |  |  |
| Callable bonds and notes | 4,142 | 5,126 | 39,358 | 29,434 | 78,060 |
| Noncallable bonds and notes | 127,600 | 12,487 | 33,688 | 17,046 | 190,821 |
| Other interest-bearing liabilities | 2,802 |  |  | 252 | 3,054 |
| Total interest-bearing liabilities | 134,544 | 17,613 | 73,046 | 46,732 | 271,935 |
| Effect of interest rate swaps and other derivatives | 8,648 | $(1,313)$ | $(8,469)$ | 1,134 |  |
| Total interest-bearing liabilities adjusted for swaps and other derivatives | 143,192 | 16,300 | 64,577 | 47,866 | 271,935 |
| Interest rate sensitivity gap (total earning assets less total interest-bearing liabilities adjusted for swaps and other derivatives) | \$ 10,699 | \$ 1,418 | \$21,544 | \$18,233 | \$ 51,894 |
| Cumulative gap | \$ 10,699 | \$12,117 | \$33,661 | \$51,894 |  |
| Cumulative gap as a percentage of total earning assets | $3.30 \%$ | 3.74\% | 10.39\% | 16.03\% |  |

As illustrated above, the System had a positive gap position between its earning assets and interestbearing liabilities for the zero to six months repricing interval as measured on June 30, 2018 and reflects the System's asset-sensitive position during this time period. Net interest income will generally benefit from rising interest rates due to earning assets repricing more quickly than interest-bearing liabilities.

Typically, the net interest margin of an institution that is asset sensitive will be favorably impacted in a rising rate environment and unfavorably impacted in a declining rate environment. Due to the System's ability to exercise call options on its callable debt, the System's net interest margin has benefitted in the past from certain declining interest rate environments.

The System's net interest spread, a component of its net interest margin, may also react in a different manner due to certain conditions at the time an earn-
ing asset or interest-bearing liability reprices. These conditions include competitive pressures on spreads or rates, the steepness of the yield curve and how capital is deployed to fund earning assets. In addition, a significant portion of the System's floating-rate loans are administered-rate loans that, unlike indexed loans, require definitive action by management to change the interest rate. The interest rates charged on administered-rate loans may reflect managements' assessments of whether rate changes are feasible or warranted in view of market conditions. Therefore, the actual interest rates charged on administered rate loans may not reflect the movement of interest rates in the markets, thereby creating volatility in net interest income.

The System's cumulative gap position in the zero to six months repricing interval decreased from $4.55 \%$ at December 31, 2017 to $3.30 \%$ at June 30, 2018.

## 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 threemonth Treasury bill rate, which was 96 basis points at June 30, 2018 and 69 basis points at December 31, 2017. Under these simulations, the System's sensitivity to interest rate changes (sum of Districts' sensitivity analyses) was:
June 30, 2018

| $\mathbf{- 9 6}$ | $\mathbf{+ 1 0 0} \quad+\mathbf{2 0 0}$ |
| :--- | :--- | :--- |

Change in net interest income $\ldots . .-1.27 \% \quad 0.61 \% \quad 1.59 \%$
Change in market value of equity . . . $4.12 \%-3.86 \%-7.48 \%$

|  | December 31, $\mathbf{2 0 1 7}$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | $\frac{\mathbf{- 6 9}}{\mathbf{+ 1 0 0}}$ | $\frac{\mathbf{+ 2 0 0}}{}$ |  |
| Change in net interest income $\ldots .$. | $-1.26 \%$ | $1.08 \%$ | $2.55 \%$ |  |
| Change in market value of equity | $\ldots$ | $2.69 \%$ | $-3.73 \%$ | $-7.36 \%$ |

Each Bank measures District interest rate sensitivity under these simulations in accordance with its asset/liability management policies. District measurements are presented in the Supplemental Financial Information on page F-57.

In addition to the interest rate scenarios required for reporting and regulatory purposes, the Banks
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. (For a more detailed discussion of sensitivity analysis and prepayment modeling assumptions, see pages 64 and 65 in the 2017 Annual Information Statement.)

## 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.

The System's aggregate duration gap (the sum of the Banks' duration gaps) was a positive 4.5 months at June 30, 2018 and a positive 4.3 months at December 31, 2017. 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 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 that provide us with greater flexibility to manage 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. Derivative products are subject to regulatory compliance obligations, including, among other things, recordkeeping, reporting, clearing and margining. Clearing and margining are discussed in more detail below.

The primary types of derivative products used and hedging strategies employed are described on page 66 of the 2017 Annual Information Statement. For additional information on derivative products and hedging activities, see Note 10 to the accompanying condensed combined financial statements.

The aggregate notional amount of the System's derivative products, most of which consisted of interest rate swaps, decreased $\$ 1.107$ billion to $\$ 37.420$ billion at June 30, 2018, as compared with $\$ 38.527$ billion at December 31, 2017. The aggregate notional amount of these instruments, which is not included in the Condensed 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. The majority of the swaps used are 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.

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 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 us on early termination of the derivative, thus creating credit risk. When the fair value of the derivative is negative, we would owe the counterparty on early termination of the derivative, and, therefore, assume no credit risk.

To minimize the risk of credit losses for non-cleared derivatives, we typically enter into master agreements that govern all derivative transactions with a counterparty, which include bilateral collateral agreements requiring the exchange of collateral. In some instances the bilateral exchange of collateral is required by regulation, whereas in other instances it is based on dollar thresholds of exposure that consider a counterparty's creditworthiness. We may also clear derivative transactions through a futures commission merchant (FCM), with a clearinghouse (i.e. a central counterparty (CCP)). Cleared derivatives require the payment of initial and variation margin as a protection against default. For additional information related to derivatives, see pages 67 through 69 in the 2017 Annual Information Statement.

As of January 2018, two of the largest CCPs amended their rule books so as to legally characterize variation margin in respect of cleared swap transactions as a settlement payment rather than the posting of collateral. This change resulted in the reclassification of collateral assets for amounts formerly considered variation margin to an offset of the fair value of interest rate swaps and other financial instruments related to our net position for cleared derivative transactions in the accompanying Condensed Combined Statement of Condition as of June 30, 2018 and December 31, 2017. In addition, price alignment interest formerly paid with respect to the collateral will no longer be paid, though an economically equivalent price adjustment amount will be included in the trading revenue associated with the centrally cleared derivatives. This change had no impact on the System's results of operations or cash flows.

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 June 30, 2018 and December 31, 2017 were:

|  | June 30, 2018 |  |  |  |  | December 31, 2017 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Counterparties | Notional Principal | Credit Exposure | Collateral Held | Exposure, Net of Collateral | Number of Counterparties | Notional <br> Principal | Credit Exposure | Collateral Held | Exposure <br> Net of <br> Collateral |
|  | (\$ in millions) |  |  |  |  |  |  |  |  |  |
| Bilateral derivatives: |  |  |  |  |  |  |  |  |  |  |
| Aa2 | 2 | \$ 6,353 | \$ 63 | \$ 59 | \$ 4 | 3 | \$ 7,259 | \$17 | \$17 |  |
| Aa3 | 5 | 6,131 | 100 | 69 | 31 | 4 | 6,836 | 37 | 22 | \$15 |
| A1 | 4 | 2,320 | 37 | 37 |  | 5 | 2,751 | 11 | 11 |  |
| A2 | 1 | 50 | 1 |  | 1 |  |  |  |  |  |
| Baal | 1 | 759 | 2 | 2 |  | 1 | 964 | 1 | 1 |  |
| Baa2 | 1 | 128 |  |  |  | 1 | 130 |  |  |  |
| Cleared |  |  |  |  |  |  |  |  |  |  |
| derivatives(1) | 2 | 14,582 |  |  |  | 2 | 13,866 | 3 |  | 3 |
| Total | 16 | \$30,323 | \$203 | \$167 | \$36 | 16 | \$31,806 | \$69 | \$51 | \$18 |

(1) 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 $\$ 58$ million and $\$ 53$ million at June 30, 2018 and December 31, 2017 related to cleared derivative transactions.

Note: The remaining notional amount of derivative financial instruments of $\$ 7.072$ billion and $\$ 6.708$ billion at June 30 , 2018 and December 31, 2017 are 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 $\$ 25$ million and $\$ 13$ million in notional amount of derivative financial instruments at June 30, 2018 and December 31, 2017 relate to forward commitments that one Bank and one Association have entered into to hedge interest rate risk on interest rate locks.

At June 30, 2018, the Banks' counterparties posted $\$ 167$ million in cash with us, as compared with $\$ 51$ million of cash at December 31, 2017. At June 30, 2018 and December 31, 2017, two Banks had posted collateral with respect to its obligations under these agreements of $\$ 5$ million and \$14 million.

## 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 Contingency Funding 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 that threaten the Banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $\$ 10$ billion and terminates on September 30, 2018, unless otherwise renewed. The decision whether to seek funds from the Federal Financing Bank is at 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.

## Investments

As more fully described on page 70 in the 2017 Annual Information Statement, 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. 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 June 30, 2018, 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, S\&P Global Ratings or Fitch Ratings, as more fully described on page 71 in the 2017 Annual Information Statement.

As a result of the final rule on investments adopted by the Farm Credit Administration, effective January 1, 2019, the requirements governing the eligibility of investment securities for Banks and Associations will be modified to comply with Section 939A of the Dodd-Frank Act. The new regulation removes references to and requirements for credit ratings and substitutes the eligibility requirement with other appropriate standards of credit worthiness, as more fully described on page 36 in "Regulatory Matters."

Eligible investments (carried at fair value) based on credit ratings issued by Moody’s Investors Service, S\&P Global Ratings, or Fitch Ratings were as follows:

| June 30, 2018 | Eligible Investments |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | AAA/Aaa | A1/P1/F1 | $\begin{gathered} \text { Split } \\ \text { Rated(1) } \end{gathered}$ | A2/P2/F2 | Total |
|  | (in millions) |  |  |  |  |
| Federal funds sold and securities purchased under resale agreements |  | \$1,190 | \$ 275 | \$250 | \$ 1,715 |
| Commercial paper, bankers' acceptances, certificates of deposit and other securities |  | 4,643 | 2,584 |  | 7,227 |
| U.S. Treasury securities |  |  | 18,559 |  | 18,559 |
| U.S. agency securities |  |  | 2,817 |  | 2,817 |
| Mortgage-backed securities: |  |  |  |  |  |
| Agency collateralized |  |  | 25,348 |  | 25,348 |
| Agency whole-loan pass through |  |  | 1,611 |  | 1,611 |
| Private label-FHA/VA |  |  | 53 |  | 53 |
| Asset-backed securities | \$1,329 | 11 | 844 |  | 2,184 |
| Total | \$1,329 | \$5,844 | \$52,091 | \$250 | \$59,514 |

Eligible Investments

| December 31, 2017 | AAA/Aaa | A1/P1/F1 | $\begin{gathered} \text { Split } \\ \text { Rated(1) } \end{gathered}$ | A2/P2/F2 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |  |  |
| Federal funds sold and securities purchased under resale agreements |  | \$1,432 | \$ 426 | \$250 | \$ 2,108 |
| Commercial paper, bankers' acceptances, certificates of deposit and other securities |  | 4,072 | 2,216 |  | 6,288 |
| U.S. Treasury securities |  |  | 14,686 |  | 14,686 |
| U.S. agency securities |  |  | 3,637 |  | 3,637 |
| Mortgage-backed securities: |  |  |  |  |  |
| Agency collateralized |  |  | 25,205 |  | 25,205 |
| Agency whole-loan pass through |  |  | 1,769 |  | 1,769 |
| Private label-FHA/VA |  |  | 58 |  | 58 |
| Asset-backed securities | \$1,101 |  | 657 |  | 1,758 |
| Total | \$1,101 | \$5,504 | \$48,654 | \$250 | \$55,509 |

[^1]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 S\&P Global Ratings 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 June 30, 2018, 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 $0.4 \%$ and $0.8 \%$ of Federal funds and available-for-sale investments at June 30, 2018 and December 31, 2017.

|  | Ineligible Investments |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 30, 2018 | Number of Securities | AA/Aa | A/A | BBB/Baa | BB/Ba | B/B | CCC/Caa | D/C | Total | Amortized Cost |
|  |  |  |  |  | (\$ in mill | ions) |  |  |  |  |
| Commercial paper, bankers' acceptances, certificates of deposit and other securities | 11 |  |  | \$87 |  |  |  |  | \$ 87 | \$ 87 |
| Non-agency mortgage-backed securities | 26 | \$10 | \$2 |  | \$ 1 | \$1 | \$1 | \$ 1 | 16 | 15 |
| Private label-FHA/VA mortgage-backed securities | 5 |  |  |  | 122 |  |  |  | 122 | 126 |
| Asset-backed securities | 10 | 2 |  |  | 1 | 1 | 5 | 15 | 24 | 17 |
| Total | 52 | \$12 | \$2 | \$87 | \$124 | \$2 | \$6 | \$16 | \$249 | \$245 |

Ineligible Investments

| December 31, 2017 | Number of Securities | AA/Aa | A/A | BBB/Baa | BB/Ba | B/B | CCC/Caa | D/C | Total | Amortized Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\$ in millions) |  |  |  |  |  |  |  |  |  |
| Non-agency mortgage-backed securities | 36 | \$ 9 | \$5 | \$2 | \$ 3 |  | \$ 2 | \$8 | \$ 29 | \$ 26 |
| Private label-FHA/VA mortgage-backed securities | 16 |  |  |  | 125 | \$142 | 115 |  | 382 | 369 |
| Asset-backed securities | 10 | 2 |  |  | 2 | 1 | 21 |  | 26 | 18 |
| Total | 62 | \$11 | \$5 | \$2 | \$130 | \$143 | \$138 | \$8 | \$437 | \$413 |

Note: Investments are classified based on the indicated rating as the highest rating from at least one rating organization.
The types of mortgage-backed and asset-backed securities that are included in the System's investment portfolio were:

|  | June 30, 2018 |  |  | December 31, 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Fair Value | Unrealized Gains/(Losses) | Amortized Cost | $\begin{gathered} \text { Fair } \\ \text { Value } \end{gathered}$ | Unrealized Gains/(Losses) |
|  | (in millions) |  |  |  |  |  |
| Mortgage-backed securities: |  |  |  |  |  |  |
| Agency collateralized | \$25,812 | \$25,348 | \$(464) | \$25,418 | \$25,205 | \$(213) |
| Agency whole-loan pass through | 1,584 | 1,611 | 27 | 1,731 | 1,769 | 38 |
| Non-agency | 15 | 16 | 1 | 26 | 29 | 3 |
| Private label-FHA/VA | 180 | 175 | (5) | 427 | 440 | 13 |
| Total mortgage-backed securities | \$27,591 | \$27,150 | \$(441) | \$27,602 | \$27,443 | \$(159) |
| Asset-backed securities: |  |  |  |  |  |  |
| Home equity loans | \$ 17 | \$ 25 | \$ 8 | \$ 19 | \$ 27 | \$ 8 |
| Small business loans | 848 | 843 | (5) | 657 | 656 | (1) |
| Auto loans | 855 | 854 | (1) | 583 | 582 | (1) |
| Equipment loans | 44 | 44 |  | 61 | 61 |  |
| Credit card receivables | 447 | 440 | (7) | 458 | 456 | (2) |
| Student loans | 2 | 2 |  | 2 | 2 |  |
| Total asset-backed securities | \$ 2,213 | \$ 2,208 | \$ (5) | \$ 1,780 | \$ 1,784 | \$ 4 |

## 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:


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

|  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | ecember |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Farmer Mac securities | \$168 | \$192 |
| Rural home loan securities | 88 | 94 |
| Other | 8 | 12 |
| Total | \$264 | \$298 |

## 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 June 30, 2018, each Bank met the individual tiers of the liquidity reserve and exceeded the regulatory minimum 90 days of liquidity. The System's liquidity position was 180 days at June 30, 2018, as compared with 175 days at December 31, 2017. (See Note 13 for each Bank's liquidity position at June 30, 2018 and December 31, 2017.)

Cash provided by the System's operating activities (primarily generated from net interest income in excess of operating expenses) of $\$ 2.762$ billion and $\$ 2.490$ billion for the first six months of 2018 and 2017 provides an additional source of liquidity for the System that is not reflected in the individual Bank's calculation of days of liquidity under the standard. 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.

Capital Adequacy and the Ability to Repay Systemwide Debt Securities

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 is the most significant component of capital. As of June 30, 2018, retained earnings totaled $\$ 45.765$ billion and represented $79.8 \%$, as compared with $\$ 43.630$ billion and $78.8 \%$ at December 31, 2017. Capital as a percentage of assets increased to $17.2 \%$ at June 30, 2018, as compared with $16.8 \%$ at December 31, 2017.

## Farm Credit Administration Capital Requirements

The following sets forth the regulatory capital ratio requirements and ratios at June 30, 2018:

| Ratio | Primary Components of Numerator | Denominator | Minimum Requirement | $\begin{gathered} \text { Minimum } \\ \text { with } \\ \text { Buffer* } \end{gathered}$ | Banks** | Associations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Common Equity Tier 1 (CET1) Capital | Unallocated retained earnings (URE) and common cooperative equities (qualifying capital stock and allocated equity) ${ }^{1}$ | Risk-adjusted assets | 4.5\% | 7.0\% | 10.0\%-20.5\% | 12.1\%-37.2\% |
| Tier 1 Capital | CET1 Capital and non-cumulative perpetual preferred stock | Risk-adjusted assets | 6.0\% | 8.5\% | 14.0\%-21.0\% | 12.1\%-37.2\% |
| Total Capital | Tier 1 Capital, allowance for loan losses ${ }^{2}$, other common cooperative equities ${ }^{3}$, and term preferred stock and subordinated debt ${ }^{4}$ | Risk-adjusted assets | 8.0\% | 10.5\% | 15.0\%-21.1\% | 13.1\%-38.3\% |
| Tier 1 Leverage*** | Tier 1 Capital | Total assets | 4.0\% | 5.0\% | 5.6\%-7.3\% | 10.9\%-33.5\% |
| Unallocated Retained Earnings and URE Equivalents (UREE) Leverage | URE and URE Equivalents | Total assets | 1.5\% | N/A | 2.8\%-6.3\% | 8.3\%-34.2\% |
| Permanent Capital | Retained earnings, common stock, non-cumulative perpetual preferred stock and subordinated debt, subject to certain limits | Risk-adjusted assets | 7.0\% | N/A | 14.1\%-21.0\% | 12.8\%-37.6\% |

[^2]
## 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 Bankinfluenced operating and financing policies and agreements for its District. (See Notes 7 and 13 to the accompanying condensed 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.

## 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 condensed combined financial statements. As of June 30, 2018, the assets in the Insurance Fund totaled $\$ 4.811$ billion. (See Note 5 to the accompanying condensed combined financial statements and the Supplemental Combining Information on pages F-49 and F-51 for condensed combining statements of condition and income that illustrate the impact of including the Insurance Fund in the System's condensed combined financial statements.)

Insurance premiums are established by the Insurance Corporation with the objective of maintaining the "secure base amount," which is defined in the Farm Credit Act as $2 \%$ of the adjusted insured obligations (adjusted to reflect the reduced risk on loans or investments guaranteed by the U.S. or state governments) or such other percentage of the adjusted insured obligations as the Insurance Corporation in its sole discretion determines to be actuarially sound. As required by the Farm Credit Act, as amended, the Insurance Corporation may return excess funds above the secure base amount to System institutions. At December 31, 2017, the assets in the Insurance Fund exceeded the secure base amount by $\$ 176$ million (after deduction of prospective operating expenses for 2018) and the excess was transferred to the Allocated Insurance Reserves Accounts. In March 2018, the Insurance Corporation's board approved and distributed the $\$ 176$ million of excess funds to the System.

