

2022 ANNUAL INFORMATION STATEMENT OF THE FARM CREDIT SYSTEM

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

MARCH 1, 2023

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

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

This annual information statement does not constitute an offer to sell or a solicitation of an offer to buy Systemwide Debt Securities. Systemwide Debt Securities are offered by the Federal Farm Credit Banks Funding Corporation (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 20, 2021, as amended by the supplement dated March 1, 2022.

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 and related supplements, 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 Consolidated Systemwide Medium-Term Notes Offering Circular dated July 19, 1993, as amended by supplements dated February 26, 1997 and June 11, 1999.

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

Certification

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

Matthew D. Walther Chairman of the Board Theresa E. McCabe President and CEO

Mattlew O Watcher Shoresa E. Melale Karen R. Brenner

Karen R. Brenner

Managing Director — Financial

Management Division

TABLE OF CONTENTS

	rage
Five-Year Summary of Selected Combined Financial Data and Key Financial Ratios	3
Business	5
Federal Regulation and Supervision of the Farm Credit System	17
Description of Systemwide Debt Securities	21
Risk Factors	25
Other Business Matters	36
Management's Discussion and Analysis of Financial Condition and Results of Operations	37
Index to Combined Financial Statements and Supplemental Combining and Financial Information	F-1
Index to Supplemental Information	S-1

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 and links to each Bank's website, are available on the Funding Corporation's website located at farmcreditfunding.com. Other information regarding the System can be found at farmcredit.com.

Copies of quarterly and annual reports of each Bank may be obtained, by request, from each respective Bank. In addition, reports of each Bank combined with its affiliated Associations may be obtained from each individual Bank. Bank addresses and telephone numbers are listed on page S-32 of this annual information statement. These documents and further information on each Bank or each Bank combined with its affiliated Associations and links to a Bank's affiliated Associations' websites are also available on each Bank's website as follows:

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

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

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

The following selected combined financial data as of and for each of the five years in the period ended December 31, 2022 has been derived from the audited combined financial statements of the Farm Credit System. The selected combined financial data and combined financial statements of the Farm Credit System combine the financial condition and operating results of each of the Banks, their affiliated Associations, the Funding Corporation, and the Farm Credit Insurance Fund, and reflect the investments in, and allocated earnings of, certain service organizations owned by the Banks or Associations. All significant intra-System transactions and balances have been eliminated in combination. Because System entities are financially and operationally interdependent, we believe providing the combined financial information is more meaningful to investors in Systemwide Debt Securities than financial information relating to the Banks on a stand-alone basis (i.e., without the Associations).

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

The combined statement of condition at December 31, 2022 and 2021 and the related combined statements of income, of comprehensive income, of changes in capital, and of cash flows for each of the three years in the period ended December 31, 2022 and related notes appear elsewhere in this annual information statement.

	2022	2021	2020	2019	2018
			(in millions)		
Combined Statement of Condition Data					
Loans	\$373,266	\$343,929	\$315,490	\$286,964	\$273,378
Allowance for loan losses	(1,576)	(1,632)	(1,796)	(1,806)	(1,713)
Net loans	371,690	342,297	313,694	285,158	271,665
Cash, Federal funds sold and investments	89,896	80,816	74,210	68,266	66,471
Accrued interest receivable	3,572	2,560	2,585	2,864	2,732
Other property owned	28	39	37	72	84
Total assets	477,063	435,957	400,693	365,359	348,992
Systemwide bonds and medium-term notes	362,624	328,552	299,145	274,540	258,877
Systemwide discount notes	27,353	24,271	23,510	18,998	22,582
Subordinated debt	398	398			
Other bonds	5,599	3,623	2,559	1,961	1,817
Total liabilities	408,462	366,480	335,158	303,629	290,548
Capital	68,601	69,477	65,535	61,730	58,444
Combined Statement of Income Data					
Net interest income	\$ 10,542	\$ 9,764	\$ 9,046	\$ 8,266	\$ 7,976
(Provision for loan losses) loan loss reversal	(40)	152	(107)	(169)	(194)
Net noninterest expense	(3,068)	(2,959)	(2,765)	(2,548)	(2,324)
Income before income taxes	7,434	6,957	6,174	5,549	5,458
Provision for income taxes	(166)	(161)	(172)	(103)	(126)
Net income	\$ 7,268	\$ 6,796	\$ 6,002	\$ 5,446	\$ 5,332

Combined Key Financial Ratios

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

	2022	2021	2020	2019	2018
Return on average assets	1.59%	1.66%	1.57%	1.54%	1.59%
Return on average capital	10.45	9.94	9.26	8.91	9.29
Net interest income as a percentage of average earning assets	2.39	2.46	2.46	2.42	2.46
Operating expense as a percentage of net interest income and noninterest income	35.1	35.3	35.9	36.2	35.2
Net loan charge-offs as a percentage of average loans	0.01	0.01	0.03	0.02	0.03
Nonperforming assets as a percentage of loans and other property owned	0.47	0.46	0.60	0.82	0.83
Allowance for loan losses as a percentage of loans outstanding at year end	0.42	0.47	0.57	0.63	0.63
Capital as a percentage of total assets at year end	14.4	15.9	16.4	16.9	16.7
Capital as a percentage of total assets at year end (excluding restricted assets and capital — Insurance Fund)	13.2	14.8	15.2	15.7	15.5
Capital and allowance for loan losses as a percentage of loans outstanding at year end	18.8	20.7	21.3	22.1	22.0
Debt to capital at year end	5.95:1	5.27:1	5.11:1	4.92:1	4.97:1

BUSINESS

Overview of the Farm Credit System

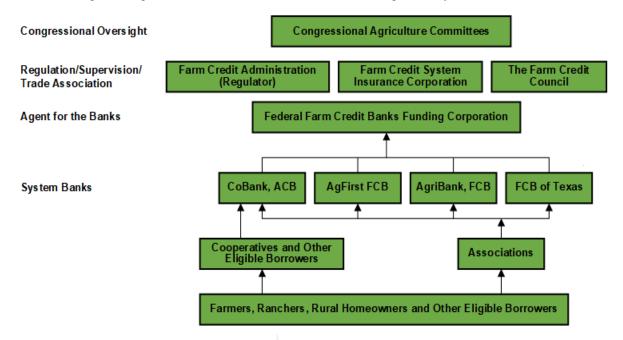
The Farm Credit System is a federally chartered network of borrower-owned lending institutions comprised of cooperatives and related service organizations. Cooperatives are organizations that are owned and controlled by their members who use the cooperatives' products or services. The U.S. Congress authorized the creation of the first System institutions in 1916. The System's mission is to support rural communities and agriculture with reliable, consistent credit and financial services. This is accomplished 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 the mission of supporting rural America, the System also makes rural residential real estate loans, finances rural power, communication and water infrastructures and makes 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.

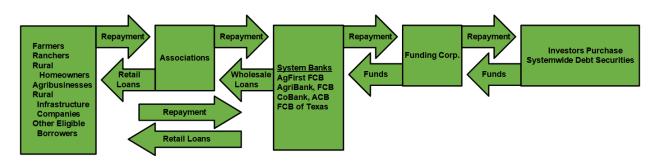
Business Model

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, the issuance of common and preferred equities and subordinated debt. As a result, the loans made by the Associations are primarily funded by the issuance of Systemwide Debt Securities by the Banks. In addition, CoBank makes retail loans and leases directly to agricultural and rural infrastructure cooperatives and businesses and other eligible entities. The Banks and Associations also purchase loan participations from other System entities and non-System lenders. Therefore, the repayment of Systemwide Debt Securities is dependent upon the ability of borrowers to repay their loans.

Preferred stock and subordinated debt are the sole obligation of the issuing entity and are not guaranteed by any other System institution. Such obligations are not Systemwide Debt Securities and therefore are not subject to the joint and several obligations of the Banks and are not guaranteed or insured by the Insurance Fund.

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 the Business

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

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

Government-Sponsored Enterprise Status

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

Agricultural Industry Overview

The agricultural sector has been and remains a key economic force in the U.S. economy and is strongly affected by domestic and global economic conditions, government policies and a changing climate. Global and domestic adverse weather events, food safety, disease, pandemics, geopolitical events and other unfavorable conditions also directly affect the agricultural sector.

The System was created to provide support for the agricultural sector because of its significance to the well-being of the U.S. economy and the U.S. consumer. Profitability 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. (See "Risk Factors" for a discussion of potential changes in the agricultural spending policies or budget priorities of the U.S. government, U.S. and global trade policies and their potential impact on the System's borrowers.) Further, off-farm income is important to the repayment ability of many agricultural producers, which affects the profitability of the System. 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 the System conducts the lending business are the Banks and the Associations.

Banks

At December 31, 2022, the System had four Banks (three Farm Credit Banks and one Agricultural Credit Bank). The Banks' lending operations include wholesale loans to their affiliated Associations and loan participations in eligible loans purchased from Associations, other Banks and non-System lenders. In addition, CoBank, as the Agricultural Credit Bank, has additional nationwide authority to make retail loans directly to agricultural and rural infrastructure cooperatives and businesses and other eligible entities.

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

Associations

At December 31, 2022, the System was comprised of 63 Associations throughout the United States and the Commonwealth of Puerto Rico. As a result of two separate mergers involving four Associations on January 1, 2023, there are currently 61 Associations, 60 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, from the issuance of common and preferred equities and subordinated debt.

Districts

Each Bank combined with its affiliated Associations is referred to as a District. The following table lists the four Districts and provides information about the asset size and the loan portfolio size of each District as of December 31, 2022.

<u>District</u>	Assets	Loans		
	(in millions)			
AgFirst	\$ 48,907	\$ 38,103		
AgriBank	179,361	152,142		
Texas	44,580	36,421		
CoBank	203,936	152,605		

The Districts vary substantially with respect to size, number and mix of Associations. The largest Associations, those with assets over \$2 billion, accounted for 52.4% and 52.2% of the System's assets at December 31, 2022 and 2021 and 62.6% and 62.2% of the System's loans at December 31, 2022 and 2021. A summary of these Associations by asset size can be found in the Supplemental Financial Information on pages F-78 and F-79.

Products and Services

Loans by Banks

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

CoBank also may make the following types of loans:

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

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

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

Loans by Associations

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

 Real estate mortgage loans — generally to purchase farm real estate, refinance existing mortgages, construct various facilities used in agricultural operations, or purchase other rural residential/lifestyle real estate for both fulltime and part- time farmers. In addition, credit for other agricultural purposes and family needs is available to full-time and part-time farmers. Real estate mortgage loans have maturities ranging from 5 to 40 years and must be secured by first liens on the real estate. These loans may be made only in amounts up to 85% of the appraised value of the property taken as security or up to 97% of the appraised value if guaranteed by a federal, state, or other governmental agency. The actual percentage of loan-to-appraised value when loans are made is generally lower than the statutory maximum percentage.

- Production and intermediate-term loans for operating funds, equipment and other purposes. Eligible financing needs include operating inputs (such as labor, feed, fertilizer, and repairs), livestock, family living expenses, income taxes, debt payments on machinery or other equipment, and business-related expenses. Production loans may be made on a secured or unsecured basis and are most often made for a period of time that matches the borrower's normal production and marketing cycle, which is typically 12 months. Intermediate-term loans typically finance depreciable capital assets of a farm or ranch. Examples of the uses of intermediate-term loans are to purchase or refinance farm machinery, vehicles, equipment, breeding livestock, or farm buildings, to make improvements, or to provide working capital. Intermediate-term loans are made for a specific term, generally 10 years or less. These loans may be made on a secured or unsecured basis, but are normally secured.
- Agribusiness loans may be made on a secured or unsecured basis and include:
 - Processing and marketing loans for operations to process or market the products produced by a farmer, rancher, or producer or harvester of aquatic products, or by a cooperative.
 - Farm-related business loans to eligible borrowers that furnish certain farm-related business services to farmers or ranchers that are directly related to their agricultural production.
- Rural residential real estate loans to purchase a single-family dwelling that will be the primary residence in rural areas, which

may include a town or village that has a population of not more than 2,500 persons. In addition, the loan may be to remodel, improve, or repair a rural home, or to refinance existing debt. These loans must be secured by a first lien on the property, except that it may be secured by a second lien if the System institution also holds the first lien on the property.