At June 30, 2018, as determined by the Insurance Corporation, the Insurance Fund for which no specific use has been identified or designated was $2.07 \%$ of adjusted insured obligations, as compared with $2.00 \%$ at December 31, 2017. The Insurance Fund with the allocated amount was $2.08 \%$ of the adjusted insured obligations at December 31, 2017. No amounts were allocated as of June 30, 2018.

## 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.

## System Capitalization

The changes in capital for the six months ended June 30, 2018 were:

|  | Capital |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \begin{array}{l} \text { Combined } \\ \text { Banks } \end{array} \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Combined } \\ \text { Associations } \end{gathered}$ | Insurance Fund | $\begin{gathered} \text { Combination } \\ \text { Entries } \end{gathered}$ | System <br> Combined |
|  |  |  | (in millions) |  |  |
| Balance at December 31, 2017 | \$18,398 | \$38,168 | \$4,848 | \$(6,032) | \$55,382 |
| Net income | 1,133 | 1,984 | 139 | (607) | 2,649 |
| Change in accumulated other comprehensive loss | (336) | 2 |  | 56 | (278) |
| Preferred stock issued | 99 | 284 |  |  | 383 |
| Preferred stock retired |  | (242) |  |  | (242) |
| Preferred stock dividends | (79) | (9) |  |  | (88) |
| Capital stock and participation certificates issued | 25 | 42 |  | (24) | 43 |
| Capital stock, participation certificates and retained earnings retired | (56) | (41) |  | 18 | (79) |
| Insurance Corporation distributions to System institutions |  |  | (176) | 176 |  |
| Patronage | (403) | (364) |  | 329 | (438) |
| Balance at June 30, 2018 | \$18,781 | \$39,824 | \$4,811 | \$(6,084) | \$57,332 |

Note: System combined capital reflected eliminations of approximately $\$ 4.7$ billion of Bank equities held by Associations as of June 30, 2018 and December 31, 2017. 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 7 and 13 to the accompanying condensed combined financial statements.)

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 Banks and Associations. 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 $\$ 346$ million since December 31, 2017 to $\$ 23.592$ billion at June 30, 2018.

Combined Bank-only net income was $\$ 1.133$ billion and $\$ 1.011$ billion for the six months ended June 30, 2018 and 2017. The combined Bank-
only net income reflects the earnings from investments, Bank wholesale loans to Associations, and retail loans, the majority of which consist of CoBank's domestic loans to cooperatives and other eligible borrowers and loans to finance agricultural export transactions. The Banks' wholesale loans to Associations represent approximately $54 \%$ of the assets on the combined Bank-only balance sheet at June 30, 2018. 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.

Combined Association capital increased $\$ 1.656$ billion since December 31, 2017 to $\$ 39.824$ billion at June 30, 2018. The growth in Association capital resulted primarily from income earned and retained. Combined Association capital as a percentage of combined Association loans was $21.1 \%$ at June 30, 2018 and 20.5\% at December 31, 2017. Capital at the Association level reduces the Banks' credit exposure with respect to wholesale loans between the Banks and each of their affiliated Associations.

Accumulated other comprehensive loss, net of tax, at June 30, 2018 and December 31, 2017 was comprised of the following components:

|  | $\begin{aligned} & \text { June 30, } \\ & 2018 \end{aligned}$ | $\underset{2017}{\text { December 31, }}$ |
| :---: | :---: | :---: |
|  | (in millions) |  |
| Unrealized losses on investments available-for-sale, net | \$ (731) | \$ (276) |
| Unrealized gains on other-than-temporarily impaired investments available-for-sale | 3 | 3 |
| Unrealized gains/losses on cash flow hedges, net . | 48 | (53) |
| Pension and other benefit plans | $(1,364)$ | $(1,413)$ |
|  | \$(2,044) | \$(1,739) |

Accumulated other comprehensive loss increased $\$ 305$ million during the first six months of 2018 as a result of an increase in unrealized losses on investments available-for-sale due to an increase in interest rates lowering the fair value of existing fixedrate investment securities.

## 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 16 and 17 of this Quarterly 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 12 and 15 in the 2017 Annual Information Statement for additional information).

## 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 Farm Credit 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

On May 10, 2018, the Farm Credit Administration adopted a final rule that amends the regulations governing investments of the Banks and Associations. The final rule strengthens eligibility criteria for the investments the Banks may purchase and hold, and implements Section 939A of the Dodd-Frank Act by removing references to and requirements for credit ratings and substitutes the eligibility requirement with other appropriate standards of credit worthiness. It also grants Associations greater flexibility regarding the risk management purposes for investments and limits the type and amount of investments that an Association may hold. Only securities that are issued by, or are unconditionally guaranteed or insured as to the timely payment of principal and interest by, the U.S. government or its agencies are eligible for Association risk management purposes. An Association may purchase and hold investments not to exceed $10 \%$ of its 90 -day average daily balance of outstanding loans on the last business day of the quarter. The final rule will become effective January 1, 2019.

## Recently Adopted or Issued Accounting Pronouncements

In February 2018, the Financial Accounting Standards Board (FASB) issued guidance entitled "Income Statement - Reporting Comprehensive Income Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." This guidance allows for the reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the recently issued tax legislation, Tax Cuts and Jobs Act (TCJA) that lowered the federal corporate tax rate from $35 \%$ to $21 \%$. The amount of the reclassification shall include the effect of the change in the tax rate on gross deferred tax amounts and related valuation allowances at the date of enactment of the TCJA related to items remaining in accumulated other comprehensive income. The guidance becomes effective for financial statements issued for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The System early adopted the guidance during the first quarter of 2018, which resulted in a $\$ 27$ million increase to accumulated other comprehensive loss and retained earnings.

In August 2017, the FASB issued guidance entitled "Targeted Improvements to Accounting for Hedging Activities." The guidance better aligns an entity's risk management activities and financial
reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The amendments in this guidance require an entity to present the earnings effect of the hedging instrument in the same income statement line item in which the earnings effect of the hedged item is reported. This guidance also addresses the timing of effectiveness testing, qualitative and quantitative effectiveness testing and components that can be excluded from effectiveness testing. This guidance becomes effective for interim and annual periods beginning after December 15, 2018. The System is evaluating the impact of adoption on the System's financial condition and its results of operations.

In March 2017, the FASB issued guidance entitled "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Cost." The guidance requires that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. Other components are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations, if one is presented. This guidance became effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance did not materially impact the System's financial condition but did change the classification of certain items in the results of operations.

In August 2016, the 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 became effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance did not materially impact the System's financial condition or its results of operations.

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 is evaluating 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. In July 2018, the FASB issued an update entitled "Leases - Targeted Improvements," which provides entities with an additional (and optional) transition method to adopt the new leases standard. Under this new transition method, an entity initially applies the new leases standard at the adoption date and recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. An entity that elects this additional transition method must provide the required disclosures of the now current standard for all prior periods presented. The guidance and related amendments in this update become effective for interim and annual periods beginning after December 15, 2018, with early application permitted. The System is evaluating 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 became effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance did not materially impact the System's financial condition or its results of operations.

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 were excluded from the scope of this new guidance. The new revenue standard became effec-
tive for interim and annual reporting periods beginning after December 15, 2017. The adoption of this guidance did not materially impact the System's financial condition or its results of operations.

## Other Matters

Effective April 2, 2018, Jeffery R. Swanhorst became CEO of AgriBank. Mr. Swanhorst replaced William J. Thone, who served as CEO since August 2016. Mr. Swanhorst served as Chief Credit Officer of AgriBank since August 2011. Mr. Thone remained with AgriBank through June 30, 2018 on a consulting basis to ensure a smooth leadership transition before retiring.

# INDEX TO CONDENSED COMBINED FINANCIAL STATEMENTS AND SUPPLEMENTAL COMBINING AND FINANCIAL INFORMATION June 30, 2018 

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## FARM CREDIT SYSTEM <br> CONDENSED COMBINED STATEMENT OF CONDITION (in millions)

|  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | $\underset{2017}{\text { December } 31, ~}$ |
| :---: | :---: | :---: |
|  | (unaudited) |  |
| A S S ETS |  |  |
| Cash | \$ 1,172 | \$ 2,813 |
| Federal funds sold and securities purchased under resale agreements | 1,715 | 2,108 |
| Investments (Note 2) |  |  |
| Available-for-sale (amortized cost of \$58,818 and \$54,137, respectively) | 58,048 | 53,838 |
| Mission-related and other held-to-maturity (fair value of \$2,788 and $\$ 2,674$, respectively) | 2,875 | 2,727 |
| Mission-related and other available-for-sale (amortized cost of \$274 and $\$ 304$, respectively) | 264 | 298 |
| Loans (Note 3) | 260,713 | 258,777 |
| Less: allowance for loan losses (Note 3) | $(1,666)$ | $(1,596)$ |
| Net loans | 259,047 | 257,181 |
| Accrued interest receivable | 2,424 | 2,354 |
| Premises and equipment | 1,258 | 1,223 |
| Other assets (Note 4) | 2,213 | 2,128 |
| Restricted assets (Note 5) | 4,811 | 4,848 |
| Total assets | \$333,827 | \$329,518 |
| LIA B LIT TES AND CAPITAL |  |  |
| Systemwide Debt Securities |  |  |
| Due within one year: |  |  |
| Systemwide discount notes | \$ 20,363 | \$ 25,507 |
| Systemwide bonds and medium-term notes | 81,911 | 77,375 |
|  | 102,274 | 102,882 |
| Due after one year: |  |  |
| Systemwide bonds and medium-term notes | 166,607 | 162,287 |
| Total Systemwide Debt Securities (Note 6) | 268,881 | 265,169 |
| Other bonds | 1,587 | 1,950 |
| Notes payable and other interest-bearing liabilities | 1,467 | 1,279 |
| Accrued interest payable | 895 | 744 |
| Other liabilities (Note 4) | 3,665 | 4,994 |
| Total liabilities | 276,495 | 274,136 |
| Commitments and contingencies (Note 12) |  |  |
| Capital (Note 7) |  |  |
| Preferred stock | 3,194 | 3,052 |
| Capital stock and participation certificates | 1,894 | 1,879 |
| Additional paid-in-capital | 3,712 | 3,712 |
| Restricted capital (Note 5) | 4,811 | 4,848 |
| Accumulated other comprehensive loss, net of tax | $(2,044)$ | $(1,739)$ |
| Retained earnings . . . . . . . . . . . . . . . . . . . . . . | 45,765 | 43,630 |
| Total capital | 57,332 | 55,382 |
| Total liabilities and capital | \$333,827 | \$329,518 |

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

## FARM CREDIT SYSTEM

## CONDENSED COMBINED STATEMENT OF INCOME (in millions)

|  | For the <br> Three Months Ended June 30, |  | For the Six Months Ended June 30, |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2018 | 2017 |
|  |  | (unau | dited) |  |
| Interest income |  |  |  |  |
| Investments, Federal funds sold and securities purchased under resale agreements | \$ 351 | \$ 258 | \$ 662 | \$ 495 |
| Loans | 3,008 | 2,604 | 5,877 | 5,117 |
| Total interest income | 3,359 | 2,862 | 6,539 | 5,612 |
| Interest expense |  |  |  |  |
| Systemwide bonds and medium-term notes | 1,284 | 895 | 2,416 | 1,705 |
| Systemwide discount notes | 93 | 52 | 175 | 99 |
| Other interest-bearing liabilities | 9 | 7 | 16 | 12 |
| Total interest expense | 1,386 | 954 | 2,607 | 1,816 |
| Net interest income | 1,973 | 1,908 | 3,932 | 3,796 |
| Provision for loan losses | 18 | 80 | 87 | 117 |
| Net interest income after provision for loan losses | 1,955 | 1,828 | 3,845 | 3,679 |
| Noninterest income |  |  |  |  |
| Loan-related fee income | 52 | 66 | 107 | 125 |
| Financially related services income | 37 | 39 | 82 | 80 |
| Mineral income | 20 | 15 | 37 | 28 |
| Income earned on Insurance Fund assets | 18 | 15 | 34 | 28 |
| Losses on extinguishment of debt |  | (7) | (6) | (9) |
| Net gains on sales of investments and other assets | 37 | 1 | 40 | 12 |
| Other income | 33 | 22 | 60 | 47 |
| Total noninterest income | 197 | 151 | 354 | 311 |
| Noninterest expense |  |  |  |  |
| Salaries and employee benefits | 457 | 438 | 916 | 878 |
| Occupancy and equipment expense | 61 | 58 | 123 | 117 |
| Purchased services | 48 | 44 | 94 | 81 |
| Other expense | 169 | 171 | 339 | 347 |
| Total noninterest expense | 735 | 711 | 1,472 | 1,423 |
| Income before income taxes | 1,417 | 1,268 | 2,727 | 2,567 |
| Provision for income taxes | 34 | 46 | 78 | 101 |
| Net income | \$1,383 | \$1,222 | \$2,649 | \$2,466 |

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

## FARM CREDIT SYSTEM

## CONDENSED COMBINED STATEMENT OF COMPREHENSIVE INCOME (in millions)

|  | For the Three Months Ended June 30, |  | For the Six Months Ended June 30, |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2018 | 2017 |
|  | (unaudited) |  |  |  |
| Net income | \$1,383 | \$1,222 | \$2,649 | \$2,466 |
| Other comprehensive (loss) income, net of tax: |  |  |  |  |
| Change in unrealized gains/losses on investments available-for-sale not other-than-temporarily impaired, including reclassification adjustments | (135) | 59 | (445) | 87 |
| Change in unrealized gains/losses on other-than-temporarily impaired investments, including reclassification adjustments . . . . . . . . . . . . . |  | 2 |  | (1) |
| Change in unrealized gains/losses on cash flow hedges, including reclassification adjustments | 30 | (25) | 105 | (22) |
| Change in net periodic pension benefit cost, including reclassification adjustments | 30 | 26 | 62 | 54 |
| Total other comprehensive (loss) income | (75) | 62 | (278) | 118 |
| Comprehensive income | \$1,308 | \$1,284 | \$2,371 | \$2,584 |

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

## FARM CREDIT SYSTEM

## CONDENSED COMBINED STATEMENT OF CHANGES IN CAPITAL (in millions)

|  | For the Six Months Ended June 30 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Preferred Stock | Capital Stock and Participation Certificates | Additional Paid-inCapital | Restricted Capital Farm Credit Insurance Fund |  | Retained Earnings | Total Capital |
| e at Decem | \$3,0 | \$1,800 | \$1,3 | (unaudited) |  | \$43,183 | 1 |
| Comprehensive income |  |  |  |  | 118 | 2,466 | 2,584 |
| Transfer of Insurance Fund premiums and other income from retained earnings to restricted capital |  |  |  | 199 |  | (199) |  |
| Preferred stock issued by Associations . . . | 224 |  |  |  |  |  | 224 |
| Preferred stock retired by Associations . . . | (163) |  |  |  |  |  | (163) |
| Preferred stock dividends |  |  |  |  |  | (84) | (84) |
| Capital stock and participation certificates issued |  | 74 |  |  |  |  | 74 |
| Capital stock and participation certificates retired |  | (90) |  |  |  |  | (90) |
| Equity issued or recharacterized upon Association merger |  | 1 | 166 |  |  |  | 167 |
| Equity retired or recharacterized upon Association merger |  | (1) |  |  |  | (172) | (173) |
| Patronage: Cash . . |  |  |  |  |  | (333) | (333) |
| Capital stock, participation certificates and retained earnings allocations |  | 45 |  |  |  | (45) |  |
| Balance at June 30, 2017 | \$3,079 | \$1,829 | \$1,557 | \$4,652 | \$(1,416) | \$44,816 | \$54,517 |
| Balance at December 31, 2017 | \$3,052 | \$1,879 | \$3,712 | $\overline{\$ 4,848}$ | \$(1,739) | \$43,630 | \$55,382 |
| Comprehensive (loss) income |  |  |  |  | (278) | 2,649 | 2,371 |
| Reclassification of stranded tax effects from accumulated other comprehensive loss to retained earnings |  |  |  |  | (27) | 27 |  |
| Transfer of Insurance Fund premiums and other income from retained earnings to restricted capital |  |  |  | 139 |  | (139) |  |
| Insurance Corporation distributions to System institutions |  |  |  | (176) |  | 176 |  |
| Preferred stock issued by Banks | 100 |  |  |  |  | (1) | 99 |
| Preferred stock issued by Associations . . . | 284 |  |  |  |  |  | 284 |
| Preferred stock retired by Associations.. | (242) |  |  |  |  |  | (242) |
| Preferred stock dividends |  |  |  |  |  | (88) | (88) |
| Capital stock and participation certificates issued |  | 43 |  |  |  |  | 43 |
| Capital stock and participation certificates retired |  | (79) |  |  |  |  | (79) |
| Patronage: |  |  |  |  |  |  |  |
| Cash |  |  |  |  |  | (438) | (438) |
| Capital stock, participation certificates and retained earnings allocations ... |  | 51 |  |  |  | (51) |  |
| Balance at June 30, 2018 | \$3,194 | \$1,894 | \$3,712 | \$4,811 | \$(2,044) | \$45,765 | \$57,332 |

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

## FARM CREDIT SYSTEM

## CONDENSED COMBINED STATEMENT OF CASH FLOWS (in millions)

|  | For the Six Months Ended June 30 |  |
| :---: | :---: | :---: |
|  | 2018 | 2017 |
|  | (unaudited) |  |
| Cash flows from operating activities |  |  |
| Net income | \$ 2,649 | \$ 2,466 |
| Adjustments to reconcile net income to net cash provided by operating activities: |  |  |
| Provision for loan losses | 87 | 117 |
| Depreciation and amortization on premises and equipment | 58 | 56 |
| Net gains on sales of investments and other assets | (40) | (12) |
| Income on Insurance Fund assets, net of operating expenses | (32) | (26) |
| (Increase) decrease in accrued interest receivable | (70) | 4 |
| Other, net | 110 | (115) |
| Net cash provided by operating activities | 2,762 | 2,490 |
| Cash flows from investing activities |  |  |
| Increase in loans, net | $(2,012)$ | $(1,744)$ |
| Decrease (increase) in Federal funds sold and securities purchased under resale agreements, net ... | 393 | (629) |
| Investments available-for-sale: |  |  |
| Purchases | $(18,188)$ | $(17,319)$ |
| Proceeds from maturities and payments | 13,472 | 15,421 |
| Proceeds from sales | 168 | 1,669 |
| Mission-related and other investments held-to-maturity: |  |  |
| Purchases | (375) | (256) |
| Proceeds from maturities and payments | 215 | 224 |
| Mission-related and other investments available-for-sale: |  |  |
| Purchases | (34) | (52) |
| Proceeds from maturities and payments | 31 | 28 |
| Proceeds from sales | 34 | 29 |
| Premiums paid to the Insurance Fund | (341) | (373) |
| Distributions by Insurance Fund to System institutions | 176 |  |
| Other, net . . . | (77) | (46) |
| Net cash used in investing activities | $(6,538)$ | $(3,048)$ |
| Cash flows from financing activities |  |  |
| Systemwide bonds issued | 47,038 | 42,421 |
| Systemwide bonds and medium-term notes retired | $(38,100)$ | $(37,823)$ |
| Systemwide discount notes issued | 94,695 | 91,830 |
| Systemwide discount notes retired | $(99,853)$ | $(95,809)$ |
| Subordinated debt retired |  | (500) |
| Other bonds retired, net | (363) | (563) |
| Increase in notes payable and other interest-bearing liabilities, net | 188 | 112 |
| Increase (decrease) in collateral held from derivative counterparties | 116 | (67) |
| Preferred stock issued by Banks | 99 |  |
| Preferred stock issued by Associations, net | 42 | 61 |
| Capital stock and participation certificates issued | 43 | 74 |
| Capital stock, participation certificates and retained earnings retired | (118) | (128) |
| Preferred stock dividends paid | (81) | (80) |
| Cash patronage paid | $(1,571)$ | $(1,237)$ |
| Net cash provided by (used in) financing activities | 2,135 | $(1,709)$ |
| Net decrease in cash | $(1,641)$ | $(2,267)$ |
| Cash at beginning of period | 2,813 | 3,240 |
| Cash at end of period | \$ 1,172 | \$ 973 |

## FARM CREDIT SYSTEM CONDENSED COMBINED STATEMENT OF CASH FLOWS - (continued) (in millions)

|  | For the Six Months Ended June 30 |  |
| :---: | :---: | :---: |
|  | 2018 | 2017 |
|  | (unaudited) |  |
| Supplemental schedule of non-cash investing and financing activities: |  |  |
| Loans transferred to other property owned | \$ 42 | \$ 15 |
| Patronage and dividends distributions payable | 518 | 403 |
| Transfer of retained earnings to additional paid-in-capital related to Association mergers |  | 166 |
| Reclassification of stranded tax effects from accumulated other comprehensive loss to retained earnings | (27) |  |
| Supplemental non-cash fair value changes related to hedging activities: |  |  |
| Decrease in Systemwide bonds and medium-term notes | (70) | (23) |
| (Increase) decrease in other assets | (31) | 75 |
| Decrease in other liabilities | (63) | (68) |
| Supplemental disclosure of cash flow information: |  |  |
| Cash paid during the six months for: |  |  |
| Interest | 2,442 | 1,737 |
| Taxes | 35 | 52 |

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

## FARM CREDIT SYSTEM

## NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS (unaudited) (dollars in millions, except as noted)

## NOTE 1 - ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

The accompanying Farm Credit System (System) condensed combined financial statements include financial information 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. Substantially all Associations are structured as Agricultural Credit Associations (ACA) parent companies, with Federal Land Credit Associations (FLCA) and Production Credit Associations (PCA) subsidiaries. ACA parent companies provide financing and related services to customers through their FLCA and PCA subsidiaries. Generally, FLCAs make long-term loans secured by agricultural real estate or rural home loans. PCAs make short- and intermediate-term loans for agricultural production or operating purposes.