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

Loan Interest Rate and Prepayment Features

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

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

Investments in Rural America

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

Administration approves these investments on a caseby-case basis.

Financially-Related Services

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

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

The Banks and Associations, acting as an agent or broker, make the above described insurance available through private insurers.

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

Customers

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

The Banks and Associations make loans and provide financially-related services to qualified borrowers in the agricultural and rural sectors and certain related entities. The loan portfolio at the

System level is diversified by commodity and geographic location. Only one commodity exceeded 10% of total assets at December 31, 2022 and 2021. On a combined basis, loans to farmers of cash grains totaled 11.7% of the System's total assets at December 31, 2022, and 12.4% at December 31, 2021. However, most System institutions have higher concentrations of certain types of loans or commodities compared with the System as a whole, due to the geographic territories served by individual Banks and Associations.

As part of the System's mission, the Banks and Associations have established policies and programs for furnishing sound and constructive credit and related services to young, beginning, and small farmers and ranchers. A summary of these activities can be found in the Supplemental Financial Information on pages F-80 and F-81.

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

Loan Underwriting Standards

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

Underwriting by Associations

The Associations manage credit risk through the use of underwriting standards, credit analysis of

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

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

Underwriting by Banks

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

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

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

Competition

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

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

Federal Farm Credit Banks Funding Corporation

As agent for the Banks, the Funding Corporation issues and markets Systemwide Debt Securities. The Funding Corporation, which was established by the Farm Credit Act, is owned by the Banks. The composition of the board of directors of the Funding Corporation is defined by statute and is comprised of nine voting members: four current or former Bank directors and three Bank chief executive officers or

presidents elected by the Banks, and two additional voting members appointed by the shareholder-elected members of the board of directors after seeking recommendations from and consulting with the Secretary of the Treasury and the Chairman of the Board of Governors of the Federal Reserve System. The appointed directors cannot be affiliated with the System or the regulator and cannot be actively engaged with a member of the group of banks and securities dealers involved in selling Systemwide Debt Securities. The president of the Funding Corporation serves as a non-voting member of the Funding Corporation's board of directors.

The Funding Corporation utilizes a selling group of banks and securities dealers to sell Systemwide Debt Securities, including our Leveraging Equality and Diversity (LEAD) dealer members. LEAD dealers are committed to increasing the representation and success of minorities in the capital markets and are minority, women, veteran, disabled veteran and American Indian tribally owned. As of December 31, 2022, the selling group had 36 members. Dealers distribute Systemwide Debt Securities to investors, including, but not limited to, commercial banks, states, municipalities, pension and mutual funds, insurance companies, investment companies, corporations and foreign banks and governments.

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

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.

Federal Agricultural Mortgage Corporation (Farmer Mac)

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

Some System institutions have entered into guarantee agreements with Farmer Mac that provide a credit enhancement on certain loans or to manage their positions. These transactions present counterparty risk should Farmer Mac fail to perform under these guarantees. However, this risk is considered "secondary" in that System institutions rely primarily on customer loan repayment capacity. These agreements are commonly referred to as long-term standby commitment to purchase agreements. System institutions may also securitize mortgage loans by exchanging the loans for Farmer Mac mortgagebacked securities. In addition, System institutions may purchase agricultural mortgage-backed securities issued by Farmer Mac. At December 31, 2022 and 2021, Farmer Mac guaranteed \$2.624 billion and \$2.427 billion of loans issued by System institutions and System institutions had \$620 million and \$693 million of mortgage-backed securities issued by Farmer Mac.

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

The Farm Credit Council

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

Governance

Boards of Directors

Each Bank and Association has its own board of directors, which is primarily comprised of directors elected by the stockholders of such Bank or Association, that oversees the management of the Bank or the Association. Farm Credit Administration regulations require each Bank and Association to have a nominating committee that is responsible for identifying, evaluating and nominating candidates for director positions. Stockholder-elected directors must constitute at least 60 percent of the members of the board of directors. Each Bank's board of directors must include two outside directors appointed by the stockholder-elected directors. Each Association with assets exceeding \$500 million must have no fewer than two outside directors, unless it would cause the percent of stockholder-elected directors to be less than 75 percent of the board. All other Associations must have at least one outside director. Each Bank and Association board of directors must have a member who is a "financial expert," as defined in regulations issued by the Farm Credit Administration, except for those Associations with assets of \$500 million or less, who may retain a financial advisor to satisfy this requirement. The boards of directors represent the interests of the stockholders of their particular institution. Each board of directors performs the following functions, among others:

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

stockholders and the institution's legal and regulatory compliance.

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

System Audit Committee

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

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

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

 the review and approval of the System's quarterly and annual information statements after discussions with management and the independent registered public accounting firm.

Internal Control Over Financial Reporting

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

Internal control over financial reporting is subject to inherent limitations and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness of future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate. Managements of System institutions have used the criteria set forth by the Committee of Sponsoring Organizations of the Commission (COSO) Treadway Control — Integrated Framework (2013) to assess the effectiveness of internal control over financial reporting. Based on testing of the design and effectiveness of key internal controls, certifications and other information furnished by the principal executive officer and principal financial officer of each System institution, as well as incremental procedures performed by the Funding Corporation over the combining process, Funding Corporation management has completed an assessment of the effectiveness of the System's internal control over financial reporting as of December 31, 2022 and has included a report on the assessment on page F-2 of this annual information statement.

The System has also engaged PricewaterhouseCoopers LLP, the System's independent registered public accounting firm, to opine on the effectiveness of the System's internal control over financial reporting based on its integrated audit. Their report can be found on pages F-3 through F-5.

Each of the Banks has also engaged PricewaterhouseCoopers LLP to opine on the effectiveness of its internal control over financial reporting for 2022. Their reports can be accessed through each of their respective websites listed on page 2.

Code of Ethics

Each System institution is required by regulation to adopt a code of ethics that applies to every director and employee. The code of ethics reaffirms the high standards of business conduct required of, and provides guidance to, directors and employees.

In addition, each Bank and the Funding Corporation have either adopted a separate code of ethics or incorporated additional requirements in its code 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 involved in the financial statements covered by the Banks' or the Funding Corporation's codes of ethics by including that information in future information statements. No such amendments or waivers were made in 2022. The Funding Corporation's and each of the Bank's codes of ethics are available and can be accessed through each respective website as listed on page 2.

Complaints Regarding Accounting, Internal Accounting Controls and Auditing Matters

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

System Committees and Work Groups

System Banks and Associations are autonomous institutions and, as such, manage and control their own business activities, operations and financial performance. However, they are financially and operationally interdependent, and thus have a common interest in working collaboratively, through various committees and work groups, to promote consistency on significant policies and practices.

The Presidents' Planning Committee is a standing committee comprised of select members of senior leadership drawn from the Banks, Associations, the Funding Corporation and The Farm Credit Council with the main objective of promoting management coordination among System institutions. Through various subcommittees, the Presidents' Planning Committee engages in discussion on topics important to the System where common, coordinated action is warranted such as identifying systemic and reputational risks, reviewing and advising on legislative and regulatory issues and discussing new business opportunities.

The Coordinating Committee is also a standing committee comprised of select directors and chief executive officers drawn from the Banks, Associations, The Farm Credit Council and the Funding Corporation. The Coordinating Committee is called upon periodically to address issues at the national level as they arise.

The System has other committees, some standing and some ad hoc, that address specific topics with the goal of sharing information, promoting best practices, and establishing a common approach. Examples of the foregoing include the System Disclosure Accounting Standards Work Group, Committee. Internal Control over Financial Reporting Work Group, Risk Work Group, Reputation Risk Analysis & Planning Work Group and the Environmental, Social and Governance Work Group. Depending on the committee or work group in question, the composition is comprised of management from one or more of the Banks, Associations, the Funding Corporation or The Farm Credit Council, which collaborate to ensure broad communication throughout the System on their respective topics.

Properties

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

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

Human Capital

System institutions recognize that their people are the key to success and therefore, strive to make the workplace attractive for all employees. Effective human capital management results from the recruitment and retention of a highly qualified workforce that is aligned with the institution's core values and mission. System institutions have an onboarding program dedicated to familiarizing all new hires with the organization's culture and values. The mission of effectively serving the needs of rural America and agriculture drives the organizational culture.

Each institution's human capital strategy is unique to its organization and is impacted by the geography and workforce demographics in the communities it serves. Human capital management is carried out under the oversight of each institution's board of directors.

Each System institution adopts a Human Capital Plan (Plan) that focuses on three broad areas: (1) assessment of workforce and performance management, (2) succession planning and (3) diversity and inclusion.

Assessment of Workforce and Performance Management

Each Plan provides a description of the institution's workforce and an assessment of strengths and weaknesses within the workforce. Such Plans generally take into account effective strategies to evaluate the workforce including reviewing job descriptions to make sure the skills needed are accurately defined, engaging in a performance review process to assess skills desired against skills employees have, and training to address any gaps.

Succession Programs

Succession planning is necessary to ensure that talent and skills are available and essential knowledge and organizational culture are maintained when employees in key positions depart. Each Plan also provides for management succession planning and strategies with the main objective of identifying critical workforce positions and developing a targeted pool of potential successors.

Diversity and Inclusion

Diversity and inclusion are embedded within each phase of the employment life cycle including recruitment, on-boarding, new employee immersion and employee retention and development. Effective diversity and inclusion strategies require a continuous cultivation of a welcoming, inclusive and collaborative environment that values the life experiences of all employees.

At December 31, 2022, the System, on a combined basis, employed 16,921 full-time employees of which 58% were women, 42% men and 10% minorities based on employee self-reporting. The statistics are for the System as a whole and individual institution information may vary from these statistics, as the composition of each System institution's workforce is impacted by the demographics of its unique service area.

FEDERAL REGULATION AND SUPERVISION OF THE FARM CREDIT SYSTEM

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

Farm Credit Administration

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

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

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

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

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

shall, in its sole discretion, adopt a resolution that:

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

Farm Credit Administration Regulations

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

Issuances of Systemwide Debt Securities

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

Lending Objective

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

Consistent with the System's mission of supporting rural communities and agriculture, CoBank also makes loans to agricultural cooperatives, to finance rural power, communication and water infrastructures, to support agricultural exports and to finance other eligible entities.

Borrower Protections

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

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

Bank Collateral Requirements

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

Capital Adequacy

Farm Credit Administration regulations set forth capital ratio requirements for the Banks and Associations, which consist of the following ratios:

<u>Ratio</u>	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	1.70/	27/4
Leverage	1.5%	N/A
Permanent Capital	7.0%	N/A

For additional information on the regulatory capital ratios, see pages 88 and 89.

Accounting Requirements

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

Internal Controls

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

Disclosure Obligations

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

• Each Bank and Association must prepare and publish its annual report on its website and submit a copy to the Farm Credit Administration within 75 days of the end of its fiscal year. In addition, each Bank and Association must prepare and provide to its shareholders an annual report within 90 days of the end of its fiscal year. The annual report must include, among other things, a description of the System institution's business, properties, capital structure, risk

exposures, loan portfolio and financial performance. Each Bank and Association must prepare a quarterly report within 40 days after the end of each fiscal quarter. The quarterly reports update and supplement the latest annual report, as necessary.

- · The Funding Corporation must prepare and disseminate a System annual information statement for holders of Systemwide Debt Securities and other users of the annual information statement within 75 days of the end of each fiscal year and file a copy with the Farm Credit Administration. The annual information statement must include, among other things, a description of the System's business, properties, capital structure, risk exposures, loan portfolio and financial performance. The Funding Corporation must also prepare a quarterly information statement within 45 days after the end of each fiscal quarter. The quarterly information statements update and supplement the System's latest annual information statement, as necessary.
- The Banks and the Funding Corporation are responsible for disclosure of information concerning the System to investors in Systemwide Debt Securities. The Banks are required to provide specified information to the Funding Corporation so that it can prepare the System information statements. Further, the Funding Corporation is required to establish a system of internal controls sufficient to reasonably ensure that any information it releases to investors or the general public is true and accurate, and that there are no omissions of material information.
- The appropriate officers and a board member from each Bank, Association and the Funding Corporation must certify that the information contained in the quarterly and annual reports or information statements they prepare and file with the Farm Credit Administration is true, accurate and complete to the best of their knowledge and belief.

Withdrawal from the System

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

- adequate provision for the payment of all of the institution's obligations to other System entities,
- if a Bank, adequate provision for the repayment of its Systemwide Debt Securities and related interest,
- approval of the Farm Credit Administration Board,
- approval by the institution's stockholders, and
- payment by the institution to the Insurance Fund of an amount by which its total capital exceeds 6% of its assets.

Appointment of Conservator or Receiver

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

Farm Credit System Insurance Corporation

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

Uses of the Farm Credit Insurance Fund

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

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

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

Funding for the Farm Credit Insurance Fund

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

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

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

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

The Insurance Corporation is required to establish Allocated Insurance Reserves Accounts for each Bank. The Insurance Corporation is also statutorily required at the end of any calendar year to allocate excess Insurance Fund balances above the secure base amount, less the Insurance Corporation's projected annual operating expenses into these accounts. These reserve accounts remain part of the Insurance Fund, and, therefore, may be used for statutorily authorized Insurance Corporation purposes. The Insurance Corporation may also distribute all or a portion of these reserve accounts to the Banks.

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

DESCRIPTION OF SYSTEMWIDE DEBT SECURITIES

General

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

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

Each issuance of Systemwide Debt Securities ranks equally, in accordance with the Farm Credit Administration regulations, with the System's other unsecured Systemwide Debt Securities. Systemwide Debt Securities are not issued under an indenture and

no trustee is provided with respect to these securities. Systemwide Debt Securities are not subject to acceleration prior to maturity upon the occurrence of any default or similar event.

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

Use of Proceeds

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

Repayment Protections

General

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

Funding Corporation have entered into the Third Amended and Restated Market Access Agreement that sets forth certain conditions of participation for the Banks, as described below.

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

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

Capital Adequacy

Farm Credit Administration regulations set minimum regulatory capital requirements that each Bank and Association must maintain. In addition, the Banks and Associations are required to develop a capital adequacy plan, as described above in "Federal Regulation and Supervision of the Farm Credit System — Farm Credit Administration Regulations — Capital Adequacy."

Agreements Among Certain System Institutions

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

Third Amended and Restated Market Access Agreement (MAA) — The Banks and the Funding Corporation have entered into the MAA. The MAA is designed to provide for the identification and resolution of individual Bank financial problems in a timely manner. The MAA also discharges the Funding Corporation's statutory responsibility for determining

conditions for each Bank's participation in each issuance of Systemwide Debt Securities. The MAA establishes criteria and procedures for the Banks that provide operational oversight and control over a Bank's access to System funding if the creditworthiness of the Bank declines below certain agreed-upon levels.

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

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

For additional discussion of the criteria and standards under the MAA, and the resulting categories and restrictions if the standards are not met, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Risk Management — Structural Risk Management." A copy of the Third Amended and Restated Market Access Agreement is available on the Funding Corporation's website.

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

Farm Credit Insurance Fund

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

The System does not have a guaranteed line of credit from the U.S. Treasury or the Federal Reserve. However, the Insurance Corporation has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation under certain limited circumstances. Under its existing statutory authority, the Insurance Corporation may use these funds to provide assistance to the System Banks in exigent market circumstances which threaten the Banks' ability to pay maturing debt

obligations. The agreement provides for advances of up to \$10 billion and terminates on September 30, 2023, unless otherwise renewed. The decision whether to seek funds from the Federal Financing Bank is in the discretion of the Insurance Corporation, and each funding obligation of the Federal Financing Bank is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by the System.

Joint and Several Liability

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

Status in Liquidation

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

Contingency Funding Program

The Banks and the Funding Corporation have established a Contingency Funding Program to provide for contingency financing mechanisms and procedures to address potential disruptions in the System's communications, operations and payments systems and to cover events that threaten continuous market access by the Banks or the Funding Corporation's normal operations. Under the 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.

RISK FACTORS

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

Risks Related to the General Economy

Inflation and rising interest rates could negatively impact the System's results of operations and financial condition.

Since March 2022, the Federal Reserve has aggressively pursued interest rate hikes to slow spending and to address ongoing inflation concerns, which reached a 40-year high in 2022. The Federal Reserve is widely expected to continue to raise interest rates even further as inflation remains elevated, increasing the possibility that the U.S. economy will enter a recession. As a result, loan demand may weaken, competition may intensify, and credit quality may deteriorate. In addition, if interest rates rise, borrowers may not be able to pay the rising interest rates on their floating-rate loans and may default. Numerous other factors may affect a borrower's ability to repay its loan, including the failure to meet its business plan or a downturn in the agricultural and rural economies. See "Risks Related to Agriculture and Rural America." This may have a negative impact on our results of operations and financial condition. See "The Banks and the Associations are subject to interest rate risks."

Pandemics, epidemics, disease outbreaks and other public health crises, such as the COVID-19 pandemic, have disrupted the global economy and our business, and future outbreaks or reemergence of the COVID-19 pandemic could materially adversely impact our business, financial condition, liquidity and results of operations.

Pandemics, epidemics, disease outbreaks and other public health crises, such as the COVID-19 pandemic, disrupted the global economy and may, in the future, disrupt the economy, our business and our borrowers' businesses. The COVID-19 pandemic and

preventative measures taken to contain or mitigate its spread negatively affected business activity and financial transactions, caused supply chain disruptions (including for agricultural products), labor difficulties and shortages, and commodity inflation. economic conditions caused by the COVID-19 pandemic could adversely impact our business, results of operations and financial condition, including deterioration in the credit quality of our loan portfolio, which could result in an increase in nonperforming assets and the allowance for loan losses, reduce regulatory capital and liquidity ratios and impact other regulatory requirements. Any new public health crisis or a resurgence of the COVID-19 pandemic or the unfavorable economic conditions caused by the pandemic could materially and adversely impact our business, financial condition, liquidity, results of operations and the operations of our borrowers.

Risks Related to Agriculture and Rural America

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

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

- global and domestic adverse weather-related events, food safety, disease, pandemics and other unfavorable conditions that periodically occur and impact the agricultural productivity and income of System borrowers;
- changes in climate, including rising average temperatures, more frequent and severe storms, more forest and wildfires and extreme flooding and droughts;
- volatile prices of agricultural commodities;
- changes in production expenses (including interest rates), particularly feed, fuel and fertilizer:
- changes in demand for and supply of U.S. agricultural products in a global marketplace;
- changes in farmland and rural real estate values:

- irrigation water availability and cost, and environmental standards;
- availability of agricultural workers and changes in labor costs;
- political, legal, regulatory, financial market and economic conditions and/or developments in the United States and abroad that can affect such things as the price of commodities or products used or sold by System borrowers, including the volatility thereof, as well as changes in the relative value of the U.S. dollar; and
- changes in the general U.S. economy that can affect the availability of off-farm sources of income and prices of real estate.

These factors, in turn, could increase the System's nonperforming assets, decrease the value of the System's loan portfolio, reduce the System's loan origination volume, and decrease the value of collateral securing certain of the System's loans, which could have a significant adverse impact on the System's financial condition and results of operations.

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

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

Climate change could have a negative impact on the System's results of operations and financial condition.

Climate change poses both short- and long-term risks globally, including to the agricultural and financial sectors. The Banks and Associations are financial institutions that operate in all 50 states and Puerto Rico where their operations or their borrowers'

businesses could be negatively impacted by climate change.

Climate change arises from physical and transition risk. Physical risk such as adverse weather conditions, particularly during the planting and growing season, can significantly affect agricultural production, with the timing and quantity of rainfall being two of the most important factors in agricultural production. Insufficient levels of rain prevent farmers from planting new crops and may cause growing crops to die or result in lower yields. Excessive rain or flooding can prevent planting from occurring at optimal times, and may cause crop loss through increased disease or mold growth. Temperatures outside normal ranges can also cause crop failure or decreased yields, and may also increase disease incidence. Temperature affects the rate of growth, crop maturity and crop quality. Natural calamities such as regional floods, wildfires, hurricanes or other storms, and droughts can have significant negative effects on agricultural and livestock production.

Transition risk may result in changes in regulations and market preferences, which, in turn, could have a negative impact on the asset values and results of operations of our customers. In addition, market perceptions could change, which may impact both the reputation of our borrowers and the System. Overall, climate change risks may result in increased compliance costs and reduced System and borrower profitability.

When there are less favorable economic conditions in agriculture, without sufficient government support programs, including crop insurance and periodic ad hoc payments, the System's financial performance and credit quality measures likely would be negatively impacted.

Production agriculture is a cyclical business that is influenced heavily by international and domestic demand for U.S. agricultural products and commodity prices. Factors that could affect demand and prices for U.S. commodities include a change in the U.S. government's support programs for agriculture, changes to trade agreements and policies, deteriorating economic conditions internationally or an increase in the U.S. dollar's value. To the extent economic conditions in agriculture become less favorable, and changes to direct government support programs, including crop insurance and periodic ad hoc payments, are implemented or there are changes in U.S. and global trade agreements or policies, the System's financial performance and credit quality measures could be negatively impacted.

Risks Related to the Debt Capital Markets

Cost and availability of funding in the debt markets could adversely affect the System's financial condition and results of operations.

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

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

Preferred stock and subordinated debt are the sole obligation of the issuing entity and are not guaranteed by any other System institution. Such obligations are not Systemwide Debt Securities and therefore are not subject to the joint and several obligations of the Banks and are not guaranteed or insured by the Insurance Fund.

Risks Related to our Lending and Investing Activities

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

Unlike commercial banks and other financial institutions that lend to both the agricultural sector and

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

The Banks and Associations are subject to credit risk.

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

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

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

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

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

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

The determination of the amount of loss allowances and asset impairments varies by asset type and is based upon the periodic evaluation and assessment of known and inherent risks associated with the respective asset class by System institutions' managements. Such evaluations and assessments are revised as conditions change and new information becomes available. The managements of System institutions update their evaluations regularly and reflect changes in allowances and impairments in operations as such evaluations are revised. These evaluations are subjective and additional impairments may need to be taken or allowances provided in the

future. Historical trends may not be indicative of future impairments or allowances.

Risks Related to Liquidity and Interest Rate Risk

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

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

The Banks and Associations are subject to interest rate risk.

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

Certain System institutions use derivative financial instruments to hedge against interest rate and liquidity risks and to lower the overall cost of funds and therefore, are subject to counterparty risk and other derivative risks.

Certain System institutions use derivative financial instruments to minimize the financial effects on their business of changes in interest rates or for liquidity purposes and must determine the nature and quantity of these hedging transactions. The effectiveness of the hedging transactions depends upon

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

Risks Related to Government-Sponsored Enterprises

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

The System's government-sponsored enterprise status has been an important factor in its ability to continually access the debt capital markets at favorable rates and terms. With both Fannie Mae and Freddie Mac still operating under conservatorship, housingrelated government-sponsored enterprise status and reform continues to be a topic of debate by Congress and the U.S. Administration. While the status and reform debate has not, to date, specifically related to the System, a potential risk exists that the System, as a government-sponsored enterprise, may directly or indirectly be impacted by any changes in status or reform of housing-related government-sponsored enterprises. The System cannot predict whether or when legislative or regulatory initiatives may commence that, if successful, could negatively affect the status of the System as a government-sponsored enterprise or how the System operates. All of which could have a material and adverse effect on the System's business, operating results, financial condition, or capital levels. Any change in the System's status as a government-sponsored enterprise or the general perception by investors of government-sponsored enterprise status could have a significant adverse impact on the System's ability to issue debt at favorable rates and terms.