The accompanying unaudited condensed combined financial statements have been prepared in accordance with accounting principles generally accepted in the U.S. (GAAP) for interim financial information. Accordingly, these statements should be read in conjunction with the audited combined financial statements for the year ended December 31, 2017, contained in the System's 2017 Annual Information Statement, as these statements do not include all of the disclosures required by GAAP for annual financial statements.

The accompanying condensed combined financial statements contain all adjustments necessary for a fair presentation of the interim financial condition and results of operation of the System. All significant intraSystem transactions and balances have been eliminated in combination. Certain amounts in prior years' combined financial statements have been reclassified to conform to the current year presentation.

A more complete description of System institutions, the significant accounting policies followed by System entities, and the System's combined financial condition and combined results of operations as of and for the year ended December 31, 2017 are contained in the 2017 Annual Information Statement.

## Recently Adopted or Issued Accounting Pronouncements

In February 2018, the Financial Accounting Standards Board (FASB) issued guidance entitled "Income Statement - Reporting Comprehensive Income - Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." This guidance allows for the reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the recently issued tax legislation, Tax Cuts and Jobs Act (TCJA) that lowered the federal corporate tax rate from $35 \%$ to $21 \%$. The amount of the reclassification shall include the effect of the change in the tax rate on gross deferred tax amounts and related valuation allowances at the date of enactment of the TCJA related to items remaining in accumulated other comprehensive income. The guidance becomes effective for financial statements issued for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The System early adopted the guidance during the first quarter of 2018 , which resulted in a $\$ 27$ million increase to accumulated other comprehensive loss and retained earnings.

In August 2017, the FASB issued guidance entitled "Targeted Improvements to Accounting for Hedging Activities." The guidance better aligns an entity's risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The amendments in this guidance require an entity to present the earnings effect of the hedging instrument in the same income statement line item in which the earnings effect of the hedged item is reported. This guidance also addresses the timing of effectiveness testing, qualitative and quantitative effectiveness testing and components that can be excluded from effectiveness testing. This guidance becomes effective for interim and annual periods beginning after December 15, 2018. The System is evaluating the impact of adoption on the System's financial condition and its results of operations.

## FARM CREDIT SYSTEM

## NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

In March 2017, the FASB issued guidance entitled "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Cost." The guidance requires that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. Other components are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations, if one is presented. This guidance became effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance did not materially impact the System's financial condition but did change the classification of certain items in the results of operations.

In August 2016, the 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 became effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance did not materially impact the System's financial condition or its results of operations.

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 is evaluating 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. In July 2018, the FASB issued an update entitled "Leases - Targeted Improvements," which provides entities with an additional (and optional) transition method to adopt the new leases standard. Under this new transition method, an entity initially applies the new leases standard at the adoption date and recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. An entity that elects this additional transition method must provide the required disclosures of the now current standard for all prior periods presented. The guidance and related amendments in this update become effective for interim and annual periods beginning after December 15, 2018, with early application permitted. The System is evaluating 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 became effective for interim and annual periods beginning after December 15, 2017. The adoption of this guidance did not materially impact the System's financial condition or its results of operations.

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 enti-

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

tled 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 were excluded from the scope of this
new guidance. The new revenue standard became effective for interim and annual reporting periods beginning after December 15, 2017. The adoption of this guidance did not materially impact the System's financial condition or its results of operations.

## NOTE 2 - 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:

|  | June 30, 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Gross <br> Unrealized <br> Gains | Gross Unrealized Losses | Fair Value | Weighted Average Yield |
| Commercial paper, bankers' acceptances, certificates of deposit and other securities | \$ 7,314 | \$ 2 | \$ (2) | \$ 7,314 | 2.30\% |
| U.S. Treasury securities | 18,847 | 1 | (289) | 18,559 | 1.78 |
| U.S. agency securities | 2,853 | 1 | (37) | 2,817 | 2.15 |
| Mortgage-backed securities | 27,591 | 55 | (496) | 27,150 | 2.35 |
| Asset-backed securities | 2,213 | 9 | (14) | 2,208 | 2.39 |
| Total | \$58,818 | \$68 | \$(838) | \$58,048 | 2.15 |
|  | December 31, 2017 |  |  |  |  |
|  | Amortized Cost | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Gains } \end{gathered}$ | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Losses } \end{gathered}$ | Fair Value | Weighted Average Yield |
| Commercial paper, bankers' acceptances, certificates of deposit and other securities | \$ 6,288 | \$ 1 | \$ (1) | \$ 6,288 | 1.58\% |
| U.S. Treasury securities | 14,813 | 8 | (135) | 14,686 | 1.61 |
| U.S. agency securities | 3,654 | 6 | (23) | 3,637 | 2.07 |
| Mortgage-backed securities | 27,602 | 104 | (263) | 27,443 | 2.06 |
| Asset-backed securities | 1,780 | 11 | (7) | 1,784 | 1.80 |
| Total | \$54,137 | \$130 | \$(429) | \$53,838 | 1.87 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

A summary of the fair value and amortized cost of investments available-for-sale at June 30, 2018 by contractual maturity is as follows:

|  | $\begin{aligned} & \text { Due in } 1 \text { Year } \\ & \text { or Less } \end{aligned}$ |  | Due After 1 Year Through 5 Years |  | Due After 5 Years Through 10 Years |  | Due After 10Years |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount | Weighted <br> Average <br> Yield | Amount | Weighted <br> Average <br> Yield | Amount | Weighted <br> Average <br> Yield | Amount | Weighted Average Yield | Amount | Weighted <br> Average <br> Yield |
| Commercial paper, bankers' acceptances, certificates of deposit and other securities | \$ 6,969 |  | \$ 258 |  | \$ 87 |  |  |  | \$ 7,314 | 2.30\% |
| U.S. Treasury securities | 5,717 |  | 9,989 |  | 2,853 |  |  |  | 18,559 | 1.78 |
| U.S. agency securities | 623 |  | 998 |  | 1,196 |  |  |  | 2,817 | 2.15 |
| Mortgage-backed securities | 1 |  | 1,669 |  | 2,501 |  | \$22,979 |  | 27,150 | 2.35 |
| Asset-backed securities | 36 |  | 1,219 |  | 193 |  | 760 |  | 2,208 | 2.39 |
| Total fair value | \$13,346 | 1.91\% | \$14,133 | 1.95\% | \$6,830 | 2.18\% | \$23,739 | 2.40\% | \$58,048 | 2.15 |
| Total amortized cost . | \$13,360 |  | \$14,338 |  | \$7,003 |  | \$24,117 |  | \$58,818 |  |

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.

## 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:

|  | June 30, 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Gains } \end{gathered}$ | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Losses } \end{gathered}$ | Fair Value | Weighted Average Yield |
| Mortgage-backed securities | \$2,401 | \$10 | \$ (79) | \$2,332 | 3.59\% |
| Asset-backed securities | 382 | 1 | (21) | 362 | 2.95 |
| Other securities | 92 | 3 | (1) | 94 | 5.90 |
| Total | \$2,875 | \$14 | \$(101) | \$2,788 | 3.58 |
|  | December 31, 2017 |  |  |  |  |
|  | Amortized Cost | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Gains } \end{gathered}$ | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Losses } \end{gathered}$ | Fair Value | Weighted Average Yield |
| Mortgage-backed securities | \$2,318 | \$12 | \$(61) | \$2,269 | 3.38\% |
| Asset-backed securities | 305 | 1 | (11) | 295 | 2.58 |
| Other securities | 104 | 7 | (1) | 110 | 5.94 |
| Total | \$2,727 | \$20 | \$(73) | \$2,674 | 3.39 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

A summary of the fair value and amortized cost of held-to-maturity mission-related and other investments at June 30, 2018 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 <br> Average <br> Yield | Amount | Weighted Average Yield | Amount | Weighted Average Yield | Amount | Weighted Average Yield | Amount | Weighted Average Yield |
| Mortgage-backed securities | \$ 4 |  | \$43 |  | \$ 91 |  | \$2,263 |  | \$2,401 | 3.59\% |
| Asset-backed securities | 3 |  | 39 |  | 66 |  | 274 |  | 382 | 2.95 |
| Other securities | 6 |  | 6 |  | 18 |  | 62 |  | 92 | 5.90 |
| Total amortized cost | \$13 | 4.35\% | \$88 | 4.15\% | \$175 | 3.77\% | \$2,599 | 3.54\% | \$2,875 | 3.58 |
| Total fair value | \$13 |  | \$88 |  | \$173 |  | \$2,514 |  | \$2,788 |  |

## Available-for-Sale Mission-Related and Other Investments

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

|  | June 30, 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Gross Unrealized Gains | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Losses } \end{gathered}$ | Fair Value | Weighted <br> Average Yield |
| Mortgage-backed securities | \$266 |  | \$(10) | \$256 | 3.08\% |
| Other securities | 8 |  |  | 8 | 5.92 |
| Total | \$274 | \$0 | \$(10) | \$264 | 3.17 |


|  | December 31, 2017 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amortized Cost | Gross Unrealized Gains | $\begin{gathered} \text { Gross } \\ \text { Unrealized } \\ \text { Losses } \end{gathered}$ | Fair Value | Weighted Average Yield |
| Mortgage-backed securities | \$292 | \$1 | \$(7) | \$286 | 2.83\% |
| Other securities | 12 |  |  | 12 | 5.68 |
| Total | \$304 | \$1 | \$(7) | \$298 | 2.94 |

A summary of the fair value and amortized cost of available-for-sale mission-related and other investments at June 30, 2018 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 | \$12 |  | \$27 |  | \$217 |  | \$256 | 3.08\% |
| Other securities | 2 |  |  |  | 6 |  | 8 | 5.92 |
| Total fair value | \$14 | 4.89\% | \$27 | 4.73\% | \$223 | 2.87\% | \$264 | 3.17 |
| Total amortized cost | \$15 |  | \$29 |  | \$230 |  | \$274 |  |

# FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted) 

## Other-Than-Temporarily Impaired Investments Evaluation

The following tables show the gross unrealized losses and fair value of the System's 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.

| June 30, 2018 | Less Than 12 Months |  | 12 Months or More |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses |
| Commercial paper, bankers' acceptances, certificates <br> of deposit and other securities |  |  |  |  |
| U.S. Treasury securities | 10,625 | (177) | 4,623 | (112) |
| U.S. agency securities | 1,544 | (17) | 813 | (20) |
| Mortgage-backed securities | 13,438 | (276) | 9,142 | (309) |
| Asset-backed securities | 1,535 | (24) | 623 | (11) |
| Total | \$28,656 | \$(496) | \$15,210 | \$(453) |
|  | Less Than | 12 Months | 12 Mont | or More |
| December 31, 2017 | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses |
| Commercial paper, bankers' acceptances, certificates of deposit and other securities . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 3.951 \quad \$ \quad$ (1) $\$ \quad 27 \quad \$$ (1) |  |  |  |  |
| U.S. Treasury securities | 7,187 | (50) | 5,397 | (85) |
| U.S. agency securities | 1,058 | (5) | 1,204 | (18) |
| Mortgage-backed securities | 9,620 | (109) | 9,914 | (222) |
| Asset-backed securities | 1,252 | (8) | 495 | (10) |
| Total | \$23,068 | \$(173) | \$17,037 | \$(336) |

As more fully discussed in Note 2 of the 2017 Annual Information Statement, 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

# FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) <br> (dollars in millions, except as noted) 

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, geo-
graphical 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. Loss severity assumptions are obtained 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:

June 30, 2018

| Assumptions Used | Mortgage-backed Securities | Asset-backed Securities |
| :---: | :---: | :---: |
| Default rate by range | 6.6\%-9.5\% | 6.9\%-11.9\% |
| Prepayment rate by range | 10.5\%-21.8\% | 13.7\%-49.9\% |
| Loss severity by range | 0.0\%-60.3\% | 17.1\%-35.4\% |

December 31, 2017
Assumptions Used

| Default rate by range | 6.5\%-10.0\% | 4.0\%-12.5\% |
| :---: | :---: | :---: |
| Prepayment rate by range | 12.3\%-24.3\% | 15.1\%-57.2\% |
| Loss severity by range | 0.0\%-65.1\% | 23.5\%-34.8\% |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) <br> (unaudited) <br> (dollars in millions, except as noted)

## NOTE 3 - LOANS AND ALLOWANCE FOR LOAN LOSSES

Loans outstanding consisted of the following:

|  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |
| :---: | :---: | :---: |
| Real estate mortgage | \$121,381 | \$119,450 |
| Production and intermediate term* | 52,786 | 55,389 |
| Agribusiness | 44,213 | 42,210 |
| Rural infrastructure | 28,430 | 27,965 |
| Rural residential real estate | 7,185 | 7,261 |
| Other** | 6,718 | 6,502 |
| Total loans | $\xlongequal{\$ 260,713}$ | \$258,777 |

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

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 as of:

|  | $\begin{gathered} \text { June } 30, \\ 2018 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |
| :---: | :---: | :---: |
| Real estate mortgage |  |  |
| Acceptable | 93.0\% | 93.5\% |
| OAEM | 3.4 | 3.2 |
| Substandard/doubtful | 3.6 | 3.3 |
|  | 100.0 | 100.0 |
| Production and intermediate-term |  |  |
| Acceptable . . . . . . . . . . . . . . | 89.4 | 90.0 |
| OAEM | 5.1 | 5.1 |
| Substandard/doubtful | 5.5 | 4.9 |
|  | 100.0 | 100.0 |
| Agribusiness |  |  |
| Acceptable | 95.5 | 95.3 |
| OAEM | 2.2 | 2.1 |
| Substandard/doubtful | 2.3 | 2.6 |
|  | 100.0 | 100.0 |
| Rural infrastructure |  |  |
| Acceptable | 97.6 | 98.5 |
| OAEM | 1.5 | 0.9 |
| Substandard/doubtful | 0.9 | 0.6 |
|  | 100.0 | 100.0 |
| Rural residential real estate |  |  |
| Acceptable | 96.8 | 97.0 |
| OAEM | 1.2 | 1.1 |
| Substandard/doubtful | 2.0 | 1.9 |
|  | 100.0 | 100.0 |
| Other |  |  |
| Acceptable | 99.9 | 99.9 |
| OAEM | 0.0 | 0.0 |
| Substandard/doubtful | 0.1 | 0.1 |
|  | 100.0 | 100.0 |
| Total Loans |  |  |
| Acceptable | 93.5 | 93.9 |
| OAEM | 3.2 | 3.0 |
| Substandard/doubtful | 3.3 | 3.1 |
|  | 100.0 | 100.0 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (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.

|  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |
| :---: | :---: | :---: |
| Nonaccrual loans: |  |  |
| Current as to principal and interest | \$1,236 | \$1,007 |
| Past due | 800 | 653 |
| Total nonaccrual loans | 2,036 | 1,660 |
| Impaired accrual loans: |  |  |
| Restructured accrual loans | 287 | 286 |
| Accrual loans 90 days or more past due | 78 | 21 |
| Total impaired accrual loans | 365 | 307 |
| Total impaired loans | \$2,401 | \$1,967 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (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.

|  | $\begin{aligned} & \text { June 30, } \\ & 2018 \end{aligned}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |
| :---: | :---: | :---: |
| Nonaccrual loans: |  |  |
| Real estate mortgage | \$ 912 | \$ 867 |
| Production and intermediate-term | 546 | 535 |
| Agribusiness | 439 | 169 |
| Rural infrastructure | 85 | 34 |
| Rural residential real estate | 50 | 51 |
| Other | 4 | 4 |
| Total nonaccrual loans | 2,036 | 1,660 |
| Accruing restructured loans: |  |  |
| Real estate mortgage | 175 | 179 |
| Production and intermediate-term | 100 | 96 |
| Agribusiness | 4 | 4 |
| Rural residential real estate | 8 | 7 |
| Total accruing restructured loans | 287 | 286 |
| Accruing loans 90 days or more past due: |  |  |
| Real estate mortgage | 31 | 4 |
| Production and intermediate-term | 40 | 12 |
| Agribusiness | 6 | 4 |
| Rural residential real estate | 1 | 1 |
| Total accruing loans 90 days or more past due | 78 | 21 |
| Total nonperforming loans | 2,401 | 1,967 |
| Other property owned | 77 | 55 |
| Total nonperforming assets | \$2,478 | $\underline{\$ 2,022}$ |

The following table reflects certain related credit quality statistics:

Nonaccrual loans as a percentage of total loans

| June 30, <br> $\mathbf{2 0 1 8}$ | December 31, <br> $\mathbf{2 0 1 7}$ |  |
| :--- | :--- | :--- |
| $0.78 \%$ |  | $0.64 \%$ |
| 0.95 |  | 0.78 |
| 4.32 |  | 3.65 |

Commitments to lend additional funds to debtors whose loans were classified as impaired were $\$ 104$ million at June 30, 2018 and $\$ 64$ million at December 31, 2017.