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

We compete for debt funding with the U.S. Treasury, Fannie Mae, Freddie Mac, the Federal Home Loan Banks, other federal government-sponsored enterprises, foreign government sponsored entities and other highly rated issuers. Access and the cost of debt funding can vary with changes in economic, financial market and regulatory environments. In addition, any negative change in the perception of governmentsponsored enterprise status may result in increased debt funding costs or reduce issuance access for us and other government-sponsored enterprises. Increased debt issuance by highly rated institutions may result in a higher cost to finance our business, which could negatively affect our financial results. An inability to issue Systemwide Debt Securities at market rates in amounts sufficient to meet our obligations and fund our business activities could have an adverse effect on our liquidity, financial condition and results of operations.

A decrease in our credit rating or the U.S. government's credit rating could have an adverse effect on our ability to issue Systemwide Debt Securities at favorable rates and terms.

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

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

Risks Related to Laws, Regulations and Policies

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

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

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

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

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

Certain System borrowers benefit from U.S.

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

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

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

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

The Banks and Associations are subject to the supervision of, and regulation by, the Farm Credit Administration, including with respect to complying with certain capital and other requirements. Compliance with capital and other requirements may limit the System's business activities and could adversely affect its financial performance. (See "Farm Credit Administration Capital Requirements" beginning on page 88 of this Annual Information Statement for a discussion on capital requirements.)

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

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

Risks Related to our Business and the Banking Industry in General

The financial services industry is highly competitive.

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

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

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

Risks Related to Operational Matters

A failure in our operational systems or infrastructure could impair our liquidity, disrupt our business, damage our reputation and cause losses adversely affecting our financial results.

Shortcomings or failures in our internal processes, people or systems could lead to impairment of our liquidity, financial loss, disruption of our business, liability to customers, legislative or regulatory intervention or reputational damage. For example, our operations rely on the secure processing, storage and transmission of confidential and other information in our computer systems and networks. Any failure of our operational systems or infrastructure could impact our ability to serve our customers, which could adversely affect the System's results of operations and our reputation.

System institutions face cybersecurity risks that could result in the disruption of operations or the disclosure of confidential information, adversely affect our business or reputation and create significant legal and financial exposure.

Information security risks for financial institutions, such as the Banks and Associations, have significantly increased in recent years and, from time to time, we have been and will likely continue to be the target of attempted cyberattacks and other information security breaches. In addition, since the beginning of the COVID-19 pandemic, there has been an increase in cyberattacks and other information security breaches on businesses and individuals. To date, System institutions have not experienced any material losses relating to cyberattacks or other information security breaches, but could suffer such losses in the future. If one or more of such events occur, this potentially could jeopardize confidential and other information, including nonpublic personal information and sensitive business data, processed and stored in, and transmitted through, a Bank or Association's computer systems and networks, or otherwise cause interruptions or malfunctions in the Bank or Association's operations or the operations of our customers or counterparties. This could result in significant losses, reputational damage, litigation, regulatory fines or penalties, increased costs associated with mitigation of damages and remediation or otherwise adversely affect our business, financial condition or results of operations. System institutions maintain insurance coverage relating to cybersecurity risks but may still be required to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities or other

exposures. In addition, System institutions may incur substantial costs to prevent any cyber incidents in the future. Despite having insurance coverage, we may be subject to litigation and financial losses. Additionally, third parties with which we do business may also be sources of cybersecurity or other technological risks.

Privacy and information security laws and regulation changes, and compliance with those changes, may result in cost increases due to system changes and the development of new administrative processes. In addition, System institutions may be required to expend significant additional resources to modify their protective measures and to investigate and remediate vulnerabilities or other exposures arising from operational and security risks.

Failures of critical vendors and other third parties could disrupt our ability to conduct and manage our businesses.

System institutions rely on vendors and other third parties to perform certain critical services. A failure in, or an interruption to, one or more of those services provided could negatively affect their business operations and services provided to System institutions. If one or more of these key external parties were not able to perform their functions for a period of time, at an acceptable service level, or for increased volumes, the System institutions' business operations could be constrained, disrupted, or otherwise negatively affected.

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

The System faces risks from unpredictable catastrophic events.

The System is exposed to the risk that a catastrophic event, such as a terrorist event, cyber attacks or natural disaster, could result in a significant business disruption and an inability to fund the System or process transactions through normal business processes. Any measures taken to mitigate this risk may not be sufficient to respond to the full range of catastrophic events that may occur and any insurance

coverage may not be sufficient for catastrophic events. System borrowers may also be negatively affected by such events, which could have a negative impact on their ability to repay loans. The impact of such events on System borrowers and the overall economy may also adversely affect our financial condition and results of operations.

An unfavorable change in the System's reputation could adversely affect our business and financial results.

The System's business faces increasing public scrutiny related to environmental, social and governance (ESG) activities. We risk damaging our brand and reputation if we fail to act responsibly in a number of areas, such as environmental stewardship, social matters, corporate governance and transparency, either in our operations or when considering ESG factors in our lending process.

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

System institutions' accounting policies and methods are key to how the financial condition and results of operations are reported, and in some cases may require System institutions' managements to make estimates about matters that are inherently uncertain.

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

From time to time, the Financial Accounting Standards Board changes the financial accounting standards that govern the preparation of our financial statements. These changes are beyond our control and can be difficult to predict and could impact how the System reports its financial condition and results of operations.

System institutions could be required to apply a new or revised accounting standard retrospectively, which may result in the revision of prior period financial statements by material amounts. The implementation of new or revised standards also could result in a change to a Bank's or Association's capital position and subject it to increased oversight by the Farm Credit Administration or limit its ability to participate in the issuance of Systemwide Debt Securities. See "Federal Regulation and Supervision of the Farm Credit System — Farm Credit Administration Regulations — Bank Collateral Requirements" and "- Capital Adequacy" and "Description Systemwide of Debt Securities — Repayment Protections — Agreements Among Certain System Institutions."

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

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

Also, because System institutions are not commonly owned or controlled, each System institution is responsible for its own risk management.

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

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

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

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

The structure of the System, as a federally chartered network of interdependent, cooperatively owned lending institutions, may present challenges to timely financial reporting and the assessment of internal control over financial reporting. Our decentralized reporting structure impacts how the Banks and Associations meet their regulatory disclosure obligations including, together with the

Funding Corporation, the responsibility to produce the System's combined financial statements and to assure that there are adequate disclosure controls and procedures and internal control over financial reporting in connection with such production. To facilitate compliance with these regulatory mandates, the Banks and Associations have agreed to disclosure policies and procedures. Because no single System institution has the corporate or direct regulatory authority to compel any other System institution to disclose information or to establish and maintain disclosure controls and procedures or internal control over financial reporting, production of the System's combined financial statements and the establishment of adequate controls is dependent on System institutions themselves satisfying their regulatory obligations and the Banks' and Associations' compliance with the agreed upon disclosure policies and procedures. Failure by any System institution to provide required information for financial reporting, or to have adequate disclosure controls or procedures or internal control over financial reporting, as required by regulation or the disclosure policies and procedures, may delay the timely publication of the System's combined financial statements.

System institutions' ability to attract and retain qualified employees is critical to the institutions' success, and failure to do so could adversely affect its results of operations and competitive position.

System institutions' success depends on the ability to recruit and retain key executive officers and other skilled professional employees. System institutions compete against other financial institutions for highly skilled executive officers and professional employees. Many of these financial institutions offer wage and benefit packages that exceed our wage and benefit packages. As a result, in the future, System institutions may have to significantly increase wages and benefits in order to attract and retain qualified personnel. Also, the System institutions' ability to attract and retain employees could be impacted by the pandemic and elevated levels of inflation, including changing workforce concerns, expectations, practices and preferences (including remote work), and increasing labor shortages and competition for labor, which could increase labor cost. The inability to attract and retain an appropriately qualified workforce could result in operational failures that could adversely affect the financial condition and results of operations and internal control over financial reporting.

Other Risks to the System's Business

Transition away from the use of the London InterBank Offered Rate (LIBOR) could adversely affect System institutions' operations and cash flows and the value of certain Systemwide Debt Securities, as well as System institutions' loans, preferred stock, investments and derivatives, and, in turn, adversely affect System institutions' results of operations, financial condition and liquidity.

Prior to December 31, 2021, System institutions routinely engaged in transactions involving certain Systemwide Debt Securities, loans, preferred stock, investments and derivatives that reference LIBOR or are directly or indirectly indexed to LIBOR, and which may mature after LIBOR is no longer available. Accordingly, uncertainty relating to the LIBOR calculation process in the interim, the valuation of using LIBOR alternatives, and other economic consequences from the phasing out of LIBOR may adversely affect the System institutions' results of operations, financial condition and liquidity.

Regulators in the United States and the United Kingdom have made it clear that LIBOR will be discontinued or declared non-representative and that, potentially, entities that System institutions transact with will be prohibited from using LIBOR, including U.S. dollar LIBOR that will be discontinued as of December 31, 2021 as well as, except in very limited circumstances, those tenors of U.S. dollar LIBOR that will be discontinued or declared non-representative after June 30, 2023. See the discussion at Future of LIBOR under Management's Discussion and Analysis of Financial Condition and Results of Operations.

Continuing uncertainty regarding the financial impact of the transition from using U.S. dollar LIBOR to SOFR-based rates or other rates, the continued development and acceptance of SOFR and other alternative reference rates, or other measures to address the transition may adversely affect the value of LIBOR-based instruments, including certain of the financial instruments that reference LIBOR issued or held by System institutions. As of December 31, 2021, System institutions are not using LIBOR to make new loans or issue preferred stock or Systemwide Debt Securities, nor use new derivative transactions, except as set forth below. System institutions also are no longer purchasing investments that reference LIBOR. Financial instruments entered into or issued by System institutions prior to December 31, 2021, may continue to use LIBOR as an interest rate or for other purposes. In addition, LIBOR may be used in derivative transactions intended to hedge these preexisting

LIBOR exposures. System institutions' exposure arises from loans made to customers, investment securities purchased, preferred stock issued and prior derivative transactions, as well as Systemwide Debt Securities issued by the Funding Corporation on the Banks' behalf prior to December 31, 2021. Accordingly, reform of, or the replacement or disappearance of, LIBOR and other "benchmarks" may adversely affect the rates of interest System institutions pay on and the value of and return on such financial instruments (including changes to their value and liquidity, return, and usefulness for their intended purpose). Moreover, since LIBOR is being replaced, System institutions are in the process of taking steps to restructure their debt, loans and derivatives, which could adversely affect our operations. Alternative reference rates that will replace LIBOR, including SOFR for U.S. dollar transactions, may not yield the same or similar economic results as LIBOR over the lives of the financial instruments.

The likelihood that SOFR based rates will be the predominant fall back rate to LIBOR gained momentum from the passage of the federal Adjustable Interest Rate (LIBOR) Act (LIBOR Act) that was signed into law on March 15, 2022. The federal legislation provides a statutory fallback mechanism on a nationwide basis to replace U.S. dollar LIBOR with a benchmark rate, selected by the Federal Reserve Board and based on SOFR, for certain contracts that reference U.S. dollar LIBOR and contain no or insufficient fallback provisions. On December 16, 2022, the Federal Reserve Board adopted a final rule implementing certain provisions of the LIBOR Act (Regulation ZZ). Regulation ZZ specifies that on the LIBOR replacement date, which is the first London banking day after June 30, 2023, the Federal Reserve Board selected benchmark replacement, based on SOFR and including any tenor spread adjustment as provided by Regulation ZZ, will replace references to overnight, one-month, three-month, six-month and 12month LIBOR in certain contracts that do not mature before the LIBOR replacement date and that do not fallback language. contain adequate substantially all contracts, including Systemwide Debt Securities and loans made by System institutions, have adequate fallbacks to replace LIBOR, the LIBOR Act and Regulation ZZ could apply to certain Systemwide Debt Securities and System institution investments, loans and preferred stock that reference LIBOR and have no or inadequate fallback provisions.

While SOFR-based rates have been mandated for LIBOR-based transactions that do not have adequate fallbacks in place under the time and other

requirements imposed by the LIBOR Act and Regulation ZZ, and the predominant alternative rate being used by System institutions to replace LIBOR in securities it has issued or loans that System institutions have made that currently reference LIBOR, there can be no guarantee that SOFR in the future will become the dominant alternative to U.S. dollar LIBOR or that SOFR will be widely used and other alternatives may or may not be developed and adopted with additional consequences.

As a result of the cessation of the publication of LIBOR and its non-representativeness, System institutions have begun utilizing other benchmark interest rates, predominantly SOFR, as the basis for fallback rates to U.S. dollar LIBOR in the existing transactions noted above and for new use in Systemwide Debt Securities, and System institutions' loans, derivatives and preferred stock. The System is using SOFR as an alternative to LIBOR for Systemwide Debt Securities and derivatives. The System is also using SOFR and considering other alternative rates for loan transactions on a going forward basis. While each System institution is required by the Farm Credit Administration to have a transition plan, the transition from LIBOR to SOFR or other alternative rates is complex and includes the development of term and credit adjustments to minimize, to the extent possible, discrepancies between LIBOR and SOFR or other alternative rates. Accordingly, the transition may introduce additional basis risk for market participants, including when an alternative index, e.g., SOFR, exists in conjunction with LIBOR. In addition, we cannot anticipate how long it will take to complete the implementation of the systems and processes necessary to replace the use of LIBOR with SOFR or other benchmark replacements, which may delay and contribute to uncertainty and volatility surrounding the LIBOR transition.

There remains uncertainty as to how well the financial services industry will be able to fully transition away from U.S. dollar LIBOR under the timeline currently expected by regulators. This uncertainty could result in disputes and litigation with investors, counterparties and borrowers surrounding the use of SOFR or other alternative reference rates in financial instruments as a replacement for LIBOR. The foregoing could cause disparate outcomes based on particular contractual terms, the ability to amend those terms, the market or product type, legal or regulatory jurisdiction, and a host of other factors. There can be no assurance that legislative or regulatory actions will completely dictate what happens if LIBOR ceases or is no longer viable, or what those actions might be.

OTHER BUSINESS MATTERS

Related Party Transactions

In the ordinary course of business, the Banks and Associations may enter into loan transactions with their officers and directors and non-System organizations with which such persons may be associated. These loans are subject to special approval requirements contained in Farm Credit Administration regulations and are, in the view of the System institutions' management, made on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with unrelated borrowers. As of December 31, 2022 and 2021, all related party loans were made in accordance with established policies and the same terms as those prevailing at the time for comparable transactions.

Total loans outstanding to related parties were \$3.7 billion and \$3.2 billion at December 31, 2022 and 2021. During 2022 and 2021, \$7.0 billion and \$4.2 billion of new loans were made to related persons and repayments totaled \$6.5 billion and \$4.1 billion. In the opinions of Bank and Association managements, all such loans outstanding at December 31, 2022 and 2021 did not involve more than a normal risk of collectability, except for a loan to one Association director totaling \$113 thousand in 2022 and loans to one Association director totaling \$2.4 million in 2021.

Legal Proceedings

On February 2, 2022, a complaint was filed in the United States District Court for the Southern District of New York by purported beneficial owners of AgriBank's 9.125% subordinated notes originally scheduled to mature in 2019 ("Subordinated Notes"). AgriBank redeemed the Subordinated Notes at par plus accrued interest on July 15, 2016 due to the occurrence of a Regulatory Event (as defined under the terms of the Subordinated Notes). The plaintiffs 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 Subordinated Notes. On June 20, 2022, AgriBank entered into a settlement agreement with the Plaintiffs on all claims and the case was dismissed.

At December 31, 2022, various other lawsuits were pending or threatened against System institutions. Each System institution to which a pending or threatened lawsuit relates intends to vigorously defend against such action. 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.

Changes in and Disagreements with the Independent Registered Public Accounting Firm of the Combined Financial Statements of the Farm Credit System

During the fiscal year ended December 31, 2022 and through the date of this annual information statement, there have been no changes in or disagreements with the independent registered public accounting firm of the combined financial statements of the System.

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

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

- · Basis of Presentation
- Forward-Looking Information
- · Critical Accounting Policies
- · 2022 Overview
- · Agricultural Outlook
- System Organizational and Structural Matters
- Results of Operations
- Fourth Quarter 2022 Results of Operations
- Risk Management
- · Regulatory Matters
- Recently Adopted or Issued Accounting Pronouncements

Basis of Presentation

The System is a federally chartered network of interdependent, borrower-owned lending institutions (Banks and Associations) and affiliated service organizations. Through the three Farm Credit Banks, one Agricultural Credit Bank and 61 Associations (as of January 1, 2023), the System supports rural communities and agriculture with reliable, consistent credit and financial services nationwide to farmers, ranchers, producers or harvesters of aquatic products, their cooperatives and farm-related businesses. System institutions also make loans to finance the processing and marketing activities of these borrowers and make loans or provide credit enhancements to other banks to support the export of U.S. agricultural commodities or supplies. In addition, System institutions make loans to rural homeowners, rural infrastructure providers and other eligible borrowers.

The combined financial statements and related financial information contained in this annual information statement present the combined assets, liabilities, capital, income and expenses of the Banks, the Associations, the Federal Farm Credit Banks Funding Corporation and the Farm Credit Insurance Fund, and reflect the investments in and allocated earnings of certain service organizations owned by the Banks or Associations. All significant intra-System transactions and balances have been eliminated in combination. (See Note 1 to the accompanying

combined financial statements for additional information on organization, operations and principles of combination and the Supplemental Combining Information on pages F-68 through F-75.) This annual information statement has been prepared under the oversight of the System Audit Committee.

The System's 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 annual information statement. While this annual information statement reports on the combined financial condition and results of operations of the Banks, Associations and other System entities specified above, only the Banks are jointly and severally liable for the payments on Systemwide Debt Securities. Each Bank is primarily liable for the payment of principal and interest on Systemwide Debt Securities issued to fund its operations. (See Notes 12 and 21 to the accompanying combined financial statements for information about the capital of the Banks and the Supplemental Combining Information on pages F-68 through F-70 for information related to the financial condition and results of operations 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 7 to the accompanying combined financial statements.)

Forward-Looking Information

Certain sections of this annual information forward-looking statement contain statements concerning financial information and statements about future financial performance and economic events, plans and objectives and assumptions underlying these projections and statements. These projections and statements are not based on historical facts but instead represent current assumptions and expectations regarding the System's business, the economy and other future conditions. However, actual results and developments may differ materially from these expectations and forecasts due to a number of risks and uncertainties, many of which are beyond the System's 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, legal, regulatory, financial market and economic conditions and/or developments in the United States and abroad, including the war in Ukraine, the elevated level of inflation, supply chain disruptions, labor shortages and potential changes to global trade patterns;
- economic fluctuations in the agricultural, rural infrastructure, international, and farm-related business sectors;
- global and domestic adverse weather-related events, food safety, disease, pandemics and other unfavorable conditions that periodically occur that impact agricultural productivity and income;
- climate change and/or measures to address climate change;
- uncertainties and risks associated with any ongoing impact of the COVID-19 pandemic, including its impact on the System's business, results of operations and financial condition including our various regulatory ratios such as capital and liquidity;
- 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 System, 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 System institutions lending activities;
- the replacement of LIBOR and the implementation of Secured Overnight Financing Rate (SOFR) and a changing interest rate environment;
- changes in assumptions for determining the allowance for loan losses, other-than-

temporary impairment and fair value measurements; and

outlooks for agricultural conditions.

Critical Accounting Policies

The System's financial statements are reported in conformity with generally accepted accounting principles in the United States of America. The significant accounting policies are critical to the understanding of the System's results of operations and financial condition because some accounting policies require complex or subjective judgments and estimates that may affect the reported amounts of certain assets or liabilities. System institutions employ judgment in making estimates in consideration of historical experience, currently available information and various other assumptions that are believed to be reasonable under the circumstances. Actual results could differ from the estimates and assumptions, and any such differences could be material to the System's combined financial statements. These policies are considered to be critical because managements of System institutions have to make judgments about matters that are inherently uncertain. For a complete discussion of the System's significant accounting policies, see Note 2 to the accompanying combined financial statements. The following is a summary of certain of the most significant critical accounting policies.

> • Allowance for loan losses — The allowance for loan losses represents the aggregate of each System entity's individual evaluation of its allowance for loan losses requirements. The allowance for loan losses is maintained at a level considered adequate to provide for probable losses existing and inherent in each entity's loan portfolio. The allowance for loan losses is increased through provisions for loan losses and loan recoveries and is decreased through loan loss reversals and loan chargeoffs. Each Bank and Association determines its allowance for loan losses based on periodic evaluation of its loan portfolio in which numerous factors are considered, including economic conditions, collateral values, loan portfolio composition, borrowers' financial conditions and prior loan loss experience. The allowance for loan losses encompasses various judgments, evaluations and appraisals with respect to the System's loans and their underlying security that, by their nature, contain elements of uncertainty imprecision. Management of each System entity also applies judgment to adjust various

loss factors, taking into consideration model imprecision, external factors and economic events that have not yet been reflected in the loss factors.

The allowance for loan losses includes components for loans individually evaluated for impairment, loans collectively evaluated for impairment and loans acquired with deteriorated credit quality.

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

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

On January 1, 2023, the System adopted the accounting pronouncement - "Measurement of Credit Losses on Financial Instruments." See Note 2 to the accompanying combined financial statements for additional information.

 Valuation methodologies — Managements of the System institutions use market prices for determining fair values for certain assets and liabilities for which an observable liquid market exists. However, when no liquid market exists, managements of the System apply various valuation institutions methodologies to assets and liabilities that often involve a significant degree of judgment. Examples of these items include impaired loans and investments, pension and other postretirement benefit obligations, and certain derivative and other financial instruments. These valuations require the use of various including, assumptions, among discount rates, rates of return on assets,

repayment rates, cash flows, default rates, costs of servicing and liquidation values. The use of different assumptions could produce significantly different results, which could have material positive or negative effects on the System's results of operations.

• Pensions — The Banks and substantially all defined benefit Associations sponsor retirement plans, all of which are closed to participants. plans These noncontributory and benefits are based on salary and years of service. In addition, the Banks and Associations sponsor defined contribution retirement savings plans. Pension expense for all plans is recorded as part of salaries and employee benefits and other expense. Pension expense is determined by using independent third party actuarial valuations based on certain assumptions, including expected long-term rates of return on plan assets, discount rates and mortality tables. The expected return on plan assets for the year is calculated based on the composition of assets at the beginning of the year and the expected long-term rate of return on that portfolio of assets. The discount rate is used to determine the present value of future benefit obligations.

2022 Overview

Business Outlook

During 2022, the U.S. and global economies weakened with risks posed by persistent inflation, including increased energy and food prices, rising interest rates, the consequences of the war in Ukraine, and lingering effects of the COVID-19 pandemic.