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

Additional impaired loan information by class is as follows:

|  | June 30, 2018 |  |  | December 31, 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Recorded <br> 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 | \$ 118 | \$ 136 | \$ 29 | \$ 127 | \$ 147 | \$ 34 |
| Production and intermediate-term | 218 | 260 | 72 | 204 | 243 | 67 |
| Agribusiness | 234 | 266 | 89 | 109 | 132 | 32 |
| Rural infrastructure | 84 | 87 | 29 | 34 | 35 | 8 |
| Rural residential real estate | 8 | 10 | 2 | 7 | 9 | 2 |
| Other | 4 | 4 | 1 | 4 | 4 | 1 |
| Total | 666 | 763 | 222 | 485 | 570 | 144 |
| Impaired loans with no related allowance for loan losses: |  |  |  |  |  |  |
| Real estate mortgage | 1,000 | 1,151 |  | 923 | 1,075 |  |
| Production and intermediate-term | 468 | 667 |  | 439 | 649 |  |
| Agribusiness | 215 | 241 |  | 68 | 128 |  |
| Rural infrastructure | 1 | 8 |  |  | 8 |  |
| Rural residential real estate | 51 | 62 |  | 52 | 63 |  |
| Total | 1,735 | 2,129 |  | 1,482 | 1,923 |  |
| Total impaired loans: |  |  |  |  |  |  |
| Real estate mortgage | 1,118 | 1,287 | 29 | 1,050 | 1,222 | 34 |
| Production and intermediate-term | 686 | 927 | 72 | 643 | 892 | 67 |
| Agribusiness | 449 | 507 | 89 | 177 | 260 | 32 |
| Rural infrastructure | 85 | 95 | 29 | 34 | 43 | 8 |
| Rural residential real estate | 59 | 72 | 2 | 59 | 72 | 2 |
| Other | 4 | 4 | 1 | 4 | 4 | 1 |
| Total | \$2,401 | \$2,892 | \$222 | \$1,967 | \$2,493 | \$144 |

[^3]
## FARM CREDIT SYSTEM

## NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

|  | For the Three Months Ended |  |  |  | For the Six Months Ended |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June 30, 2018 |  | June 30, 2017 |  | June 30, 2018 |  | June 30, 2017 |  |
|  | Average Impaired Loans | $\begin{gathered} \text { Interest } \\ \text { Income } \\ \text { Recognized } \end{gathered}$ | Average Impaired Loans | $\begin{gathered} \text { Interest } \\ \text { Income } \\ \text { Recognized } \end{gathered}$ | Average Impaired Loans | $\begin{gathered} \text { Interest } \\ \text { Income } \\ \text { Recognized } \end{gathered}$ | Average Impaired Loans | $\begin{gathered} \text { Interest } \\ \text { Income } \\ \text { Recognized } \end{gathered}$ |
| Impaired loans with a related allowance for loan losses: |  |  |  |  |  |  |  |  |
| Real estate mortgage | \$ 125 | \$ 1 | \$ 157 | \$ 1 | \$ 128 | \$ 1 | \$ 164 | \$ 1 |
| Production and intermediate-term | 214 | 1 | 212 | 1 | 216 | 2 | 212 | 2 |
| Agribusiness | 233 |  | 112 |  | 187 | 2 | 114 |  |
| Rural infrastructure | 92 |  | 2 |  | 66 |  | 1 |  |
| Rural residential real estate | 5 |  | 6 |  | 5 |  | 6 |  |
| Other | 4 |  |  |  | 4 |  |  |  |
| Total | 673 | 2 | 489 | 2 | 606 | 5 | 497 | 3 |
| Impaired loans with no related allowance for loan losses: |  |  |  |  |  |  |  |  |
| Real estate mortgage | 983 | 11 | 950 | 13 | 955 | 22 | 925 | 24 |
| Production and intermediate-term | 433 | 7 | 495 | 8 | 422 | 14 | 463 | 18 |
| Agribusiness | 100 | 1 | 52 | 1 | 82 | 3 | 48 | 3 |
| Rural infrastructure | 1 | 7 |  | 1 |  | 8 | 23 | 3 |
| Rural residential real estate | 53 | 1 | 52 |  | 53 | 2 | 53 | 1 |
| Total | 1,570 | 27 | 1,549 | 23 | 1,512 | 49 | 1,512 | 49 |
| Total impaired loans: |  |  |  |  |  |  |  |  |
| Real estate mortgage | 1,108 | 12 | 1,107 | 14 | 1,083 | 23 | 1,089 | 25 |
| Production and intermediate-term | 647 | 8 | 707 | 9 | 638 | 16 | 675 | 20 |
| Agribusiness | 333 | 1 | 164 | 1 | 269 | 5 | 162 | 3 |
| Rural infrastructure | 93 | 7 | 2 | 1 | 66 | 8 | 24 | 3 |
| Rural residential real estate . | 58 | 1 | 58 |  | 58 | 2 | 59 | 1 |
| Other | 4 |  |  |  | 4 |  |  |  |
| Total | \$2,243 | \$29 | \$2,038 | \$25 | \$2,118 | \$54 | \$2,009 | \$52 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

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

|  | June 30, 2018 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { 30-89 Days } \\ & \text { Past Due } \end{aligned}$ | 90 Days or More Past Due | Total Past Due | $\begin{aligned} & \text { Not Past Due or } \\ & \text { less than 30 Days } \\ & \text { Past Due } \end{aligned}$ | Total Loans and Accrued Interest | Recorded Investment $>90$ Days and Accruing |
| Real estate mortgage | \$368 | \$358 | \$ 726 | \$122,028 | \$122,754 | \$31 |
| Production and intermediate-term | 313 | 321 | 634 | 52,700 | 53,334 | 40 |
| Agribusiness | 20 | 25 | 45 | 44,350 | 44,395 | 6 |
| Rural infrastructure |  | 22 | 22 | 28,518 | 28,540 |  |
| Rural residential real estate | 35 | 15 | 50 | 7,163 | 7,213 | 1 |
| Other |  |  |  | 6,742 | 6,742 |  |
| Total | \$736 | \$741 | \$1,477 | \$261,501 | \$262,978 | \$78 |


|  | December 31, 2017 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30-89 Days Past Due | 90 Days or More Past Due | $\begin{aligned} & \text { Total Past } \\ & \text { Due } \end{aligned}$ | Not Past Due or less than 30 Days Past Due | Total Loans and Accrued Interest | Recorded Investment $>90$ Days and Accruing |
| Real estate mortgage | \$350 | \$251 | \$ 601 | \$120,162 | \$120,763 | \$ 4 |
| Production and intermediate-term | 289 | 259 | 548 | 55,413 | 55,961 | 12 |
| Agribusiness | 21 | 23 | 44 | 42,329 | 42,373 | 4 |
| Rural infrastructure |  |  |  | 28,078 | 28,078 |  |
| Rural residential real estate | 83 | 17 | 100 | 7,189 | 7,289 | 1 |
| Other |  |  |  | 6,522 | 6,522 |  |
| Total | \$743 | \$550 | \$1,293 | \$259,693 | \$260,986 | \$21 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (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 | $\begin{aligned} & \text { Production } \\ & \text { and } \\ & \text { intermediate- } \\ & \text { term } \end{aligned}$ | Agribusiness | Rural infrastructure |  | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allowance for Loan Losses: |  |  |  |  |  |  |  |
| Balance at March 31, 2018 | \$443 | \$480 | \$507 | \$207 | \$19 | \$18 | \$1,674 |
| Charge-offs | (5) | (13) | (4) | (3) | (1) |  | (26) |
| Recoveries | 3 | 4 |  |  | 1 |  | 8 |
| Provision for loan losses (loan loss reversal) | 23 | 21 | (27) | (1) | 1 | 1 | 18 |
| Reclassification (to) from reserve for unfunded commitments* | (2) |  | (8) | 2 |  |  | (8) |
| Balance at June 30, 2018 | \$462 | \$492 | \$468 | \$205 | \$20 | \$19 | \$1,666 |
| Balance at March 31, 2017 | \$398 | \$465 | \$439 | \$204 | \$21 | \$16 | \$1,543 |
| Charge-offs | (7) | (10) | (3) |  |  |  | (20) |
| Recoveries | 2 | 5 | 1 |  |  |  | 8 |
| Provision for loan losses (loan loss reversal) | 50 | 36 | (16) | 9 | 1 |  | 80 |
| Reclassification (to) from reserve for unfunded commitments* | (10) | (2) | (11) |  |  |  | (23) |
| Balance at June 30, 2017 | \$433 | \$494 | \$410 | \$213 | \$22 | \$16 | \$1,588 |
| Balance at December 31, 2017 | $\overline{\$ 450}$ | \$489 | $\overline{\$ 420}$ | \$200 | $\overline{\$ 20}$ | $\overline{\text { \$17 }}$ | $\overline{\$ 1,596}$ |
| Charge-offs | (6) | (25) | (5) | (3) | (1) |  | (40) |
| Recoveries | 5 | 8 | 1 |  | 1 |  | 15 |
| Provision for loan losses | 15 | 19 | 47 | 4 |  | 2 | 87 |
| Reclassification (to) from reserve for unfunded commitments* | (2) | 1 | 5 | 4 |  |  | 8 |
| Balance at June 30, 2018 | \$462 | \$492 | \$468 | \$205 | \$20 | \$19 | \$1,666 |
| Balance at December 31, 2016 | \$399 | \$462 | \$407 | \$201 | \$21 | \$16 | \$1,506 |
| Charge-offs | (9) | (21) | (3) |  | (1) |  | (34) |
| Recoveries | 4 | 8 | 4 | 2 |  |  | 18 |
| Provision for loan losses | 49 | 47 | 6 | 13 | 2 |  | 117 |
| Adjustment due to merger | (1) | (2) |  |  |  |  | (3) |
| Reclassification (to) from reserve for unfunded commitments* | (9) |  | (4) | (3) |  |  | (16) |
| Balance at June 30, 2017 | \$433 | \$494 | \$410 | \$213 | \$22 | \$16 | \$1,588 |
| Ending Balance at June 30, 2018: |  |  |  |  |  |  |  |
| Individually evaluated for impairment | \$ 29 | \$ 72 | \$ 89 | \$ 29 | \$ 2 | \$ 1 | \$ 222 |
| Collectively evaluated for impairment | 433 | 420 | 379 | 176 | 18 | 18 | 1,444 |
| Balance at June 30, 2018 | \$462 | \$492 | \$468 | \$205 | \$20 | \$19 | \$1,666 |
| Ending Balance at December 31, 2017: |  |  |  |  |  |  |  |
| Individually evaluated for impairment | \$ 34 | \$ 67 | \$ 32 | \$ 8 | \$ 2 | \$ 1 | \$ 144 |
| Collectively evaluated for impairment . | 416 | 422 | 388 | 192 | 18 | 16 | 1,452 |
| Balance at December 31, 2017 | \$450 | \$489 | \$420 | \$200 | \$20 | \$17 | \$1,596 |

[^4]
# FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted) 

|  | $\begin{gathered} \text { Real } \\ \text { estate } \\ \text { mortgage } \end{gathered}$ | $\begin{aligned} & \text { Production } \\ & \text { and } \\ & \text { intermediate } \\ & \text { term } \end{aligned}$ | Agribusiness | $\begin{gathered} \text { Rural } \\ \text { infrastructure } \end{gathered}$ | Rural residential real estate | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Recorded Investments in Loans Outstanding: |  |  |  |  |  |  |  |
| Ending balance at June 30, 2018: |  |  |  |  |  |  |  |
| Loans individually evaluated for impairment. | \$ 1,322 | \$ 696 | \$ 452 | \$ 86 | \$1,380 | \$ 88 | 4,024 |
| Loans collectively evaluated for impairment | 121,432 | 52,638 | 43,943 | 28,454 | 5,833 | 6,654 | 258,954 |
| Balance at June 30, 2018 | \$122,754 | \$53,334 | \$44,395 | \$28,540 | \$7,213 | \$6,742 | \$262,978 |
| Ending balance at December 31, 2017: |  |  |  |  |  |  |  |
| Loans individually evaluated for impairment . | \$ 1,262 | \$ 666 | \$ 188 | \$ 35 | \$1,455 | \$ 96 | 3,702 |
| Loans collectively evaluated for impairment | 119,501 | 55,295 | 42,185 | 28,043 | 5,834 | 6,426 | 257,284 |
| Balance at December 31, 2017 | $\stackrel{\text { \$120,763 }}{ }$ | $\stackrel{\text { \$55,961 }}{ }$ | $\stackrel{\text { \$42,373 }}{ }$ | $\stackrel{\text { \$28,078 }}{ }$ | $\stackrel{\text { \$7,289 }}{ }$ | \$6,522 | $\stackrel{\text { \$260,986 }}{ }$ |

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 following periods:

|  | For the Three Months Ended June 30, 2018 |  | For the Three Months Ended June 30, 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Pre-modification Outstanding Recorded Investment* | Post-modification Outstanding Recorded Investment* |  | $\begin{aligned} & \hline \text { Post-modification } \\ & \text { Outstanding } \\ & \text { Recorded } \\ & \text { Investment** } \end{aligned}$ |
| Troubled debt restructurings: |  |  |  |  |
| Real estate mortgage | \$ 18 | \$ 18 | \$17 | \$17 |
| Production and intermediate-term | 25 | 25 | 24 | 24 |
| Agribusiness | 125 | 125 | 2 | 2 |
| Rural residential real estate |  |  | 1 | 1 |
| Total | \$168 | \$168 | \$44 | \$44 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

|  | For the Six Months Ended June 30, 2018 |  | For the Six Months Ended June 30, 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 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 | \$ 26 | \$ 26 | \$27 | \$27 |
| Production and intermediate-term | 33 | 33 | 55 | 55 |
| Agribusiness | 125 | 125 | 4 | 4 |
| Rural residential real estate | 1 | 1 | 1 | 1 |
| Total | \$185 | \$185 | \$87 | \$87 |

* 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 the first six months of 2018 and 2017.

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* |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |
| Real estate mortgage | \$245 | \$256 | \$ 70 | \$ 77 |
| Production and intermediate-term | 143 | 144 | 43 | 48 |
| Agribusiness | 133 | 27 | 129 | 23 |
| Rural residential real estate | 13 | 12 | 5 | 5 |
| Total | \$534 | \$439 | \$247 | \$153 |

[^5]Additional commitments to lend to borrowers whose loans have been modified in troubled debt restructurings were $\$ 26$ million at June 30, 2018 and $\$ 30$ million at December 31, 2017.

Loans held for sale were $\$ 50$ million and $\$ 147$ million at June 30, 2018 and December 31, 2017. Such loans are included in other assets and are carried at the lower of cost or fair value.

# FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted) 

## NOTE 4 - OTHER ASSETS AND OTHER LIABILITIES

Other assets consisted of the following:

|  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | $\underset{2017}{\text { December 31, }}$ |
| :---: | :---: | :---: |
| Equipment held for lease | \$ 748 | \$ 713 |
| Accounts receivable | 482 | 426 |
| Interest rate swaps and other derivatives | 281 | 189 |
| Assets held in non-qualified benefits trusts | 178 | 176 |
| Equity investments in other System institutions | 119 | 121 |
| Other property owned | 77 | 55 |
| Prepaid expenses | 63 | 51 |
| Loans held for sale | 50 | 147 |
| Net deferred tax assets | 12 | 11 |
| Collateral pledged to derivative counterparties | 5 | 14 |
| Other | 198 | 225 |
| Total | \$2,213 | \$2,128 |

Other liabilities consisted of the following:

|  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ | cember 31, $2017$ |
| :---: | :---: | :---: |
| Pension and other postretirement benefit plan liabilities | \$1,303 | \$1,364 |
| Accounts payable | 501 | 635 |
| Patronage and dividends payable | 460 | 1,594 |
| Net deferred tax liabilities | 235 | 260 |
| Interest rate swaps and other derivatives | 185 | 122 |
| Accrued salaries and employee benefits | 178 | 257 |
| Collateral held from derivative counterparties | 167 | 51 |
| Reserve for unfunded commitments | 156 | 164 |
| Liabilities held in non-qualified benefit trusts | 106 | 103 |
| Bank drafts payable | 78 | 163 |
| Other | 296 | 281 |
| Total | \$3,665 | \$4,994 |

## NOTE 5 - 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 condensed 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 of 1971, as amended (Farm Credit Act), all of which benefit Banks and Associations. The Insurance Fund is under the direct control of the Farm Credit System Insurance Corporation (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 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 that threaten the Banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $\$ 10$ billion and terminates on September 30, 2018, unless otherwise renewed. The decision whether to seek funds from the Federal Financing Bank is at 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.

At June 30, 2018, total assets in the Insurance Fund totaled $\$ 4.811$ billion and consisted of cash, investments, related accrued interest receivable and other receivables of $\$ 4.704$ billion and of premiums receivable from System institutions of $\$ 107$ million accrued on the basis of adjusted outstanding insured obligations during the first six months of 2018.

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) <br> (dollars in millions, except as noted)

Investments held by the Insurance Fund must be obligations of the United States or obligations guaranteed as to principal and interest by the United States. During the first six months of 2018, income earned on assets in the Insurance Fund and premiums accrued by the Insurance Corporation totaled $\$ 139$ million, net of administrative expenses.

As further discussed in the 2017 Annual Information Statement, pursuant to the Farm Credit Act, as amended, the Insurance Corporation may distribute excess funds above the secure base amount to the System institutions. At December 31, 2017, the assets in the Insurance Fund exceeded the secure base amount by $\$ 176$ million (after deduction of pro-
spective operating expenses for 2018) and the excess was transferred to the Allocated Insurance Reserves Accounts. In March 2018, the Insurance Corporation's board approved and distributed the $\$ 176$ million of excess funds to the System.

At June 30, 2018, as determined by the Insurance Corporation, the Insurance Fund for which no specific use has been identified or designated was $2.07 \%$ of adjusted insured obligations, as compared with $2.00 \%$ at December 31, 2017. The Insurance Fund with the allocated amount was $2.08 \%$ of the adjusted insured obligations at December 31, 2017. No amounts were allocated as of June 30, 2018.