These conditions are driving significant uncertainty about the future economic environment, which could lead to a recession and impact our borrowers and our operating results.

General

The System's combined net income was \$7.268 billion for 2022, \$6.796 billion for 2021 and \$6.002 billion for 2020. The increase in net income for 2022 primarily resulted from increases in net interest income of \$778 million and noninterest income of \$209 million, partially offset by an increase in noninterest expense of \$318 million and a provision for loan losses of \$40 million, as compared with a loan loss reversal of \$152 million for 2021. The increase in net interest income for 2022 resulted primarily from a higher level of average earning assets, driven largely

by increased loan volume and, to a lesser extent, growth in investments held for liquidity. Average earning assets grew \$44.340 billion or 11.2% to \$440.995 billion for 2022, as compared with the prior year.

The System's loan portfolio increased \$29.337 billion or 8.5% to \$373.266 billion at 2022, compared December 31, as with \$343.929 billion at December 31, 2021, primarily due to growth in real estate mortgage, process and marketing, rural infrastructure, production and intermediate-term and agricultural export finance loans, offset in part by a decrease in loans to cooperatives.

The System's nonperforming assets totaled \$1.755 billion at December 31, 2022, as compared with \$1.578 billion at December 31, 2021, representing 0.47% and 0.46% of total loans and other property owned for the corresponding periods. The System's capital to assets ratio was 14.4% at December 31, 2022, as compared with 15.9% at December 31, 2021.

Climate Change

On January 12, 2023, the U.S. National Oceanic and Atmospheric Administration (NOAA) reported that 2022 was the sixth-warmest year on record, which dates back to 1880. In February 2023, NOAA reported that 2023 started off on a warm note with the nation seeing its sixth-warmest January on record. This month of record warmth was marked by a series of atmospheric rivers that brought historic rainfall and snow to the West, as numerous tornadoes struck other parts of the country. Incidents of extreme weather events are projected to increase as a result of climate change according to NOAA.

Agricultural production has been and continues to be vulnerable to weather events and climate change. The USDA has recognized that the changing climate presents threats to U.S. and global agricultural production, forest resources and rural communities. The impact of climate change including its effect on weather is, and will continue to be a challenge to agricultural producers. Among the risks to agriculture of climate change are:

- rising average temperatures,
- more frequent and severe storms,
- · more wildfires, and
- extremes in flooding and droughts.

While these challenges could increase the operating costs for agricultural producers, climate

change could also result in expanded opportunities, particularly in the area of renewable fuels generated from crop production. For example, potential expansion of ethanol and renewable diesel production to meet shifting market preferences for renewable fuels in automobile and aviation could have a positive impact for crop producers.

U.S. agricultural producers also will need to navigate changing industry dynamics from numerous perspectives, including trade, government policy, consumer preferences and weather. Producers regularly adopt new technologies, agronomic practices and financial strategies in response to evolving trends to ensure their competitiveness. Climate change mitigation and climate resilient practices are strategies, among others, that help producers faced with climate challenges.

Climate and Weather-Related Conditions

During 2022, 18 separate weather and climate disasters occurred in the United States with losses exceeding \$1 billion for each event, according to NOAA. These events included one drought, one flood, eleven severe storms, three tropical cyclones, one wildfire and one winter storm, each of which impacted agriculture and rural America. According to the U.S. Drought Monitor, as of December 31, 2022, approximately 50% of the United States was experiencing moderate to exceptional drought, concentrated mainly in the West and High Plains regions, as compared with approximately 55% concentrated in the West, High Plains and South regions for the same period of the prior year. This multi-year drought resulted in water stress/shortages across many locations in 2022 as some major reservoirs dropped to their lowest levels on record.

The January 31, 2023 U.S. Drought Monitor reported 43% of the United States was experiencing moderate to exceptional drought with improvements across large parts of the West and Midwest.

While the assessment of the full impact on System borrowers is ongoing, these events have not and are not expected to have a significant adverse impact on the System's overall financial condition and results of operations as such risks are significantly mitigated by crop and property insurance.

Agricultural Outlook

Overview

Production agriculture is a cyclical business that is heavily influenced by commodity prices, weather, government policies (including, among other things, tax, trade, immigration, crop insurance and periodic aid), interest rates, input costs and various other factors that affect supply and demand. The System utilizes the 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 occur subsequent to its issuance. References to USDA information in this section refer to U.S. agricultural market data and not System data.

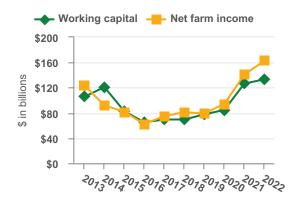
Farm Sector Income & Finances

The USDA's February 2023 forecast estimates net farm income (income after expenses from production in the current year; a broader measure of profits) for 2022 at \$162.7 billion, a \$21.8 billion increase from 2021 and \$70.0 billion above the 10year average. The forecasted increase in net farm income for 2022, compared with 2021, is primarily due to increases in cash receipts for animals and animal products of \$61.9 billion to \$257.7 billion and increases in crop receipts of \$44.7 billion to \$285.7 billion, partially offset by a decrease of \$10.3 billion to \$15.6 billion in direct government payments and an increase in cash expenses of \$65.7 billion to \$411.1 billion. If realized, 2022 net farm income (in real dollars of \$167.3 billion) would be the highest level since 1973 when net farm income was \$179.0 billion adjusted for real dollars.

The USDA's outlook projects net farm income for 2023 at \$136.9 billion, a \$25.8 billion or 15.9% decrease from 2022, but \$44.2 billion above the 10year average. The forecasted decrease in net farm income for 2023 is primarily due to expected decreases in cash receipts for animals and animal products of \$14.7 billion, crop receipts of \$8.8 billion and direct government payments of \$5.4 billion as well as an increase in cash expenses of \$13.7 billion. The decrease in cash receipts for animals and animal products are predicted for milk, hogs, broilers and eggs, while cattle receipts are forecasted to increase. The expected decline in cash receipts for crops is primarily driven by decreases in corn, soybeans, vegetables and melon receipts, while receipts for wheat are expected to increase. Most production expenses are expected to remain elevated, while feed expenses are projected to fall in 2023 after rising significantly in 2022. Fertilizer-lime-soil conditioner expenses are expected to have peaked in 2022 but remain high in 2023. In addition, interest and labor are forecasted to increase, while fuel and oil expenses are projected to decline.

Working capital (which is defined as cash and cash convertible assets minus liabilities due to creditors within 12 months) is forecasted to increase 5.4% in 2022 to \$133.4 billion from \$126.5 billion in 2021. Although working capital increased, it remained far below the peak of \$165 billion in 2012.

The following chart illustrates USDA data on working capital and net farm income for the past ten years:

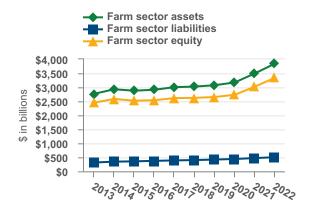


The value of farm real estate accounted for 83% of the total value of the U.S. farm sector assets for 2022 according to the USDA in its February 2023 forecast. Because real estate is such a significant component of the balance sheet of U.S. farms, the value of farm real estate is an important measure of the farm sector's financial performance. Changes in farmland values also affect the financial well-being of agricultural producers because farm real estate serves as the principal source of collateral for farm loans.

The USDA's forecast projects (in nominal dollars) that farm sector equity, the difference between farm sector assets and debt, will rise 10.6% in 2022. Farm real estate value is expected to increase 10.1% and non-real estate farm assets are expected to increase 9.7%, while farm sector debt is forecasted to increase 6.3% in 2022. Farm real estate debt as a share of total debt has been rising since 2014 and is expected to account for 69.3% of total farm debt in 2022.

The USDA is forecasting farm sector solvency ratios to improve in 2022 to 15.1% for the debt-to-equity ratio and 13.1% for the debt-to-asset ratio, which are well below the peak of 28.5% and 22.2% in 1985.

The following chart illustrates USDA data on the farm sector balance sheet for the past ten years:

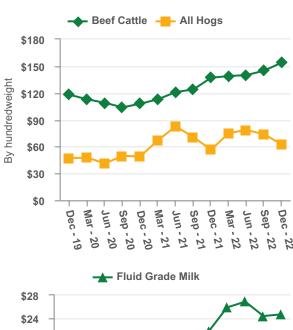


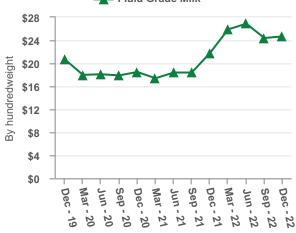
Commodity Review

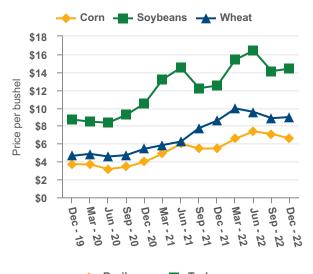
Expected agricultural commodity prices can influence production decisions of farmers and ranchers on planted/harvested acreage of crops or inventory of livestock and thus affect the supply of agricultural commodities. Actual production levels are sensitive to weather conditions that may impact production yields. Livestock and dairy profitability are influenced by crop prices as feed is a significant input to animal agriculture.

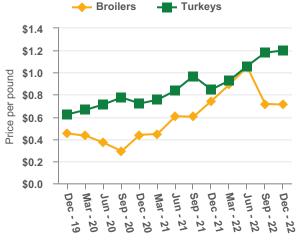
Global economic conditions, government actions (including tariffs, war and response to disease) and weather volatility in key agricultural production regions can influence export and import flows of agricultural products between countries. U.S. exports and imports may periodically shift to reflect short-term disturbances to trade patterns and long-term trends in world population demographics. Also impacting U.S. agricultural trade are global agricultural and commodity supplies and prices, changes in the value of the U.S. dollar and the government support for agriculture.

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 December 31, 2019 to December 31, 2022:









Market Share

The USDA estimated, in February 2023, that the System's market share of farm business debt (defined as debt incurred by those involved in on-farm agricultural production) increased to 45.3% at December 31, 2021 (the latest available data), as compared with 44.4% at December 31, 2020.

System Organizational and Structural Matters

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

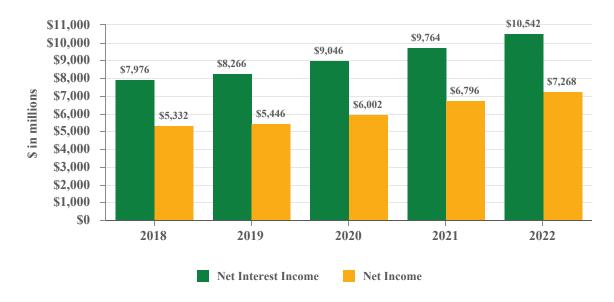
	Banks	Associations	Total
Entities at January 1, 2018	4	69	73
Net changes through January 1, 2022		(4)	(4)
Entities at January 1, 2022	4	65	69
Net changes through January 1, 2023		(4)_	(4)
Entities at January 1, 2023	4	61	65

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

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

Results of Operations

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



Earnings Analysis

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

	2022 vs. 2021 2021		21 vs. 2020	
	(in millions)			
Increase (decrease) in net income due to:				
Interest income	\$	4,175	\$	(566)
Interest expense		(3,397)		1,284
Net interest income		778		718
Provision for loan losses/loan loss reversal		(192)		259
Noninterest income		209		2
Noninterest expense		(318)		(196)
Provision for income taxes		(5)		11
Net change in net income	\$	472	\$	794

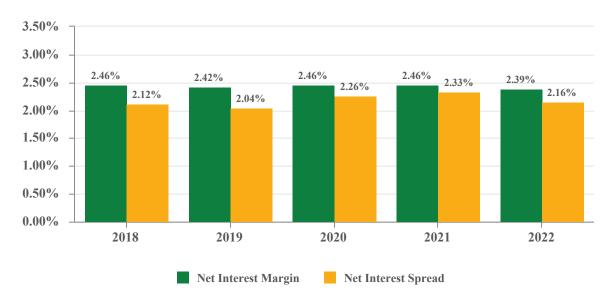
Net Interest Income

Net interest income was \$10.542 billion in 2022, \$9.764 billion in 2021 and \$9.046 billion in 2020. Net interest income is the difference between interest income and interest expense. Net interest income is the principal source of earnings for the System and is impacted by volume, rates on interest-bearing assets and liabilities and funding from noninterest-bearing sources (principally capital). The effects of changes in

volume and interest rates on net interest income over the past three years are presented in the following table. The table distinguishes between the changes in interest income and interest expense related to average outstanding balances and the levels of average interest rates. The change in the benefit derived from funding earning assets with noninterest-bearing sources (principally capital) is reflected solely as an increase in volume.