## NOTE 6 - SYSTEMWIDE DEBT SECURITIES

Aggregate maturities and the weighted average interest rate of Systemwide Debt Securities were as follows at June 30, 2018:

|  | 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 |
| Due in 1 year or less | \$ 81,910 | 1.74\% | \$ 1 | 6.67\% | \$20,363 | 1.79\% | \$102,274 | 1.75\% |
| Due after 1 year through 2 years | 65,529 | 1.82 |  |  |  |  | 65,529 | 1.82 |
| Due after 2 years through 3 years | 24,492 | 1.93 |  |  |  |  | 24,492 | 1.93 |
| Due after 3 years through 4 years | 14,879 | 2.08 | 4 | 7.35 |  |  | 14,883 | 2.08 |
| Due after 4 years through 5 years | 13,115 | 2.24 |  |  |  |  | 13,115 | 2.24 |
| Due after 5 years | 48,504 | 2.84 | 84 | 5.77 |  |  | 48,588 | 2.85 |
| Total | \$248,429 | 2.04 | \$89 | 5.85 | \$20,363 | 1.79 | \$268,881 | 2.02 |

## FARM CREDIT SYSTEM

## NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) <br> (dollars in millions, except as noted)

## NOTE 7 - CAPITAL STRUCTURE

Capital consisted of the following at June 30, 2018:

|  | Combined Banks | Combined Associations | $\begin{aligned} & \text { Combination } \\ & \text { Entries } \end{aligned}$ | System Combined |
| :---: | :---: | :---: | :---: | :---: |
| Preferred stock | \$ 2,499 | \$ 695 |  | \$ 3,194 |
| Capital stock and participation certificates | 6,043 | 589 | \$(4,738) | 1,894 |
| Additional paid-in-capital | 59 | 3,653 |  | 3,712 |
| Restricted capital - Insurance Fund |  |  | 4,811 | 4,811 |
| Accumulated other comprehensive loss | (773) | (165) | $(1,106)$ | $(2,044)$ |
| Retained earnings | 10,953 | 35,052 | (240) | 45,765 |
| Total capital | \$18,781 | \$39,824 | \$(1,273) | \$57,332 |

Preferred stock issued and outstanding reflects the issuance by four Banks and six Associations. Combined System retained earnings reflected net eliminations of $\$ 240$ million representing transactions between the Banks, the Associations and/or the Insurance Fund. Capital stock and participation certificates of the Banks amounting to $\$ 4.7$ billion were owned by the Associations. These amounts have been eliminated in the accompanying condensed combined financial statements. Restricted capital is only available for statutorily authorized purposes and is not available for payment of dividends or patronage distributions.
non-cumulative perpetual preferred stock. Dividends on preferred stock, if declared by Texas' board of directors in its sole discretion, are non-cumulative and are payable quarterly at a fixed annual rate of $6.20 \%$, up to, but excluding June 15,2028 , and then resets to 3-month USD LIBOR plus 3.223\%. The preferred stock is redeemable at par value, in whole or in part, at Texas' option quarterly beginning on June 15, 2028. The preferred stock will be redeemable in whole at any time upon the occurrence of certain defined regulatory events. Proceeds from this preferred stock issuance were for general corporate purposes.

During the second quarter of 2018, the Farm Credit Bank of Texas issued $\$ 100$ million of

Accumulated other comprehensive loss was comprised of the following components:

|  | June 30, 2018 |  |  | December 31, 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Before Tax | $\begin{gathered} \hline \text { Deferred } \\ \text { Tax } \end{gathered}$ | Net of Tax | Before Tax | $\begin{gathered} \hline \text { Deferred } \\ \text { Tax } \end{gathered}$ | Net of Tax |
| Unrealized losses on investments available-for-sale, net | \$ (779) | \$48 | \$ (731) | \$ (302) | \$26 | \$ (276) |
| Unrealized gains on other-than-temporarily impaired investments available-for-sale . | 4 | (1) | 3 | 4 | (1) | 3 |
| Unrealized gains/losses on cash flow hedges, net | 40 | 8 | 48 | (66) | 13 | (53) |
| Pension and other benefit plans | $(1,386)$ | 22 | $(1,364)$ | $(1,449)$ | 36 | $(1,413)$ |
|  | \$(2,121) | \$77 | \$(2,044) | \$(1,813) | \$74 | \$(1,739) |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) <br> (dollars in millions, except as noted)

The following tables present the activity in the accumulated other comprehensive loss, net of tax by component for the three and six months ended June 30, 2018 and 2017:

|  | Unrealized losses on investments available-for-sale, net | Unrealized gains on other-thantemporarily impaired investments available-for sale | Unrealized gains on cash flow hedges, net | Pension and other benefit plans | $\begin{gathered} \text { Accumulated } \\ \text { other } \\ \text { comprehensive } \\ \text { loss } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at March 31, 2018 | \$(596) | \$3 | \$18 | \$(1,394) | \$ $(1,969)$ |
| Other comprehensive income before reclassifications | (97) |  | 29 |  | (68) |
| Amounts reclassified from accumulated other comprehensive loss to income | (38) |  | 1 | 30 | (7) |
| Net current period other comprehensive (loss) income | (135) | 0 | 30 | 30 | (75) |
| Balance at June 30, 2018 | \$(731) | \$3 | \$48 | \$(1,364) | \$(2,044) |


|  | Unrealized losses on investments available-for-sale, net | Unrealized gains on other-thantemporarily impaired investments available-for sale | Unrealized losses on cash flow hedges, net | Pension and other benefit plans | $\begin{aligned} & \text { Accumulated } \\ & \text { other } \\ & \text { comprehensive } \\ & \text { loss } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at March 31, 2017 | \$(89) | \$2 | \$(46) | \$(1,345) | \$ $(1,478)$ |
| Other comprehensive income before reclassifications | 59 | 2 | (31) |  | 30 |
| Amounts reclassified from accumulated other comprehensive loss to income |  |  | 6 | 26 | 32 |
| Net current period other comprehensive income (loss) | 59 | 2 | (25) | 26 | 62 |
| Balance at June 30, 2017 | \$(30) | \$4 | \$(71) | \$(1,319) | \$(1,416) |


|  | Unrealized losses on investments available-for-sale, net | Unrealized gains on other-thantemporarily impaired investments available-for sale | Unrealized gains/ losses on cash flow hedges, net | Pension and other benefit plans | $\begin{aligned} & \text { Accumulated } \\ & \text { other } \\ & \text { comprehensive } \\ & \text { loss } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at December 31, 2017 | \$(276) | \$ 3 | \$ (53) | \$ $(1,413)$ | \$ $(1,739)$ |
| Reclassification of stranded tax effects from accumulated other comprehensive loss to retained earnings . . . . . . | (10) |  | (4) | (13) | (27) |
| Balance at January 1, 2018 | (286) | 3 | (57) | $(1,426)$ | $(1,766)$ |
| Other comprehensive income before reclassifications | (407) | 3 | 104 |  | (300) |
| Amounts reclassified from accumulated other comprehensive loss to income | (38) | (3) | 1 | 62 | 22 |
| Net current period other comprehensive (loss) income | (445) | 0 | 105 | 62 | (278) |
| Balance at June 30, 2018 | \$(731) | \$ 3 | \$ 48 | \$(1,364) | \$(2,044) |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) <br> (dollars in millions, except as noted)

|  | Unrealized losses on investments available-for-sale, net | Unrealized gains on other-thantemporarily impaired investments available-for sale | Unrealized losses on cash flow hedges, net | Pension and other benefit plans | $\begin{aligned} & \text { Accumulated } \\ & \text { other } \\ & \text { comprehensive } \\ & \text { loss } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at December 31, 2016 | \$(117) | \$ 5 | \$(49) | \$(1,373) | \$ $(1,534)$ |
| Other comprehensive income before reclassifications. | 92 | 2 | (31) | 1 | 64 |
| Amounts reclassified from accumulated other comprehensive loss to income . . . . . . . . . . . . . . | (5) | (3) | 9 | 53 | 54 |
| Net current period other comprehensive income (loss) | 87 | (1) | (22) | 54 | 118 |
| Balance at June 30, 2017 | \$ (30) | \$ 4 | \$(71) | \$(1,319) | \$(1,416) |

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


## FARM CREDIT SYSTEM

## NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

Only the Banks are statutorily liable for the payment of principal and interest on 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 other debt securities issued under Section 4.2(d) of the Farm Credit Act (collectively, 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 also generally possess indirect access to certain financial resources of their affiliated Associations through loan-pricing provisions and through Bankinfluenced District operating and financing policies and agreements.

Capital regulations issued by the System's regulator, the Farm Credit Administration, require that the Banks and Associations maintain regulatory minimums for the following capital ratios:

| Ratio | Minimum Requirement | Minimum Requirement with Buffer |
| :---: | :---: | :---: |
| Common Equity Tier 1 |  |  |
| Capital | 4.5\% | 7.0\% |
| Tier 1 Capital | 6.0\% | 8.5\% |
| Total Capital | 8.0\% | 10.5\% |
| Tier 1 Leverage* | 4.0\% | 5.0\% |
| Unallocated Retained |  |  |
| Earnings (URE) and |  |  |
| URE Equivalents |  |  |
| (UREE) Leverage | 1.5\% | N/A |
| Permanent Capital | 7.0\% | N/A |

* Must include the regulatory minimum requirement for the URE and UREE Leverage ratio.

The capital requirements have a three-year phase-in of the capital conservation buffer applied to these capital ratios, beginning January 1, 2017, except for the Tier 1 Leverage ratio that has no phase-in. The buffer amounts shown reflect the full capital conservation buffer.

At June 30, 2018, all System institutions complied with these standards.

## NOTE 8 - 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 generally 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.

The following table summarizes the components of net periodic benefit cost for the three months ended June 30:

|  | Pension <br> Benefits |  | Other <br> Benefits |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2018 | 2017 |
| Service cost | \$ 18 | \$ 18 | \$1 | \$1 |
| Interest cost | 37 | 39 | 3 | 3 |
| Expected return on plan assets |  | (46) |  |  |
| Net amortization and deferral | 31 | 28 | 1 | 1 |
| Net periodic benefit cost | \$37 | \$ 39 | \$5 | \$5 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

The following table summarizes the components of net periodic benefit cost for the six months ended June 30:

|  | Pension <br> Benefits |  | Other <br> Benefits |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2018 | 2017 |
| Service cost | \$ 36 | \$ 35 | \$ 2 | \$2 |
| Interest cost | 74 | 78 | 6 | 6 |
| Expected return on plan assets ............. | (99) | (91) |  |  |
| Net amortization and deferral | 62 | 56 | 2 | 1 |
| Curtailments |  | 1 |  |  |
| Net periodic benefit cost | \$ 73 | \$ 79 | \$10 | \$9 |

The System previously disclosed for the year ended December 31, 2017 that the Banks and Associations expected to contribute $\$ 212$ million to
their pension plans and $\$ 12$ million to their other postretirement benefit plans in 2018. As of June 30, 2018, $\$ 73$ million and $\$ 6$ million of contributions have been made to pension and other postretirement benefit plans. System institutions presently anticipate contributing an additional $\$ 130$ million to fund their pension plans and $\$ 6$ million to fund their other postretirement benefit plans during the remainder of 2018.

## NOTE 9 - 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 in the 2017 Annual Information Statement for additional information.

Assets and liabilities measured at fair value on a recurring basis at June 30, 2018 and December 31, 2017 for each of the fair value hierarchy levels are summarized below:

| June 30, 2018 | Fair Value Measurement Using |  |  | Total Fair Value |
| :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | Level 2 | Level 3 |  |
| Assets: |  |  |  |  |
| Federal funds sold and securities purchased under resale agreements |  | \$ 1,715 |  | \$ 1,715 |
| Commercial paper, bankers' acceptances, certificates |  |  |  |  |
| U.S. Treasury securities |  | 18,559 |  | 18,559 |
| U.S. agency securities |  | 2,817 |  | 2,817 |
| Mortgage-backed securities |  | 27,116 | 290 | 27,406 |
| Asset-backed securities |  | 2,183 | 25 | 2,208 |
| Derivative assets |  | 281 |  | 281 |
| Assets held in non-qualified benefits trusts | \$178 |  |  | 178 |
| Total assets | \$178 | \$59,985 | \$323 | \$60,486 |
| Liabilities: |  |  |  |  |
| Derivative liabilities |  | \$ 185 |  | \$ 185 |
| Collateral liabilities | \$ 7 | 160 |  | 167 |
| Standby letters of credit |  |  | \$ 11 | 11 |
| Total liabilities | \$ 7 | \$ 345 | \$ 11 | \$ 363 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

| December 31, 2017 | Fair Value Measurement Using |  |  | Total Fair Value |
| :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | Level 2 | Level 3 |  |
| Assets: |  |  |  |  |
| Federal funds sold and securities purchased under resale agreements |  | \$ 2,108 |  | \$ 2,108 |
| Commercial paper, bankers' acceptances, certificates of deposit and other securities |  | 6,288 | \$ 12 | 6,300 |
| U.S. Treasury securities |  | 14,686 |  | 14,686 |
| U.S. agency securities |  | 3,637 |  | 3,637 |
| Mortgage-backed securities |  | 27,155 | 574 | 27,729 |
| Asset-backed securities |  | 1,757 | 27 | 1,784 |
| Derivative assets |  | 189 |  | 189 |
| Assets held in non-qualified benefits trusts | \$176 |  |  | 176 |
| Total assets | \$176 | \$55,820 | \$613 | \$56,609 |
| Liabilities: |  |  |  |  |
| Derivative liabilities |  | \$ 122 |  | \$ 122 |
| Collateral liabilities |  | 51 |  | 51 |
| Standby letters of credit |  |  | \$ 13 | 13 |
| Total liabilities | \$ 0 | \$ 173 | \$ 13 | \$ 186 |

The tables below summarize the activity of all Level 3 assets and liabilities measured at fair value on a recurring basis for the three months ended June 30, 2018 and 2017:

|  | Commercial paper, bankers' acceptances certificates of deposit and other securities | Mortgage-backed securities | Asset-backed securities | Standby letters of credit |
| :---: | :---: | :---: | :---: | :---: |
| Balance at March 31, 2018 | \$ 7 | \$ 680 | \$26 | \$12 |
| Total gains or (losses) realized/unrealized: |  |  |  |  |
| Included in earnings |  | 38 |  |  |
| Included in other comprehensive loss |  | (20) | (1) |  |
| Sales |  | (296) |  |  |
| Issuances | 2 |  |  | 2 |
| Settlements | (1) | (20) |  | (3) |
| Transfers from Level 3 into Level 2 |  | (92) |  |  |
| Balance at June 30, 2018 | \$ 8 | \$ 290 | \$25 | \$11 |
|  | Commercial paper, bankers' acceptances certificates of deposit and other securities | Mortgage-backed securities | Asset-backed securities | Standby letters of redit |
| Balance at March 31, 2017 | \$8 | \$652 | \$31 | \$13 |
| Total gains realized/unrealized: |  |  |  |  |
| Purchases |  | 41 |  |  |
| Sales |  | (25) |  |  |
| Issuances | 1 |  |  | 3 |
| Settlements |  | (26) | (1) | (2) |
| Balance at June 30, 2017 | \$9 | \$651 | \$30 | \$14 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

There were no losses included in earnings during either the second quarter of 2018 or 2017 that were attributable to the change in unrealized gains or losses relating to assets or liabilities still held at June 30, 2018 and 2017.

The tables below summarize the activity of all Level 3 assets and liabilities measured at fair value on a recurring basis for the six months ended June 30, 2018 and 2017:

|  | Commercial paper, bankers' acceptances certificates of deposit and other securities | Mortgage-backed securities | Asset-backed securities | Standby letters of credit |
| :---: | :---: | :---: | :---: | :---: |
| Balance at December 31, 2017 | \$12 | \$ 574 | \$27 | \$13 |
| Total gains or (losses) realized/unrealized: |  |  |  |  |
| Included in earnings |  | 38 |  |  |
| Included in other comprehensive loss |  | (19) | (1) |  |
| Purchases |  | 126 |  |  |
| Sales |  | (296) |  |  |
| Issuances | 2 |  |  | 4 |
| Settlements | (6) | (41) | (1) | (6) |
| Transfers from Level 3 into Level 2 |  | (92) |  |  |
| Balance at June 30, 2018 | \$ 8 | \$ 290 | \$25 | \$11 |
|  | Commercial paper, bankers' acceptances certificates of deposit and other securities | Mortgage-backed securities | Asset-backed securities | Standby letters of credit |
| Balance at December 31, 2016 | \$7 | \$687 | \$32 | \$13 |
| Total gains realized/unrealized: |  |  |  |  |
| Purchases |  | 41 |  |  |
| Sales |  | (25) |  |  |
| Issuances | 2 |  |  | 5 |
| Settlements |  | (60) | (2) | (4) |
| Balance at June 30, 2017 | \$9 | \$651 | \$30 | \$14 |

There were no losses included in earnings during the first six months of 2018 and 2017 that were attributable to the change in unrealized gains or losses relating to assets or liabilities still held at June 30, 2018 and 2017.

The transfers between Level 3 and Level 2 during the three and six months ended June 30, 2018 were due to a change in the sources of pricing information. There were no transfers into or out of

Level 1 during the first six months of 2018 and no transfers among Levels 1, 2 or 3 during the first six months of 2017.

Level 3 assets measured at fair value on a non-recurring basis included loans of $\$ 469$ million and other property owned of $\$ 83$ million at June 30, 2018, as compared to $\$ 401$ million and $\$ 61$ million at December 31, 2017.

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

Financial assets and financial liabilities measured at carrying amounts and not measured at fair value on the Condensed Combined Statement of Condition for each of the fair value hierarchy levels are summarized as follows:

|  | June 30, 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Carrying <br> Amount | Fair Value Measurement Using |  |  | Total Fair Value |
|  |  | Level 1 | Level 2 | Level 3 |  |
| Assets: |  |  |  |  |  |
| Cash | \$ 1,172 | \$1,172 |  |  | \$ 1,172 |
| Mission-related and other investments held-to-maturity | 2,875 |  | \$601 | \$ 2,187 | 2,788 |
| Net loans | 259,047 |  | 10 | 262,785 | 262,795 |
| Total assets | \$263,094 | \$1,172 | \$611 | \$264,972 | \$266,755 |
| Liabilities: |  |  |  |  |  |
| Systemwide Debt Securities | \$268,881 |  |  | \$266,497 | \$266,497 |
| Other bonds | 1,587 |  |  | 1,587 | 1,587 |
| Other interest bearing liabilities | 1,467 |  | \$ 7 | 1,465 | 1,472 |
| Total liabilities | \$271,935 | \$ 0 | \$ 7 | \$269,549 | \$269,556 |
| Other financial instruments: |  |  |  |  |  |
| Commitments to extend credit |  |  |  | \$ 192 | \$ 192 |


|  | December 31, 2017 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

# FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) <br> (dollars in millions, except as noted) 

## 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 direc-
tionally 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.

## Quantitative Information about Recurring and Nonrecurring Level 3 Fair Value Measurements



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.

## FARM CREDIT SYSTEM

# NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted) 

# 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 | $\mathrm{Par} /$ 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, caps and floors | Discounted cash flow | Annualized volatility Counterparty credit risk Company's own credit risk |

## Valuation Techniques

As more fully discussed in Note 2 - Summary of Significant Accounting Policies, in the 2017 Annual Information Statement, 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 measured at fair value:

## 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 invest-
ments 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 primarily residential mortgages, while the underlying loans for asset-backed securities are primarily auto loans, small business loans, equipment loans or credit card receivables.

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.

# FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted) 

The models used to determine the fair value of derivative assets and liabilities use an income approach based on observable market inputs, including the LIBOR and Overnight Index Swap curves 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 market-place.

## 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

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 or are cleared through a futures commission merchant, with a clearinghouse (i.e., a central counterparty). The market value of collateral liabilities is its face value plus accrued interest that approximates fair value.

## NOTE 10 - 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 goal is 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 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 gains and losses on the derivative instruments that are linked to these hedged assets and liabilities. The strategic use of derivatives is considered 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, derivative transactions, particularly interest rate swaps, are entered into to lower funding

## FARM CREDIT SYSTEM

## NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

costs, diversify sources of funding, alter interest rate exposures arising from mismatches between assets and liabilities, or better manage liquidity. Interest rate swaps allow us to issue medium-term debt at fixed rates, which are then swapped to floating rates that are lower than those available if floating rate debt was issued directly. These interest rate swaps also help to manage liquidity. Under interest rate swap arrangements, the parties agree 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.

The Banks may enter into derivatives with their customers, including Associations, as a service to enable customers 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.

A substantial amount of the System's assets are interest-earning assets (principally loans and invest-
ments) 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 that pay floating rate and receive fixed rate (receive-fixed swaps) are used to reduce the impact of market fluctuations on net interest income. Because the size of swap positions needed to reduce the impact of market fluctuations varies over time, swaps that receive floating rate and pay fixed rate (pay-fixed swaps) are used to reduce net positions.

Interest rate options may be purchased in order to reduce the impact of rising interest rates on floating-rate debt (interest rate caps) or to reduce the impact of falling interest rates on floating-rate assets (interest rate floors). The primary types of derivative instruments used and the amount of activity (notional amount of derivatives) during the six months ended June 30, 2018 and 2017 are summarized in the following tables:

|  | Receive-Fixed Swaps | Pay-Fixed and Amortizing PayFixed Swaps | Floating-forFloating and Amortizing Floating-forFloating | Interest Rate Caps and Floors | Other Derivatives | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at December 31, 2017 | \$14,845 | \$8,947 | \$2,700 | \$5,080 | \$ 6,955 | \$38,527 |
| Additions | 2,144 | 904 |  | 55 | 4,076 | 7,179 |
| Maturities/amortization | $(3,838)$ | (355) | (200) | (75) | $(3,459)$ | $(7,927)$ |
| Terminations |  | (180) |  |  | (179) | (359) |
| Balance at June 30, 2018 | \$13,151 | \$9,316 | \$2,500 | \$5,060 | \$ 7,393 | \$37,420 |
|  | Receive-Fixed Swaps | Pay-Fixed and Amortizing PayFixed Swaps | Floating-forFloating and Amortizing Floating-forFloating | Interest Rate Caps and Floors | Other Derivatives | Total |
| Balance at December 31, 2016 | \$14,915 | \$7,633 | \$3,100 | \$3,049 | \$ 5,858 | \$34,555 |
| Additions | 2,083 | 952 |  | 700 | 2,432 | 6,167 |
| Maturities/amortization | $(1,783)$ | (236) | (100) | (534) | $(1,874)$ | $(4,527)$ |
| Terminations | (318) | (52) |  | (600) | (52) | $(1,022)$ |
| Balance at June 30, 2017 | \$14,897 | \$8,297 | \$3,000 | \$2,615 | \$ 6,364 | \$35,173 |

## FARM CREDIT SYSTEM

## NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

Use of derivatives creates exposure to credit and market risk. If a counterparty fails to fulfill its performance obligations under a derivative contract, 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 us, thus creating a repayment (credit) risk. When the fair value of the derivative contract is negative, we owe the counterparty and, therefore, assume no repayment risk.

To minimize the risk of credit losses, credit standing and levels of exposure to individual counterparties are monitored and derivative transactions are almost exclusively entered into with non-customer counterparties that have an investment grade or better credit rating from a major rating agency. Nonperformance by any of these counterparties is not anticipated. We typically enter into master agreements that contain netting provisions. These provisions 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 the derivative contracts are supported by collateral arrangements with counterparties. The System's exposure to counterparties, net of collateral of $\$ 167$ million at June 30, 2018 and $\$ 51$ million at December 31, 2017, was $\$ 36$ million and $\$ 18$ million.

Derivative transactions may also be cleared through a futures commission merchant (FCM) with a clearinghouse (i.e., 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 require-
ments 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.

As of January 2018, two of the largest CCPs amended their rule books so as to legally characterize variation margin in respect of cleared swap transactions as a settlement payment rather than the posting of collateral. This change resulted in the reclassification of collateral assets for amounts formerly considered variation margin to an offset of the fair value of interest rate swaps and other financial instruments related to our net position for cleared derivative transactions in the accompanying Condensed Combined Statement of Condition as of June 30, 2018 and December 31, 2017. In addition, price alignment interest formerly paid with respect to the collateral will no longer be paid, though an economically equivalent price adjustment amount will be included in the trading revenue associated with the centrally cleared derivatives. This change had no impact on the System's results of operations or cash flows.

Derivative activities are monitored by an AssetLiability Management Committee (ALCO) at the various System institutions as part of its oversight of asset/liability and treasury functions. Each ALCO is responsible for approving hedging strategies that are developed within parameters established by the board of directors through analysis of data derived from financial simulation models and other internal and industry sources. The resulting hedging strategies are then incorporated into the overall interest rate riskmanagement 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

# FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) <br> (dollars in millions, except as noted) 

interest rate swaps recognized in interest income for the first six months of 2018 was $\$ 70$ million, as compared with gains on the Systemwide Debt Securities of $\$ 70$ 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 earn-
ings. 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 Condensed Combined Statement of Income.

## Fair Values of Derivative Instruments

The following table represents the fair value of derivative instruments:


The following table sets forth the effect of derivative instruments in the Condensed Combined Statement of Income:

|  |  | For the Six Months Ended |  |
| :---: | :---: | :---: | :---: |
| Derivatives - Fair Value Hedging Relationships | Location of Gain | June 30, 2018 | June 30, 2017 |
| Receive-fixed swaps | Interest expense | \$0 | \$2 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

The following table sets forth the effect of derivative instruments in cash flow hedging relationships:

| Derivatives - Cash Flow Hedging Relationships | Amount of Gain or (Loss) Recognized in OCI on Derivatives (Effective Portion) |  | Location of Loss Reclassification from AOCI into Income <br> (Effective Portion) | Amount of Loss Reclassified from AOCI into Income (Effective Portion) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { June 30, } \\ & 2018 \end{aligned}$ | $\begin{aligned} & \text { June 30, } \\ & 2017 \end{aligned}$ |  | $\begin{aligned} & \text { June 30, } \\ & 2018 \end{aligned}$ | $\begin{aligned} & \text { June 30, } \\ & 2017 \end{aligned}$ |
| Pay-fixed and amortizing pay-fixed swaps | \$ 87 | \$(11) | Interest expense |  | \$(1) |
| Floating-for-floating and amortizing floating-for-floating swaps ..... | 2 | (5) |  |  |  |
| Interest rate caps and floors | 12 | (6) | Interest expense | \$(4) | (3) |
| Foreign exchange contracts | 3 | (9) | Interest income | 4 | (5) |
| Other derivative products |  |  | Interest income | (1) |  |
| Total | \$104 | \$(31) |  | \$(1) | \$(9) |

The System had no significant gains or losses recognized in income on cash flow hedges (ineffective portion and amount excluded from effectiveness testing) for the six months ended June 30, 2018 and 2017.

The following table sets forth the amount of gains or losses recognized in the Condensed Combined Statement of Income related to derivatives not designated as hedging instruments:

| Derivatives Not Designated as Hedging Instruments | Location of Gain or (Loss) | For the Six Months Ended |  |
| :---: | :---: | :---: | :---: |
|  |  | June 30, 2018 | June 30, 2017 |
| Pay-fixed and amortizing pay-fixed swaps | Noninterest income | \$ 2 |  |
| Derivatives entered into on behalf of customers | Noninterest income | (12) |  |
| Other derivative products | Noninterest income | 2 | \$(1) |
| Total |  | \$ (8) | \$(1) |

## NOTE 11 - ASSET/LIABILITY OFFSETTING

The following tables represent the offsetting of financial assets and liabilities:

| June 30, 2018 | Gross <br> Amounts Recognized | Gross Amounts Offset in the Condensed Combined Statement of Condition | Net Amounts Presented in the Condensed Combined Statement of Condition | Gross Amounts Not Offset in the Condensed Combined Statement of Condition |  |  | Net Amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Securities <br> Received/ Pledged | Cash Collateral Received/Pledged | Cleared Derivative Initial Margin Pledged |  |
| Assets: |  |  |  |  |  |  |  |
| Interest rate swaps and other derivatives . | \$ 318 | \$(37) | \$ 281 |  | \$(167) | \$ 21 | \$ 135 |
| Federal Funds sold and securities purchased under resale agreements . . . . . . | 1,715 |  | 1,715 | \$(100) |  |  | 1,615 |
| Liabilities: |  |  |  |  |  |  |  |
| Interest rate swaps and other derivatives . | 222 | (37) | 185 |  | (5) | (37) | 143 |

# FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted) 

| December 31, 2017 | Gross Amounts Recognized | Gross Amounts Offset in the Condensed Combined Statement of Condition | Net Amounts Presented in the Condensed Combined Statement of Condition | Gross Amounts Not Offset in the Condensed Combined Statement of Condition |  |  | Net Amount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Cleared Derivative |  |
|  |  |  |  | Securities |  | Initial |  |
|  |  |  |  | Received/ | Cash Collateral | Margin |  |
|  |  |  |  | Pledged | $\underline{\text { Received/Pledged }}$ | Pledged |  |
| Assets: |  |  |  |  |  |  |  |
| Interest rate swaps and |  |  |  |  |  |  |  |
| Federal Funds sold and securities purchased under resale |  |  |  |  |  |  |  |
| agreements . . | 2,108 |  | 2,108 | \$(150) |  |  | 1,958 |
| Liabilities: |  |  |  |  |  |  |  |
| Interest rate swaps and other derivatives . | 151 | (29) | 122 |  | (14) | (32) | 76 |

## NOTE 12 - COMMITMENTS AND CONTINGENCIES

In the normal course of business, the Banks and Associations have various commitments and contingent liabilities, such as certain letters of credit and commitments to extend credit, which are not reflected in the accompanying condensed combined financial statements. No material losses are anticipated as a result of these transactions.

A summary of the contractual amount of creditrelated instruments is as follows:

|  | June 30, <br> $\mathbf{2 0 1 8}$ |
| :--- | ---: |
| Commitments to extend credit . . . . . . . . . . | $\$ 79,979$ |
| Standby letters of credit . . . . . . . . . | 1,844 |
| Commercial and other letters of credit . . . | 179 |

On at least a quarterly basis, System institutions assess their liabilities and contingencies in connection with outstanding legal proceedings utilizing the latest information available. For matters where it is probable the institution will incur a loss and the amount can be reasonably estimated, the institution would establish an accrual for the loss. Once established, the accrual would be adjusted as appropriate to reflect any relevant developments. For matters where a loss is not probable or the amount of loss cannot be estimated, no accrual would be established.

In June 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 in April 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 in September 2016 and discovery concluded in January 2018. CoBank and Plaintiffs filed their respective motions for summary judgment in March 2018. There is presently no indication of when the court will rule on the motions for summary judgment. CoBank intends to vigorously defend against these allegations. The likelihood of any outcome of this proceeding cannot be determined at this time.

In November 2016, an alleged class action complaint was filed in New York state court against AgriBank by a purported beneficial owner of some of AgriBank's 9.125\% subordinated notes due in 2019 ("Subordinated Notes"). The plaintiff 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 Subordi-

## FARM CREDIT SYSTEM

## NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

nated Notes. AgriBank removed the lawsuit to federal court in the Southern District of New York. Plaintiff has requested damages in an amount to be determined at trial, reasonable attorneys' fees, and other relief. In October 2017, AgriBank filed an answer to the lawsuit. The lawsuit is in the early pleadings and discovery 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 June 30, 2018, 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 or threatened legal actions will not have a material adverse impact on the System's combined results of operations or financial condition.

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) <br> (dollars in millions, except as noted)

## NOTE 13 - 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

June 30, 2018

|  | AgFirst Farm Credit Bank | $\underset{\text { FCB }}{\text { AgiBank, }}$ | Farm Credit Bank of Texas | $\begin{gathered} \text { CoBank, } \\ \text { ACB } \end{gathered}$ | Combination Entries | Combined Banks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |  |  |
| Cash | \$ 403 | \$ 404 | \$ 25 | \$ 207 |  | \$ 1,039 |
| Federal funds sold and securities purchased under resale agreements | 100 | 600 | 165 | 850 |  | 1,715 |
| Investments (Note 2) | 7,920 | 14,694 | 5,275 | 30,783 |  | 58,672 |
| Loans |  |  |  |  |  |  |
| To Associations(1) | 15,910 | 81,149 | 11,833 | 47,636 |  | 156,528 |
| To others(2) | 7,398 | 7,949 | 5,908 | 51,100 | \$(389) | 71,966 |
| Less: allowance for loan losses | (16) | (25) | (12) | (622) |  | (675) |
| Net loans | 23,292 | 89,073 | 17,729 | 98,114 | (389) | 227,819 |
| Accrued interest receivable | 82 | 577 | 68 | 415 |  | 1,142 |
| Other assets | 223 | 232 | 253 | 832 | 149 | 1,689 |
| Total assets | \$32,020 | \$105,580 | \$23,515 | \$131,201 | \$(240) | \$292,076 |
| Liabilities and Capital |  |  |  |  |  |  |
| Systemwide Debt Securities (Note 6): |  |  |  |  |  |  |
| Due within one year | \$11,177 | \$ 31,652 | \$ 8,035 | \$ 51,411 | \$ (1) | \$102,274 |
| Due after one year | 18,358 | 66,610 | 13,533 | 68,107 | (1) | 166,607 |
| Total Systemwide Debt Securities | 29,535 | 98,262 | 21,568 | 119,518 | (2) | 268,881 |
| Accrued interest payable | 96 | 345 | 76 | 378 |  | 895 |
| Other liabilities | 50 | 1,190 | 89 | 2,205 | (15) | 3,519 |
| Total liabilities | 29,681 | 99,797 | 21,733 | 122,101 | (17) | 273,295 |
| Capital |  |  |  |  |  |  |
| Preferred stock | 49 | 250 | 700 | 1,500 |  | 2,499 |
| Capital stock and participation certificates | 310 | 2,352 | 338 | 3,273 | (230) | 6,043 |
| Additional paid-in-capital | 59 |  |  |  |  | 59 |
| Accumulated other comprehensive loss | (77) | (39) | (87) | (555) | (15) | (773) |
| Retained earnings | 1,998 | 3,220 | 831 | 4,882 | 22 | 10,953 |
| Total capital | 2,339 | 5,783 | 1,782 | 9,100 | (223) | 18,781 |
| Total liabilities and capital | \$32,020 | \$105,580 | \$23,515 | \$131,201 | \$(240) | \$292,076 |

## FARM CREDIT SYSTEM

## NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

Combining Bank-Only
Statement of Condition
December 31, 2017

|  | AgFirst Farm Credit Bank | $\underset{\text { FCB }}{\text { AgriBank, }}$ | Farm Credit Bank of Texas | $\begin{gathered} \text { CoBank, } \\ \text { ACB } \end{gathered}$ | Combination Entries | Combined Banks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |  |  |
| Cash | \$ 563 | \$ 470 | \$ 56 | \$ 1,314 |  | \$ 2,403 |
| Federal funds sold and securitie under resale agreements . . . . | 150 | 676 | 247 | 1,035 |  | 2,108 |
| Investments (Note 2) | 8,122 | 14,386 | 5,146 | 26,870 |  | 54,524 |
| Loans |  |  |  |  |  |  |
| To Associations(1) | 15,839 | 79,961 | 11,544 | 47,861 |  | 155,205 |
| To others(2) | 7,520 | 8,414 | 5,541 | 51,405 | \$(411) | 72,469 |
| Less: allowance for loan losses | (14) | (26) | (8) | (577) |  | (625) |
| Net loans | 23,345 | 88,349 | 17,077 | 98,689 | (411) | 227,049 |
| Accrued interest receivable | 75 | 499 | 58 | 382 |  | 1,014 |
| Other assets | 232 | 165 | 253 | 921 | 141 | 1,712 |
| Total assets | \$32,487 | \$104,545 | \$22,837 | \$129,211 | \$(270) | \$288,810 |

## Liabilities and Capital

| Systemwide Debt Securities (Note 6): |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Due within one year | \$11,970 | \$ 31,665 | \$ 7,673 | \$ 51,575 | \$ (1) | \$102,882 |
| Due after one year | 17,793 | 65,629 | 13,278 | 65,588 | (1) | 162,287 |
| Total Systemwide Debt Securities | 29,763 | 97,294 | 20,951 | 117,163 | (2) | 265,169 |
| Accrued interest payable | 81 | 289 | 64 | 310 |  | 744 |
| Other liabilities | 400 | 1,320 | 154 | 2,678 | (53) | 4,499 |
| Total liabilities | 30,244 | 98,903 | 21,169 | 120,151 | (55) | 270,412 |
| Capital |  |  |  |  |  |  |
| Preferred stock | 49 | 250 | 600 | 1,500 |  | 2,399 |
| Capital stock and participation certificates | 314 | 2,345 | 340 | 3,240 | (221) | 6,018 |
| Additional paid-in-capital | 59 |  |  |  |  | 59 |
| Accumulated other comprehensive loss | (25) | (86) | (52) | (232) | (15) | (410) |
| Retained earnings | 1,846 | 3,133 | 780 | 4,552 | 21 | 10,332 |
| Total capital | 2,243 | 5,642 | 1,668 | 9,060 | (215) | 18,398 |
| Total liabilities and capital | \$32,487 | \$104,545 | \$22,837 | \$129,211 | \$(270) | \$288,810 |

[^6]
## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

## Combining Bank-Only Statement of Comprehensive Income

For the Six Months Ended June 30,

|  | AgFirst Farm Credit Bank | $\underset{\text { FCB }}{\text { AgriBank, }}$ | Farm Credit Bank of Texas | $\begin{gathered} \text { CoBank, } \\ \text { ACB } \end{gathered}$ | Combination Entries | Combined Banks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 |  |  |  |  |  |  |
| Interest income | \$ 476 | \$1,248 | \$ 319 | \$ 1,943 | \$ (4) | \$ 3,982 |
| Interest expense | (272) | (950) | (198) | $(1,199)$ | 16 | $(2,603)$ |
| Net interest income | 204 | 298 | 121 | 744 | 12 | 1,379 |
| Provision for loan losses | (1) | (1) | (5) | (40) |  | (47) |
| Noninterest income | 17 | 56 | 18 | 175 | (35) | 231 |
| Noninterest expense | (67) | (62) | (51) | (172) | (17) | (369) |
| Provision for income taxes |  |  |  | (61) |  | (61) |
| Net income | 153 | 291 | 83 | 646 | (40) | 1,133 |
| Other comprehensive (loss) income | (52) | 47 | (35) | (296) |  | (336) |
| Comprehensive income | \$ 101 | \$ 338 | \$ 48 | \$ 350 | \$(40) | \$ 797 |
| 2017 |  |  |  |  |  |  |
| Interest income | \$ 412 | \$ 990 | \$ 261 | \$ 1,509 | \$ 1 | \$ 3,173 |
| Interest expense | (189) | (697) | (138) | (806) | 17 | $(1,813)$ |
| Net interest income | 223 | 293 | 123 | 703 | 18 | 1,360 |
| (Provision for loan losses) loan loss reversal | (1) | (3) | 1 | (15) |  | (18) |
| Noninterest income | 7 | 39 | 14 | 104 | (39) | 125 |
| Noninterest expense | (65) | (61) | (46) | (186) | (15) | (373) |
| Provision for income taxes |  |  |  | (83) |  | (83) |
| Net income | 164 | 268 | 92 | 523 | (36) | 1,011 |
| Other comprehensive income (loss) | 1 | 8 | 5 | 52 | (1) | 65 |
| Comprehensive income | \$ 165 | \$ 276 | \$ 97 | \$ 575 | \$(37) | \$ 1,076 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) <br> (dollars in millions, except as noted)