	2022 vs. 2021 Increase (decrease) due to						2021 vs. 2020 Increase (decrease) due to					
	V	olume		Rate	Total		Volume		Rate		Total	
						(in mi	llion	s)				
Interest income:												
Loans	\$	1,325	\$	2,108	\$	3,433	\$	1,054	\$	(1,327)	\$	(273)
Investments		122	_	620		742		19	_	(312)		(293)
Total interest income		1,447		2,728		4,175		1,073		(1,639)		(566)
Interest expense:												
Systemwide Debt Securities and other		400		2,997		3,397		297		(1,581)		(1,284)
Changes in net interest income	\$	1,047	\$	(269)	\$	778	\$	776	\$	(58)	\$	718

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



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

		2022			2021		2020		
	Average			Average			Average		
	Balance	Interest	Rate	Balance	Interest	Rate	Balance	Interest	Rate
A4-				(\$	in millions)				
Assets									
Real estate mortgage loans	\$168,558	\$ 7,295	4.33%	\$154,361	\$ 6,309	4.09%	\$137,236	\$ 6,191	4.51%
Production and intermediate-term loans	58,703	2,581	4.40	55,829	1,940	3.47	54,926	2,160	3.93
Agribusiness loans	71,479	2,979	4.17	59,579	1,781	2.99	52,629	1,784	3.39
Rural infrastructure loans	39,788	1,618	4.07	35,728	1,137	3.18	32,610	1,159	3.55
Agricultural export finance loans	8,491	193	2.27	6,814	76	1.12	6,894	134	1.94
Rural residential real estate loans	6,927	265	3.83	6,881	261	3.79	7,166	302	4.21
Lease receivables	4,005	146	3.65	4,175	137	3.28	4,038	151	3.74
Loans to other financing institutions	1,033	22	2.13	910	14	1.54	854	16	1.87
Nonaccrual loans	1,183	78	6.59	1,386	89	6.42	1,816	120	6.61
Total loans	360,167	15,177	4.21	325,663	11,744	3.61	298,169	12,017	4.03
Federal funds sold, investments and other interest-earning assets	80,828	1,539	1.90	70,992	797	1.12	69,721	1,090	1.56
Total earning assets	440,995	16,716	3.79	396,655	12,541	3.16	367,890	13,107	3.56
Allowance for loan losses	(1,609)			(1,767)			(1,845)		
Other noninterest-earning assets	16,463			15,507			16,675		
Total assets	\$455,849			\$410,395			\$382,720		
Liabilities and Capital									
Systemwide bonds and medium-term notes	\$348,585	\$ 5,702	1.64%	\$309,837	\$ 2,718	0.88%	\$282,166	\$ 3,839	1.36%
Systemwide discount notes	23,514	351	1.49	20,568	25	0.12	25,586	199	0.78
Other interest-bearing liabilities	6,983	121	1.73	5,251	34	0.65	3,575	23	0.64
Total interest-bearing liabilities	379,082	6,174	1.63	335,656	2,777	0.83	311,327	4,061	1.30
Noninterest-bearing liabilities	7,222			6,340			6,549		
Capital	69,545			68,399			64,844		
Total liabilities and capital	\$455,849			\$410,395			\$382,720		
Net interest spread(1)			2.16			2.33			2.26
Impact of noninterest-bearing sources			0.23			0.13			0.20
Net interest income and margin(2)		\$ 10,542	2.39%		\$ 9,764	2.46%		\$ 9,046	2.46%

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

Earning assets are funded with both interestbearing and noninterest-bearing sources (principally capital). Variations in average volume and the spreads earned on interest-bearing funds and capital determine changes in net interest income.

As illustrated in the preceding tables, the increase in net interest income in 2022, as compared with 2021, primarily resulted from a higher level of average earning assets, driven largely by increased

loan volume and, to a lesser extent, growth in investments held for liquidity. Average earning assets grew \$44.340 billion or 11.2% to \$440.995 billion for 2022, as compared with the prior year.

The net interest margin decreased by seven basis points to 2.39% for 2022, as compared with 2.46% for 2021. Net interest spread decreased 17 basis points to 2.16% for 2022, as compared with 2.33% for 2021, primarily due to higher debt costs in the rising interest

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

rate environment as the opportunities to call and refinance debt declined and loan refinancings diminished. Called debt totaled \$2 billion during 2022, as compared with \$36 billion during 2021. Also impacting the decline in the net interest spread was the higher levels of investments held for liquidity, which have lower spreads commensurate with lower risk. These factors along with competitive market pressures resulted in spread compression. Partially offsetting the decrease in net interest spread was a ten basis point increase in income earned on earning assets funded by noninterest-bearing sources.

Interest income recognized on cash-basis nonaccrual loans was \$78 million for 2022, \$89 million for 2021 and \$120 million for 2020. Interest income is recognized on cash-basis nonaccrual loans only as interest payments are received and certain other conditions are met. Nonaccrual loans are returned to accrual status if all contractual principal and interest is current, the borrower is fully expected to fulfill the contractual repayments terms and after remaining current as to principal and interest for a sustained period or have a recent repayment pattern demonstrating future repayment capacity to make ontime payments.

The increase in net interest income in 2021, as compared with 2020, resulted primarily from an increase in the net interest spread and a higher level of average earning assets. Average earning assets grew \$28.765 billion or 7.8% to \$396.655 billion for 2021. The net interest margin was unchanged at 2.46% for both 2021 and 2020. Positively impacting the net interest margin was an increase in the net interest spread of seven basis points to 2.33% for 2021, as compared with net interest spread of 2.26% for 2020. Offsetting the increase in net interest spread was a seven basis point decrease in income earned on earning assets funded by noninterest-bearing sources.

Provision for Loan Losses

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

The System recognized a provision for loan losses of \$40 million for 2022, as compared with a loan loss reversal of \$152 million for 2021 and a provision for loan losses of \$107 million in 2020. Provisions for loan losses of \$174 million were recorded by certain System institutions in 2022 primarily due to a higher level of overall agribusiness

lending activity and specific reserves associated with a limited number of customers in the agribusiness and rural power sectors. Partially offsetting these provisions for loan losses were loan loss reversals of \$134 million recorded by other System institutions primarily from credit quality improvements and the reversal of specific reserves associated with a limited number of customers.

The 2021 loan loss reversal primarily reflected credit quality improvements and the release of general reserves that were added in 2020 to address potential losses from the COVID-19 pandemic that did not occur. Partially offsetting the loan loss reversal was a provision for loan losses in the agribusiness sector due to increased lending activity and a modest deterioration in credit quality in this sector as well as the adverse impact of a severe weather event in Texas during the first quarter of 2021 affecting a limited number of rural power customers.

Noninterest Income

Noninterest income for each of the three years in the period ended December 31, 2022 is summarized in the following table:

For the Veer Ended

	December 31,							
	202	22	2	2021		2020		
			(in n	nillions)			
Loan-related fee income	\$ 3	367	\$	392	\$	368		
Financially-related services income	3	347		308		273		
Mineral income	1	107		66		42		
Income earned on Insurance Fund assets		72		49		65		
Operating lease income		32		31		23		
Gains (losses) on extinguishment of debt		1		(135)		(141)		
Net (losses) gains on derivative and other transactions		(34)		54		69		
Net gains (losses) on sales of investments and other assets.		4		(28)		20		
Other noninterest income		73		23		39		
Total noninterest income	\$ 9	969	\$	760	\$	758		

Noninterest income increased \$209 or 27.5% in 2022 to \$969 million, as compared with 2021. The increase was primarily due to gains on extinguishment of debt of \$1 million in 2022, as compared with losses on extinguishment of debt of \$135 million in 2021 and increases in other noninterest income of \$50 million, mineral income of \$41 million, financially-related services income of \$39 million and income earned on

Insurance Fund assets of \$23 million. Also, positively impacting noninterest income was a \$4 million net gain on sales of investments and other assets, as compared with a \$28 million net loss for the prior year. Mineral income increased from higher oil prices The increase in financially-related during 2022. services income was due to higher commodity prices and market volatility that drove increased insurance premiums, which resulted in higher commission income. Partially offsetting these increases in noninterest income was a \$34 million net loss on derivative and other transactions, as compared with a \$54 million net gain for the prior year and a decrease in loan-related fee income of \$25 million. The losses on derivatives and other transactions was driven by the change in fair value of non-hedged derivatives.

Noninterest income was relatively unchanged at \$760 million for 2021, as compared with 2020. However, the components had changed. Positively impacting noninterest income for 2021 were increases in financially-related services income of \$35 million, loan-related fee income of \$24 million and mineral income of \$24 million. The increase in financiallyrelated services income resulted from increased insurance coverage by borrowers due to acreage increases and new coverage products as well as increased premiums. Negatively impacting noninterest income for 2021 were net losses on the sales of investments and other assets of \$28 million, as compared to net gains on the sales of investments and other assets of \$20 million in 2020, and decreases in income earned on Insurance Fund assets of \$16 million, net gains on derivative and other transactions of \$15 million and other noninterest income of \$16 million.

Noninterest Expense

Noninterest expense for each of the three years in the period ended December 31, 2022 is summarized below:

	For the Year Ended December 31,							
	2022	2020						
		(in millions))					
Salaries and employee benefits	\$ 2,438	\$ 2,272	\$ 2,162					
Purchased services	347	304	277					
Occupancy and equipment expense	322	302	296					
Other operating expense	931	840	785					
Total operating expense	4,038	3,718	3,520					
Net (gains) losses on other property owned	(1)	1	3					
Total noninterest expense	\$4,037	\$ 3,719	\$ 3,523					

Noninterest expense increased \$318 million or 8.6% to \$4.037 billion for 2022, as compared with 2021, primarily due to increases in salaries and employee benefits, purchased services and other operating expense.

Salaries and employee benefits increased \$166 million or 7.3% in 2022 as a result of annual merit and other pay increases to address inflation and tight labor markets as well as higher staffing levels at certain System institutions. The System employed 16,921 full-time equivalents at December 31, 2022, a 2.3% increase, as compared with 16,539 full-time equivalents at December 31, 2021.

Purchased services increased \$43 million or 14.1% for 2022, as compared with 2021, primarily due to increases in consulting services related to information technology and various other business initiatives.

Other operating expense increased \$91 million or 10.8% for 2022, as compared to 2021, primarily due to increases in travel, training and member relations expenses as restrictions caused by the COVID-19 pandemic were eased and/or lifted, and higher technology expenses.

Noninterest expense increased \$196 million or 5.6% to \$3.719 billion for 2021, as compared with 2020, primarily due to increases in salaries and employee benefits, purchased services and other operating expense.

Salaries and employee benefits increased \$110 million or 5.1% in 2021 as a result of annual merit increases, performance-based compensation and higher staffing levels at certain System institutions. The System employed 16,539 full-time equivalents at December 31, 2021, a 4.3% increase, as compared with 15,855 full-time equivalents at December 31, 2020.