Combining Bank-Only
Statement of Changes in Capital

|  | AgFirst Farm Credit | $\underset{\text { FCB }}{\text { AgriBank, }}$ |  | $\begin{gathered} \text { CoBank, } \\ \text { ACB } \end{gathered}$ | Combination Entries | Combined Banks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at December 31, 2016 | \$2,225 | \$5,486 | \$1,622 | \$8,574 | \$(183) | \$17,724 |
| Comprehensive income | 165 | 276 | 97 | 575 | (37) | 1,076 |
| Preferred stock dividends |  | (9) | (25) | (42) |  | (76) |
| Capital stock and participation certificates issued | 1 | 83 |  |  |  | 84 |
| Capital stock, participation certificates, and retained earnings retired |  |  |  | (26) |  | (26) |
| Patronage |  | (172) | (3) | (248) | 26 | (397) |
| Balance at June 30, 2017 | \$2,391 | \$5,664 | \$1,691 | \$8,833 | \$(194) | \$18,385 |
| Balance at December 31, 2017 | \$2,243 | \$5,642 | \$1,668 | \$9,060 | \$(215) | \$18,398 |
| Comprehensive income | 101 | 338 | 48 | 350 | (40) | 797 |
| Preferred stock issued, net |  |  | 99 |  |  | 99 |
| Preferred stock dividends | (1) | (8) | (27) | (43) |  | (79) |
| Capital stock and participation certificates issued |  | 25 |  |  |  | 25 |
| Capital stock, participation certificates, and retained earnings retired | (4) | (18) | (2) | (32) |  | (56) |
| Patronage |  | (196) | (4) | (235) | 32 | (403) |
| Balance at June 30, 2018 | \$2,339 | \$5,783 | \$1,782 | \$9,100 | \$(223) | \$18,781 |

## FARM CREDIT SYSTEM <br> NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

Certain Bank-only ratios and other information is as follows:

For the six months ended:

|  | June 30, 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Return on average assets |  | 0.96\% | 0.56\% | 0.72\% | 0.97\% |
| Return on average capital |  | 13.31\% | 10.15\% | 9.90\% | 14.38\% |
| June 30, 2017 |  |  |  |  |  |
| Return on average assets |  | 1.05\% | 0.53\% | 0.85\% | 0.82\% |
| Return on average capital |  | 14.14\% | 9.60\% | 11.06\% | 11.95\% |

## For the period ended:

June 30, 2018

| Nonperforming assets as a percentage of loans and other property owned | 0.19\% | 0.07\% | 0.13\% | 0.41\% |
| :---: | :---: | :---: | :---: | :---: |
| Allowance for loan losses as a percentage of loans | 0.07\% | 0.03\% | 0.07\% | 0.63\% |
| Capital as a percentage of total assets | 7.30\% | 5.48\% | 7.58\% | 6.94\% |
| Tier 1 Leverage ratio | 7.27\% | 5.55\% | 7.09\% | 7.21\% |
| Total Capital ratio | 21.1\% | 19.0\% | 16.0\% | 15.0\% |
| Permanent capital ratio | 21.0\% | 19.0\% | 15.9\% | 14.1\% |
| Liquidity in days | 234 | 145 | 229 | 180 |
| Average liquidity in days during 2018 | 224 | 152 | 228 | 177 |

## December 31, 2017

Nonperforming assets as a percentage of loans and
other property owned . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $0.16 \% \quad 0.07 \% \quad 0.04 \% \quad 0.25 \%$
Allowance for loan losses as a percentage of loans $\ldots \ldots \ldots$

| Capital as a percentage | 6.90\% | 5.40\% | 7.30\% |  |
| :---: | :---: | :---: | :---: | :---: |
| Tier 1 Leverage ratio | 7.67\% | 5.65\% | 7.33\% |  |

Total Capital ratio . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $22.3 \%$. $19.1 \%$ 16.7\%


Average liquidity in days during 2017 . . . . . . . . . . . . . . . . . . . . . . . . . . . 204182187207182

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. 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 7.

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

## FARM CREDIT SYSTEM NOTES TO CONDENSED COMBINED FINANCIAL STATEMENTS - (continued) (unaudited) (dollars in millions, except as noted)

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 14 - SUBSEQUENT EVENTS

On August 9, 2018, CoBank, ACB announced a one-time special all-cash patronage distribution of approximately $\$ 96$ million to be made in September 2018. The distribution is part of a broader plan to share the benefits of federal tax reform legislation with eligible customer-owners, along with earnings from significant non-recurring items in 2018.

The Banks and Associations have evaluated subsequent events through August 9, 2018, which is the date the financial statements were issued.

## FARM CREDIT SYSTEM

## SUPPLEMENTAL COMBINING INFORMATION (unaudited)

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) <br> June 30, 2018 <br> (in millions)

|  | Combined Banks | Combined Associations | Eliminations | Combined without Insurance Fund | Insurance Fund | System Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and investments | \$ 61,426 | \$ 2,648 |  | \$ 64,074 |  | \$ 64,074 |
| Loans | 228,494 | 188,755 | \$(156,536) | 260,713 |  | 260,713 |
| Less: allowance for loan losses | (675) | (991) |  | $(1,666)$ |  | $(1,666)$ |
| Net loans | 227,819 | 187,764 | $(156,536)$ | 259,047 |  | 259,047 |
| Other assets | 2,831 | 9,158 | $(6,094)$ | 5,895 |  | 5,895 |
| Restricted assets |  |  |  |  | \$4,811 | 4,811 |
| Total assets | \$292,076 | \$199,570 | \$(162,630) | \$329,016 | \$4,811 | \$333,827 |
| Systemwide Debt Securities | \$268,881 |  |  | \$268,881 |  | \$268,881 |
| Other liabilities | 4,414 | \$159,746 | \$(156,546) | 7,614 |  | 7,614 |
| Total liabilities | 273,295 | 159,746 | $(156,546)$ | 276,495 |  | 276,495 |
| Capital |  |  |  |  |  |  |
| Preferred stock | 2,499 | 695 |  | 3,194 |  | 3,194 |
| Capital stock and participation certificates | 6,043 | 589 | $(4,738)$ | 1,894 |  | 1,894 |
| Additional paid-in-capital | 59 | 3,653 |  | 3,712 |  | 3,712 |
| Restricted capital |  |  |  |  | \$4,811 | 4,811 |
| Accumulated other comprehensive loss | (773) | (165) | $(1,106)$ | $(2,044)$ |  | $(2,044)$ |
| Retained earnings | 10,953 | 35,052 | (240) | 45,765 |  | 45,765 |
| Total capital | 18,781 | 39,824 | $(6,084)$ | 52,521 | 4,811 | 57,332 |
| Total liabilities and capital | \$292,076 | \$199,570 | $\underline{\text { \$(162,630) }}$ | $\underline{\$ 329,016}$ | $\underline{\underline{\$ 4,811}}$ | $\underline{\$ 333,827}$ |

## FARM CREDIT SYSTEM

# SUPPLEMENTAL COMBINING INFORMATION - (continued) <br> (unaudited) 

## COMBINING STATEMENT OF CONDITION - (Condensed) <br> December 31, 2017 <br> (in millions)

|  | $\begin{aligned} & \text { Combined } \\ & \text { Banks } \end{aligned}$ | Combined Associations | Eliminations | Combined without Insurance Fund | Insurance Fund | System Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and investments | \$ 59,035 | \$ 2,749 |  | \$ 61,784 |  | \$ 61,784 |
| Loans | 227,674 | 186,314 | \$(155,211) | 258,777 |  | 258,777 |
| Less: allowance for loan losses | (625) | (971) |  | $(1,596)$ |  | $(1,596)$ |
| Net loans | 227,049 | 185,343 | $(155,211)$ | 257,181 |  | 257,181 |
| Other assets | 2,726 | 9,449 | $(6,470)$ | 5,705 |  | 5,705 |
| Restricted assets |  |  |  |  | \$4,848 | 4,848 |
| Total assets | \$288,810 | \$197,541 | \$(161,681) | \$324,670 | \$4,848 | \$329,518 |
| Systemwide Debt Securities | \$265,169 |  |  | \$265,169 |  | \$265,169 |
| Other liabilities | 5,243 | \$159,373 | \$(155,649) | 8,967 |  | 8,967 |
| Total liabilities | 270,412 | 159,373 | $(155,649)$ | 274,136 |  | 274,136 |
| Capital |  |  |  |  |  |  |
| Preferred stock | 2,399 | 653 |  | 3,052 |  | 3,052 |
| Capital stock and participation certificates | 6,018 | 588 | $(4,727)$ | 1,879 |  | 1,879 |
| Additional paid-in-capital | 59 | 3,653 |  | 3,712 |  | 3,712 |
| Restricted capital |  |  |  |  | \$4,848 | 4,848 |
| Accumulated other comprehensive loss | (410) | (167) | $(1,162)$ | $(1,739)$ |  | $(1,739)$ |
| Retained earnings | 10,332 | 33,441 | (143) | 43,630 |  | 43,630 |
| Total capital | 18,398 | 38,168 | $(6,032)$ | 50,534 | 4,848 | 55,382 |
| Total liabilities and capital | \$288,810 | \$197,541 | \$(161,681) | \$324,670 | \$4,848 | \$329,518 |

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 necessary 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 timely pay the principal or interest on the insured debt obligation.

## FARM CREDIT SYSTEM

## SUPPLEMENTAL COMBINING INFORMATION - (continued) (unaudited)

## COMBINING STATEMENT OF COMPREHENSIVE INCOME - (Condensed) For the Six Months Ended June 30, 2018 (in millions)

|  | Combined Banks | Combined Associations | Eliminations | Combined without Insurance Fund | Insurance Fund | Combination Entries | System Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net interest income | \$1,379 | \$ 2,553 |  | \$ 3,932 |  |  | \$ 3,932 |
| Provision for loan losses | (47) | (40) |  | (87) |  |  | (87) |
| Noninterest income | 231 | 788 | \$(523) | 496 | \$141 | \$(283)(a)(b) | ) 354 |
| Noninterest expense | (369) | $(1,300)$ | 92 | $(1,577)$ | (2) | 107 (a) | $(1,472)$ |
| Provision for income taxes | (61) | (17) |  | (78) |  |  | (78) |
| Net income | 1,133 | 1,984 | (431) | 2,686 | 139 | (176) | 2,649 |
| Other comprehensive (loss) income | (336) | 2 | 56 | (278) |  |  | (278) |
| Comprehensive income | \$ 797 | \$ 1,986 | \$(375) | \$ 2,408 | \$139 | \$(176) | \$ 2,371 |

## For the Six Months Ended June 30, 2017

(in millions)

|  | Combined Banks | Combined Associations | Eliminations | Combined without Insurance Fund | Insurance Fund | Combination Entries | System Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net interest income | \$1,360 | \$ 2,436 |  | \$ 3,796 |  |  | \$ 3,796 |
| Provision for loan losses | (18) | (99) |  | (117) |  |  | (117) |
| Noninterest income | 125 | 635 | \$(478) | 282 | \$201 | \$(172)(a) | 311 |
| Noninterest expense | (373) | $(1,287)$ | 67 | $(1,593)$ | (2) | 172 (a) | $(1,423)$ |
| Provision for income taxes | (83) | (18) |  | (101) |  |  | (101) |
| Net income | 1,011 | 1,667 | (411) | 2,267 | 199 | 0 | 2,466 |
| Other comprehensive income | 65 | 3 | 50 | 118 |  |  | 118 |
| Comprehensive income | \$1,076 | \$ 1,670 | \$(361) | \$ 2,385 | \$199 | \$ 0 | \$ 2,584 |

Combination entry (a) eliminates the Insurance Fund premiums expensed by the Banks in the first six months of 2018 and 2017 of $\$ 107$ million and $\$ 172$ million and the related income recognized by the Insurance Corporation.

Combination entry (b) eliminates $\$ 176$ million of income recognized by System institutions for excess funds that were returned during the first quarter of 2018.

## FARM CREDIT SYSTEM

## SUPPLEMENTAL COMBINING INFORMATION - (continued) (unaudited)

STATEMENT OF CONDITION - (Condensed)<br>June 30, 2018<br>(in millions)

The Banks and their affiliated Associations are referred to as Districts. 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.

|  | AgFirst District Combined | AgriBank District Combined | Texas District Combined | CoBank <br> District Combined | Insurance Fund and Combination Entries | System Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and investments | \$ 8,501 | \$ 18,063 | \$ 5,491 | \$ 32,013 | \$ 6 | \$ 64,074 |
| Loans | 28,572 | 103,562 | 24,389 | 109,461 | $(5,271)$ | 260,713 |
| Less: allowance for loan losses | (193) | (459) | (82) | (932) |  | $(1,666)$ |
| Net loans | 28,379 | 103,103 | 24,307 | 108,529 | $(5,271)$ | 259,047 |
| Other assets | 626 | 2,419 | 606 | 2,196 | 48 | 5,895 |
| Restricted assets |  |  |  |  | 4,811 | 4,811 |
| Total assets | \$37,506 | \$123,585 | \$30,404 | \$142,738 | \$ (406) | \$333,827 |
| Systemwide Debt Securities | \$29,535 | \$ 98,262 | \$21,568 | \$119,518 | \$ (2) | \$268,881 |
| Other liabilities | 1,516 | 2,335 | 4,288 | 4,170 | $(4,695)$ | 7,614 |
| Total liabilities | 31,051 | 100,597 | 25,856 | 123,688 | $(4,697)$ | 276,495 |
| Capital |  |  |  |  |  |  |
| Preferred stock | 49 | 350 | 720 | 2,075 |  | 3,194 |
| Capital stock and participation certificates | 164 | 361 | 105 | 1,569 | (305) | 1,894 |
| Additional paid-in-capital | 83 | 2,085 | 225 | 1,319 |  | 3,712 |
| Restricted capital |  |  |  |  | 4,811 | 4,811 |
| Accumulated other comprehensive loss | (418) | (524) | (192) | (835) | (75) | $(2,044)$ |
| Retained earnings | 6,577 | 20,716 | 3,690 | 14,922 | (140) | 45,765 |
| Total capital | 6,455 | 22,988 | 4,548 | 19,050 | 4,291 | 57,332 |
| Total liabilities and capital | \$37,506 | \$123,585 | \$30,404 | \$142,738 | \$ (406) | \$333,827 |

## FARM CREDIT SYSTEM

## SUPPLEMENTAL COMBINING INFORMATION - (continued) (unaudited)

STATEMENT OF CONDITION - (Condensed)<br>December 31, 2017 (in millions)

|  | AgFirst District Combined | AgriBank District Combined | Texas District Combined | CoBank <br> District <br> Combined | Insurance Fund and Combination Entries | System Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and investments | \$ 8,958 | \$ 17,781 | \$ 5,478 | \$ 29,564 | \$ 3 | \$ 61,784 |
| Loans | 28,452 | 102,473 | 23,745 | 109,378 | $(5,271)$ | 258,777 |
| Less: allowance for loan losses | (193) | (436) | (83) | (884) |  | $(1,596)$ |
| Net loans | 28,259 | 102,037 | 23,662 | 108,494 | $(5,271)$ | 257,181 |
| Other assets | 594 | 2,324 | 577 | 2,177 | 33 | 5,705 |
| Restricted assets |  |  |  |  | 4,848 | 4,848 |
| Total assets | \$37,811 | \$122,142 | \$29,717 | \$140,235 | \$ (387) | \$329,518 |
| Systemwide Debt Securities | \$29,763 | \$ 97,294 | \$20,951 | \$117,163 | \$ (2) | \$265,169 |
| Other liabilities | 1,799 | 2,768 | 4,487 | 4,640 | $(4,727)$ | 8,967 |
| Total liabilities | 31,562 | 100,062 | 25,438 | 121,803 | $(4,729)$ | 274,136 |
| Capital |  |  |  |  |  |  |
| Preferred stock | 49 | 350 | 620 | 2,033 |  | 3,052 |
| Capital stock and participation certificates | 170 | 359 | 105 | 1,541 | (296) | 1,879 |
| Additional paid-in-capital | 83 | 2,085 | 225 | 1,319 |  | 3,712 |
| Restricted capital |  |  |  |  | 4,848 | 4,848 |
| Accumulated other comprehensive loss | (382) | (594) | (163) | (522) | (78) | $(1,739)$ |
| Retained earnings | 6,329 | 19,880 | 3,492 | 14,061 | (132) | 43,630 |
| Total capital | 6,249 | 22,080 | 4,279 | 18,432 | 4,342 | 55,382 |
| Total liabilities and capital | \$37,811 | \$122,142 | \$29,717 | \$140,235 | \$ (387) | \$329,518 |

## FARM CREDIT SYSTEM

## SUPPLEMENTAL COMBINING INFORMATION - (continued) (unaudited)

## STATEMENT OF COMPREHENSIVE INCOME - (Condensed) For the Six Months Ended June 30, (in millions)

|  | AgFirst District Combined | AgriBank District Combined | Texas District Combined | CoBank District Combined | Insurance Fund and Combination Entries | System Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{2018}$ |  |  |  |  |  |  |
| Net interest income | \$ 508 | \$1,515 | \$ 390 | \$1,505 | \$ 14 | \$ 3,932 |
| Provision for loan losses | (5) | (35) | (4) | (43) |  | (87) |
| Noninterest income | 51 | 192 | 41 | 261 | (191) | 354 |
| Noninterest expense | (251) | (594) | (185) | (527) | 85 | $(1,472)$ |
| Provision for income taxes |  | (16) |  | (62) |  | (78) |
| Net income | 303 | 1,062 | 242 | 1,134 | (92) | 2,649 |
| Other comprehensive (loss) income | (36) | 70 | (29) | (286) | 3 | (278) |
| Comprehensive income | \$267 | \$1,132 | \$213 | \$ 848 | \$ (89) | \$ 2,371 |
| $\underline{2017}$ |  |  |  |  |  |  |
| Net interest income | \$ 514 | \$1,460 | \$ 377 | \$1,426 | \$ 19 | \$ 3,796 |
| Provision for loan losses | (5) | (69) | (16) | (27) |  | (117) |
| Noninterest income | 24 | 119 | 27 | 161 | (20) | 311 |
| Noninterest expense | (257) | (608) | (177) | (534) | 153 | $(1,423)$ |
| Provision for income taxes |  | (15) |  | (86) |  | (101) |
| Net income | 276 | 887 | 211 | 940 | 152 | 2,466 |
| Other comprehensive income | 18 | 26 | 13 | 61 |  | 118 |
| Comprehensive income | \$294 | \$ 913 | \$224 | $\underline{ }$ \$1,001 | \$152 | $\underline{\text { \$ 2,584 }}$ |

## FARM CREDIT SYSTEM

## SUPPLEMENTAL COMBINING INFORMATION - (continued) (unaudited)

STATEMENT OF CHANGES IN CAPITAL - (Condensed) For the Six Months Ended June 30 (in millions)

|  | AgFirst District Combined | AgriBank District Combined | Texas District Combined | CoBank <br> District <br> Combined | Insurance Fund and Combination Entries | System Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at December 31, 2016 | \$5,881 | \$20,792 | \$4,099 | \$17,339 | \$4,200 | \$52,311 |
| Comprehensive income | 294 | 913 | 224 | 1,001 | 152 | 2,584 |
| Preferred stock issued, net |  |  | 20 | 41 |  | 61 |
| Capital stock and participation certificates issued | 20 | 56 | 5 | 6 | (13) | 74 |
| Capital stock, participation certificates, and retained earnings retired | (27) | (40) | (4) | (30) | 11 | (90) |
| Equity issued or recharacterized upon Association merger |  |  |  | 167 |  | 167 |
| Equity retired or recharacterized upon Association merger |  |  |  | (173) |  | (173) |
| Patronage and dividends | (46) | (114) | (34) | (256) | 33 | (417) |
| Balance at June 30, 2017 | \$6,122 | \$21,607 | \$4,310 | \$18,095 | \$4,383 | \$54,517 |
| Balance at December 31, 2017 | \$6,249 | \$22,080 | \$4,279 | \$18,432 | \$4,342 | \$55,382 |
| Comprehensive income | 267 | 1,132 | 213 | 848 | (89) | 2,371 |
| Preferred stock issued, net |  |  | 99 | 42 |  | 141 |
| Capital stock and participation certificates issued | 16 | 19 | 5 | 4 | (1) | 43 |
| Capital stock, participation certificates, and retained earnings retired | (22) | (17) | (5) | (35) |  | (79) |
| Patronage and dividends | (55) | (226) | (43) | (241) | 39 | (526) |
| Balance at June 30, 2018 | \$6,455 | \$22,988 | \$4,548 | \$19,050 | \$4,291 | \$57,332 |

## FARM CREDIT SYSTEM <br> SUPPLEMENTAL FINANCIAL INFORMATION (unaudited)

## COMBINED BANK AND ASSOCIATION (DISTRICT)

## SELECTED KEY FINANCIAL RATIOS

The following combined key financial ratios related to each District are intended for the purpose of additional analysis.

## For the six months ended: <br> June 30, 2018

| Return on average assets | 1.62\% | 1.74\% | 1.61\% | 1.58\% |
| :---: | :---: | :---: | :---: | :---: |
| Return on average capital | 9.50\% | 9.43\% | 10.96\% | 12.15\% |
| Net interest margin | 2.77\% | 2.53\% | 2.65\% | 2.12\% |
| Net loan charge-offs as a \% of average loans | 0.03\% | 0.02\% | 0.04\% | 0.01\% |
| Operating expense as a $\%$ of net interest income and noninterest income | 44.88\% | 34.70\% | 43.14\% | 29.87\% |
| June 30, 2017 |  |  |  |  |
| Return on average assets | 1.51\% | 1.51\% | 1.48\% | 1.36\% |
| Return on average capital | 9.08\% | 8.36\% | 9.95\% | 10.56\% |
| Net interest margin | 2.87\% | 2.52\% | 2.72\% | 2.10\% |
| Net loan charge-offs as a \% of average loans | 0.01\% | 0.02\% | 0.00\% | 0.01\% |
| Operating expense as a \% of net interest income and noninterest income | 47.40\% | 37.91\% | 43.98\% | 33.62 |

## At the period ended:

 June 30, 2018| Nonperforming assets as a \% of loans and other property o | 1.39\% | 0.97\% | 0.75\% | 0.82\% |
| :---: | :---: | :---: | :---: | :---: |
| Allowance for loan losses as a \% of loans | 0.68\% | 0.44\% | 0.34\% | 0.85\% |
| Capital as a \% of total assets | 17.21\% | 18.60\% | 14.96\% | 13.35\% |
| Capital and allowance for loan losses as a \% of loans | 23.27\% | 22.64\% | 18.98\% | 18.25\% |
| Debt to capital | 4.81:1 | 4.38:1 | 5.69:1 | 6.49:1 |

## December 31, 2017

| N | 1.33\% | 0.84\% | 0.74\% | 0.56\% |
| :---: | :---: | :---: | :---: | :---: |
| Allowance for loan losses as a \% of loans | 0.68\% | 0.43\% | 0.35\% | 0.81\% |
| Capital as a \% of total assets | 16.53\% | 18.08\% | 14.40\% | 13.14\% |
| Capital and allowance for loan losses as a \% of loans | 22.64\% | 21.97\% | 18.37\% | 17.66\% |
| Debt to capital | 5.05:1 | 4.53:1 | 5.94:1 | 6.61:1 |

## FARM CREDIT SYSTEM

## SUPPLEMENTAL FINANCIAL INFORMATION - (continued) (unaudited)

The table below reflects the combined results of each District's measurement under market value of equity and net interest income sensitivity analysis in accordance with their respective asset/liability management policies and District limits.

| District | Change in Market Value of Equity |  |  | Change in Net Interest Income |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June 30, 2018 |  |  | June 30, 2018 |  |  |
|  | -96 | +100 | +200 | -96 | +100 | +200 |
| AgFirst | 4.21\% | -4.10\% | -8.17\% | -1.85\% | 1.50\% | 2.34\% |
| AgriBank | 4.74 | -4.09 | -7.73 | -1.84 | 0.07 | 1.41 |
| Texas | 6.89 | -6.01 | -11.54 | -0.41 | 1.05 | 2.03 |
| CoBank | 2.87 | -3.12 | -6.22 | -0.74 | 0.75 | 1.41 |
|  | Change in Market Value of Equity |  |  | Change in Net Interest Income |  |  |
|  | December 31, 2017 |  |  | December 31, 2017 |  |  |
| District | -69 | +100 | +200 | -69 | +100 | +200 |
| AgFirst | 2.84\% | -4.01\% | -8.22\% | -0.42\% | 1.74\% | 2.49\% |
| AgriBank | 3.07 | -4.08 | -7.90 | -1.35 | -0.10 | 1.15 |
| Texas | 4.81 | -6.15 | -11.89 | -0.33 | 1.44 | 2.85 |
| CoBank | 1.80 | -2.78 | -5.62 | -1.69 | 2.01 | 3.98 |

## FARM CREDIT SYSTEM <br> SUPPLEMENTAL FINANCIAL INFORMATION - (continued) (unaudited)

## 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 District information provided on pages F-52 to F-55, selected financial information regarding Associations with asset size greater than $\$ 1.5$ billion is provided below for the purpose of additional analysis.

|  | At June 30, 2018 |  |  |  |  | For the Six Months Ended June 30, 2018 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Assets | Gross Loans | Allowance for Loan Losses as a \% of Gross Loans | Nonperforming Assets as a \% of Gross Loans and Other Property Owned | Total Capital Ratio | Return on Average Assets | Return on Average Capital | Net Interest Margin |
|  | (\$ in millions) |  |  |  |  |  |  |  |
| AgFirst District |  |  |  |
| MidAtlantic Farm Credit, ACA |  |  |  |  |  |  |  |  | \$ 2,795 | \$ 2,742 | 1.02\% | 1.95\% | 21.43\% | 1.87\% | 8.35\% | 2.61\% |
| First South Farm Credit, ACA | 2,144 | 2,051 | 0.66 | 0.55 | 18.59 | 1.53 | 7.73 | 2.67 |
| AgCredit, ACA | 1,928 | 1,856 | 0.54 | 0.61 | 20.47 | 2.60 | 14.91 | 2.78 |
| AgChoice Farm Credit, ACA | 1,907 | 1,865 | 0.72 | 0.90 | 19.10 | 2.14 | 10.20 | 2.77 |
| Farm Credit of the Virginias, ACA | 1,868 | 1,827 | 0.83 | 1.64 | 22.66 | 2.17 | 9.39 | 3.07 |
| AgSouth Farm Credit, ACA | 1,829 | 1,758 | 0.81 | 1.32 | 21.00 | 2.30 | 11.23 | 3.49 |
| Carolina Farm Credit, ACA | 1,567 | 1,499 | 0.51 | 1.00 | 21.69 | 1.98 | 9.20 | 3.33 |
| AgriBank District |  |  |  |  |  |  |  |  |
| Farm Credit Services of America, ACA | 28,258 | 27,024 | 0.53 | 1.02 | 16.36 | 1.98 | 10.60 | 2.69 |
| Farm Credit Mid-America, ACA | 22,538 | 20,285 | 0.49 | 1.77 | 21.25 | 1.73 | 8.48 | 2.21 |
| Compeer Financial, ACA | 19,972 | 18,104 | 0.32 | 0.81 | 15.66 | 1.95 | 11.10 | 2.49 |
| GreenStone FCS, ACA | 8,706 | 8,441 | 0.86 | 0.75 | 17.33 | 2.02 | 10.72 | 2.60 |
| AgCountry, ACA | 7,584 | 7,258 | 0.25 | 0.57 | 18.02 | 1.84 | 8.45 | 2.72 |
| Farm Credit of Illinois, ACA | 4,228 | 4,050 | 0.26 | 0.20 | 19.21 | 1.67 | 7.42 | 2.43 |
| FCS Financial, ACA | 4,027 | 3,864 | 0.41 | 0.19 | 18.72 | 1.85 | 9.02 | 2.54 |
| Texas District |  |  |  |  |  |  |  |  |
| Capital Farm Credit, ACA | 7,636 | 7,465 | 0.36 | 1.07 | 14.96 | 2.55 | 15.68 | 3.18 |
| AgTexas Farm Credit Services | 1,909 | 1,843 | 0.24 | 0.48 | 13.75 | 1.49 | 11.14 | 2.47 |
| Lone Star, ACA | 1,678 | 1,648 | 0.48 | 0.42 | 19.25 | 2.21 | 10.81 | 3.15 |
| CoBank District |  |  |  |  |  |  |  |  |
| Northwest Farm Credit Services, ACA | 11,449 | 10,934 | 0.72 | 1.04 | 18.42 | 2.55 | 11.97 | 2.96 |
| Farm Credit West, ACA | 10,176 | 9,631 | 0.75 | 1.61 | 14.41 | 2.46 | 11.49 | 2.83 |
| American AgCredit, ACA | 9,992 | 9,382 | 0.18 | 0.70 | 15.42 | 1.86 | 8.61 | 2.83 |
| Farm Credit East, ACA | 6,987 | 6,714 | 1.15 | 0.72 | 18.69 | 2.62 | 13.09 | 3.01 |
| Yosemite Farm Credit, ACA | 2,942 | 2,784 | 0.25 | 0.40 | 14.30 | 2.16 | 12.63 | 2.81 |
| Frontier Farm Credit, ACA | 2,011 | 1,887 | 0.41 | 0.76 | 17.64 | 2.00 | 9.33 | 2.75 |
| Farm Credit of New Mexico, ACA | 1,727 | 1,640 | 0.58 | 0.95 | 22.79 | 1.93 | 8.24 | 2.79 |
| Golden State, ACA | 1,586 | 1,508 | 0.28 | 0.26 | 16.39 | 2.06 | 10.58 | 2.84 |

## FARM CREDIT SYSTEM

## SUPPLEMENTAL FINANCIAL INFORMATION - (continued) (unaudited)

## SELECTED ASSOCIATION KEY FINANCIAL INFORMATION

|  | At December 31, 2017 |  |  |  |  | For the Six Months Ended June 30, 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Assets | Gross Loans | Allowance for Loan Losses as a \% of Gross Loans | Nonperforming Assets as a \% of Gross Loans and Other Property Owned | Total Capital Ratio | Return on Average Assets | Return on <br> Average Capital | Net Interest Margin |
|  | (\$ in millions) |  |  |  |  |  |  |  |
| AgFirst District |  |  |  |  |  |  |  |  |
| MidAtlantic Farm Credit, ACA | \$ 2,797 | \$ 2,717 | 0.95\% | 1.58\% | 20.44\% | 1.77\% | 8.18\% | 2.64\% |
| First South Farm Credit, ACA | 2,097 | 1,977 | 0.69 | 0.52 | 17.35 | 1.25 | 6.79 | 2.69 |
| AgCredit, ACA | 1,972 | 1,880 | 0.66 | 0.55 | 19.71 | 2.37 | 14.20 | 2.76 |
| AgChoice Farm Credit, ACA | 1,912 | 1,853 | 0.73 | 1.11 | 18.34 | 1.92 | 9.75 | 2.68 |
| Farm Credit of the Virginias, ACA | 1,904 | 1,845 | 0.95 | 2.10 | 21.72 | 1.89 | 8.74 | 2.99 |
| AgSouth Farm Credit, ACA | 1,801 | 1,710 | 0.87 | 1.49 | 20.10 | 1.91 | 9.79 | 3.51 |
| Carolina Farm Credit, ACA | 1,545 | 1,454 | 0.54 | 0.86 | 21.15 | 1.72 | 7.93 | 3.33 |
| AgriBank District |  |  |  |  |  |  |  |  |
| Farm Credit Services of America, ACA | 27,958 | 26,653 | 0.49 | 0.82 | 16.21 | 1.83 | 9.91 | 2.69 |
| Farm Credit Mid-America, ACA | 22,472 | 20,318 | 0.51 | 1.70 | 20.32 | 1.28 | 6.97 | 2.15 |
| Compeer Financial, ACA | 19,545 | 17,749 | 0.28 | 0.58 | 15.08 | 1.74 | 10.91 | 2.56 |
| GreenStone FCS, ACA | 8,483 | 8,212 | 0.88 | 0.63 | 17.05 | 1.89 | 9.53 | 2.56 |
| AgCountry, ACA | 7,443 | 7,084 | 0.22 | 0.38 | 17.47 | 1.52 | 6.40 | 2.61 |
| Farm Credit of Illinois, ACA | 4,264 | 4,074 | 0.17 | 0.14 | 18.34 | 1.76 | 7.97 | 2.54 |
| FCS Financial, ACA | 3,984 | 3,820 | 0.42 | 0.26 | 18.60 | 1.66 | 8.06 | 2.52 |
| Texas District |  |  |  |  |  |  |  |  |
| Capital Farm Credit, ACA | 7,471 | 7,308 | 0.40 | 1.13 | 14.98 | 2.37 | 14.46 | 3.23 |
| AgTexas Farm Credit Services | 1,937 | 1,867 | 0.33 | 0.96 | 13.94 | 1.43 | 10.87 | 2.46 |
| Lone Star, ACA(a) | 1,714 | 1,681 | 0.55 | 0.60 | 18.54 | 0.71 | 3.63 | 2.83 |
| CoBank District |  |  |  |  |  |  |  |  |
| Northwest Farm Credit Services, ACA | 11,452 | 10,893 | 0.75 | 0.49 | 18.06 | 2.21 | 10.62 | 2.94 |
| Farm Credit West, ACA | 10,260 | 9,699 | 0.67 | 1.25 | 13.95 | 2.23 | 11.02 | 2.71 |
| American AgCredit, ACA | 9,965 | 9,307 | 0.21 | 0.44 | 15.57 | 1.75 | 7.99 | 2.93 |
| Farm Credit East, ACA | 6,910 | 6,605 | 1.15 | 0.60 | 18.59 | 2.48 | 12.82 | 3.07 |
| Yosemite Farm Credit, ACA | 2,889 | 2,720 | 0.23 | 0.35 | 14.55 | 1.86 | 10.76 | 2.70 |
| Frontier Farm Credit, ACA | 2,052 | 1,917 | 0.32 | 0.33 | 17.00 | 1.76 | 8.84 | 2.74 |
| Farm Credit of New Mexico, ACA | 1,742 | 1,650 | 0.66 | 1.28 | 22.40 | 1.99 | 8.87 | 2.69 |
| Golden State, ACA | 1,565 | 1,477 | 0.31 | 0.25 | 15.90 | 1.89 | 9.69 | 2.79 |

[^7]
## INDEX TO SUPPLEMENTAL INFORMATION

Controls and Procedures ..... S-2
Certifications ..... S-3
Farm Credit System Entities ..... S-5

## CONTROLS AND PROCEDURES

As of June 30, 2018, 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 their respective disclosure controls and procedures ${ }^{(1)}$ with respect to the System's quarterly 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 June 30, 2018 that have materially affected, or are reasonably likely to materially affect, the System's internal control over financial reporting.

[^8]
## CERTIFICATION

I, Theresa E. McCabe, certify that:

1. I have reviewed the Second Quarter 2018 Quarterly Information Statement of the Farm Credit System.
2. Based on my knowledge, this quarterly 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 quarterly information statement.
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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 quarterly information statement is being prepared;
(b) designed such internal control over financial reporting, or caused such internal control over finncial 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 quarterly information statement our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly information statement based on such evaluation; and
(d) disclosed in this quarterly 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 registered public accounting firm 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, procass, 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.
Jhnesa E. melule

Theresa E. McCabe
President and CEO
Date: August 9, 2018
(1) See footnote 1 on page S-2.
(2) See footnote 2 on page S-2.

## CERTIFICATION

I, Karen R. Brenner, certify that:

1. I have reviewed the Second Quarter 2018 Quarterly Information Statement of the Farm Credit System.
2. Based on my knowledge, this quarterly 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 quarterly information statement.
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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 quarterly 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 quarterly information statement our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly information statement based on such evaluation; and
(d) disclosed in this quarterly 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 registered public accounting firm 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.Bremen

Karen R. Brenner
Managing Director - Financial
Management Division
Date: August 9, 2018
(1) See footnote 1 on page S-2.
(2) See footnote 2 on page S-2.

## FARM CREDIT SYSTEM ENTITIES (As of June 30, 2018)

## 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

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
Compeer Financial, ACA
2600 Jenny Wren Trail
Sun Prairie, WI 53590
Delta Agricultural Credit Association
118 E. Speedway
Dermott, AR 71638

FCS Financial, ACA
1934 East Miller Street
Jefferson City, MO 65101
Farm Credit Illinois, ACA
1100 Farm Credit Drive
Mahomet, IL 61853
Farm Credit Mid-America, ACA
1601 UPS Drive
Louisville, KY 40223
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 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
Farm Credit Services of Western Arkansas, ACA
3115 West 2nd Court
Russellville, AR 72801
Farm Credit Southeast Missouri, ACA
1116 N. Main Street
Sikeston, MO 63801
GreenStone Farm Credit Services, ACA
3515 West Road
East Lansing, MI 48823

## 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 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 $\mathrm{AgCredit}, \mathrm{ACA}$
188 West Judicial Street
Blackfoot, ID 83221
Northwest Farm Credit Services, ACA
2001 South Flint Road
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


[^0]:    * Represents the elimination of the allowance for loan losses in connection with Association mergers.
    ** 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.

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

[^2]:    * The capital requirements that became effective January 1, 2017 have a three-year phase-in of the capital conservation buffer applied to the riskadjusted capital ratios. There is no phase-in of the leverage buffer. Amounts shown reflect the full capital conservation buffer.
    ** See Note 13 for each Bank's Total Capital ratio and Tier 1 Leverage ratio at June 30, 2018 and December 31, 2017.
    *** Must include the regulatory minimum requirement for the URE and UREE Leverage ratio.
    1 Equities outstanding 7 or more years
    2 Capped at $1.25 \%$ of risk-adjusted assets and inclusive of the reserve for unfunded commitments
    3 Outstanding 5 or more years, but less than 7 years
    4 Outstanding 5 or more years

[^3]:    * 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.

[^4]:    * 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.

[^5]:    * Represents the portion of loans modified as troubled debt restructurings that are in nonaccrual status.

[^6]:    (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 risk-adjusted capital 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, just over $50 \%$ 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.

[^7]:    (a) As previously discussed in the 2017 Annual Information Statement, during the second quarter of 2017, Lone Star, ACA discovered appraisal and accounting irregularities that resulted from material weaknesses in internal controls. The Association evaluated the ramifications such material weaknesses in internal controls had on its previously issued financial statements. On May 3, 2018, Lone Star, ACA published its 2017 Annual Report, which included restated 2016 financial statements. The impact of this restatement is not material to the current or previously issued System's combined financial statements.

[^8]:    ${ }^{(1)}$ 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 quarterly 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 condensed 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 condensed 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 condensed combined financial statements.