Purchased services increased \$27 million or 9.7% for 2021, as compared with 2020, primarily due to higher contractor and other consulting services related to various technology and business initiatives.

Other operating expense increased \$55 million or 7.0% for 2021, as compared to 2020, primarily due to increases in travel, training and member relations expenses as restrictions caused by the COVID-19 pandemic eased, and higher technology expenses.

Operating expense statistics for each of the three years in the period ended December 31, 2022 are set forth below:

	For the Year Ended December 31,						
	2022	2021	2020				
	(9	in million	s)				
Excess of net interest income over operating expense	\$6,504	\$6,046	\$5,526				
Operating expense as a percentage of net interest income	38.3%	38.1%	38.9%				
Operating expense as a percentage of net interest income and noninterest income	35.1	35.3	35.9				
Operating expense as a percentage of average loans	1.12	1.14	1.18				
Operating expense as a percentage of average earning assets	0.92	0.94	0.96				

Provision for Income Taxes

The System recorded provisions for income taxes of \$166 million for 2022, \$161 million in 2021 and \$172 million in 2020. The System's effective tax rate decreased slightly to 2.2% for 2022 from 2.3% for 2021.

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

Fourth Quarter 2022 Results of Operations

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

	For the Quarter Ended December 31,							
		2022		2021				
		(in mi	llion	s)				
Interest income	\$	5,293	\$	3,195				
Interest expense		(2,587)		(691)				
Net interest income		2,706		2,504				
(Provision for loan losses) loan loss reversal		(49)		10				
Noninterest income		333		189				
Noninterest expense		(1,157)		(1,087)				
Income before income taxes		1,833		1,616				
Provision for income taxes		(14)		(21)				
Net income	\$	1,819	\$	1,595				

Combined net income increased \$224 million or 14.0% to \$1.819 billion for the fourth quarter of 2022, as compared with \$1.595 billion for the fourth quarter of 2021. The increase in net income between these periods resulted from increases in net interest income of \$202 million and noninterest income of \$144 million and a decrease in the provision for income taxes of \$7 million. The increase in net income was partially offset by an increase in noninterest expense of \$70 million and a provision for loan losses of \$49 million in the fourth quarter of 2022, as compared with a loan loss reversal of \$10 million for the same period of the prior year.

Net interest income increased 8.1% to \$2.706 billion for the fourth quarter of 2022, as compared with \$2.504 billion for the prior year period. The increase resulted from a higher level of earning assets. Average earning assets grew \$45.658 billion or 11.2% to \$452.207 billion for the fourth quarter of 2022, as compared with the same period of the prior year.

The net interest margin for the fourth quarter of 2022 decreased to 2.39%, as compared with 2.46% for the same period of the prior year. The net interest margin was impacted by a 31 basis point decrease in the net interest spread to 2.03%, as compared with 2.34% for the fourth quarter of 2021, partially offset by a 24 basis point increase in income earned on earning assets funded by noninterest-bearing sources (primarily capital). The decrease in the net interest spread was primarily due to increasing debt costs in the rising interest rate environment and higher levels

of investments held for liquidity, which have lower spreads commensurate with lower risk.

The System recognized a provision for loan losses of \$49 million for the fourth quarter of 2022, as compared with a loan loss reversal of \$10 million for the same period of the prior year. The provision for loan losses recorded in the fourth quarter of 2022 primarily reflected a higher level of overall agribusiness lending activity.

Noninterest income increased \$144 million or 76.2% to \$333 million for the fourth quarter of 2022, as compared with the fourth quarter of 2021. The increase was primarily due to a decrease in losses on extinguishment of debt of \$68 million, net gains on sales of investments and other assets of \$6 million, as compared to net losses on sales of investments and other assets of \$34 million in the fourth quarter of the prior year, and to an increase in financially-related services income of \$21 million. Partially offsetting this increase in noninterest income was a decrease in net gains on derivative and other transactions of \$14 million.

The increase of \$70 million or 6.4% to \$1.157 billion in noninterest expense for the fourth quarter of 2022, as compared with the fourth quarter of 2021, was primarily due to increases in salaries and employee benefits of \$35 million, purchased services of \$17 million and other operating expense of \$17 million.

The System recorded provisions for income taxes of \$14 million and \$21 million for the fourth quarters of 2022 and 2021. The effective tax rate decreased to 0.8% for the fourth quarter of 2022, as compared with 1.3% for the fourth quarter of 2021, primarily attributable to non-taxable business activities during the fourth quarter of 2022.

Risk Management

Overview

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

process. Each System institution is required by regulation to perform stress tests; however, the depth and frequency of these stress tests may vary by institution size and complexity.

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

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

Structural Risk Management

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

In order to monitor the financial strength of each Bank and mitigate the risks of non-performance by each Bank of its obligations under the Systemwide Debt Securities, we utilize two integrated intra-System financial performance agreements — the Amended and Restated Contractual Interbank Performance Agreement, or CIPA, and the 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 pages 88 and 89.

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%

(See Note 21 for each Bank's Tier 1 Leverage and Total Capital ratios.)

During the three years ended December 31, 2022, all Banks met the agreed-upon standards of financial condition and performance (including those defined in the CIPA) as required by the MAA.

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 73 and 74 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 offfarm income. Real estate mortgage loans must be secured by first liens on the real estate (collateral). As required by Farm Credit Administration regulations, each institution that makes loans on a secured basis must have collateral evaluation policies and procedures. Real estate mortgage loans may be made only in amounts up to 85% of the original appraised value of the property taken as security or up to 97% of the appraised value if guaranteed by a state, federal, or other governmental agency. The actual loan to appraised value when loans are made is generally lower than the statutory maximum percentage. Appraisals are required for loans of more than \$250,000 with exemptions allowed pursuant to Farm Credit Administration regulation.

System institutions use a two-dimensional risk rating model based on internally generated combined System risk rating guidance that incorporates a 14point probability of default rating scale to identify and track the probability of borrower default and a separate scale addressing loss given default over a period of time. Probability of default is the probability that a borrower will experience a default within 12 months from the date of the determination of the risk rating. A default is considered to have occurred if the lender believes the borrower will not be able to pay its obligation in full or the borrower is past due more than 90 days. The loss given default is management's opinion as to the anticipated principal loss on a specific loan assuming default has occurred or is expected to occur within the next 12 months. This credit risk rating process incorporates objective and subjective criteria to identify inherent strengths, weaknesses and risks in a particular relationship.

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

 acceptable — assets are expected to be fully collectible and represent the highest quality,

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

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

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

- A/B anticipated principal loss of 0% to 3%
- C/D anticipated principal loss of greater than 3% to 15%
- E anticipated principal loss of greater than 15% to 40%
- F anticipated principal loss of greater than 40%

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

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

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

- typical commercial lending provisions, including advance rates based on quality of pledged assets and financial performance covenants,
- a pledge of substantially all Association assets as collateral for the loan,
- a risk-based score that is based on the Association's profitability, credit quality, risk

- coverage, capital adequacy and quality of credit administration,
- a requirement that retail loans originated by the Association over an established dollar amount be approved by the Bank and all loans to Association board members receive prior approval by the Bank, and
- a requirement that the Association adopt underwriting standards consistent with the Bank's underwriting guidelines and maintain an internal audit function, which reviews its lending operations.

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

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

Loan Portfolio

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

	December 31,										
_	2022	2021	2020	2019	2018						
			(in millions)								
Real estate mortgage \$	172,806	\$ 164,535	\$ 147,623	\$ 132,215	\$ 126,310						
Production and intermediate-term	66,427	62,620	57,973	56,095	53,447						
Agribusiness:											
Processing and marketing	41,973	34,308	31,939	28,205	24,832						
Loans to cooperatives	19,525	21,286	20,020	17,776	17,589						
Farm-related business	5,998	5,053	4,453	4,068	3,692						
Rural infrastructure:											
Power	27,880	23,621	22,066	19,432	20,100						
Communication	12,453	10,272	9,708	7,847	6,755						
Water/waste facilities	3,882	3,122	2,703	2,390	2,305						
Agricultural export finance	10,071	7,079	6,873	6,712	6,581						
Rural residential real estate	7,043	6,883	6,928	7,405	7,308						
Lease receivables	4,146	4,165	4,345	3,902	3,630						
Loans to other financing institutions	1,062	985	859	917	829						
Total loans \$	373,266	\$ 343,929	\$ 315,490	\$ 286,964	\$ 273,378						

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

_	December 31,									
_	2022	2021	2020	2019	2018					
Real estate mortgage	46.3%	47.8%	46.8%	46.1%	46.2%					
Production and intermediate-term	17.8	18.2	18.4	19.6	19.6					
Agribusiness:										
Processing and marketing	11.3	10.0	10.1	9.8	9.1					
Loans to cooperatives	5.2	6.2	6.3	6.2	6.4					
Farm-related business	1.6	1.5	1.4	1.4	1.3					
Rural infrastructure:										
Power	7.5	6.9	7.0	6.8	7.4					
Communication	3.3	3.0	3.1	2.7	2.5					
Water/waste facilities	1.0	0.9	0.8	0.8	0.8					
Agricultural export finance	2.7	2.0	2.2	2.3	2.4					
Rural residential real estate	1.9	2.0	2.2	2.6	2.7					
Lease receivables	1.1	1.2	1.4	1.4	1.3					
Loans to other financing institutions	0.3	0.3	0.3	0.3	0.3					
Total loans	100.0%	100.0%	100.0%	100.0%	100.0%					

The year-to-year change in loan volume was an increase of 8.5% in 2022, 9.0% in 2021, 9.9% in 2020 and 5.0% in 2019. The increase in 2022 was primarily attributable to increases in real estate mortgage, process and marketing, rural infrastructure, production

and intermediate-term and agricultural export finance loans, offset in part by a decrease in loans to cooperatives.

Real estate mortgage loans increased \$8.271 billion or 5.0% during 2022. Financing for new and existing customers was the primary driver of the increase in real estate mortgage loans due to continued demand for fixed-rate financing in early 2022 before long-term rates began to increase.

Production and intermediate-term loans increased \$3.807 billion or 6.1% during 2022, primarily due to increased seasonal utilization of operating lines of credit.

Processing and marketing loans increased \$7.665 billion or 22.3% during 2022 primarily due to increased draws on lines of credit by new and existing customers as a result of higher commodity prices.

Loans to cooperatives decreased \$1.761 billion or 8.3%, during 2022, primarily resulting from paydown of seasonal loans at grain and farm supply cooperatives.

Power loans increased \$4.259 billion or 18.0% during 2022 primarily due to new originations in the rural electric regulated utility and electric distribution sectors.

Communication loans increased \$2.181 billion or 21.2% during 2022 as a result of lending to new and

existing borrowers in the telecommunications local exchange carrier, cable and wireless sectors.

Agricultural export finance loans increased \$2.992 billion or 42.3% during 2022, primarily due to a higher level of import/export loan demand.

The increase in loan volume for 2021 was primarily attributable to increases in real estate mortgage, production and intermediate-term, power and agribusiness loans.

The increase in loan volume for 2020 was primarily attributable to increases in real estate mortgage, rural infrastructure and agribusiness loans.

The increase in loan volume for 2019 was primarily attributable to increases in real estate mortgage, processing and marketing and production and intermediate-term loans.

Real estate mortgage loans represent the largest component of the System's loan portfolio. The following table provides credit risk information aggregating System institutions' assessments of the probability of default and loss given default ratings on our real estate mortgage loans outstanding (excluding accrued interest) at December 31, 2022:

		Loss Given Default(1)									
Probability of Default Rate	Uniform Loan Classification System(2)	A/B 0-3%		C/D >3-15%		E >15-40%		F >40%		Total	
						(in millions)					
1 through 3	Acceptable	\$	280							\$	280
4	Acceptable		10,188	\$	3,716	\$	249	\$	13		14,166
5	Acceptable		21,562		9,195		384		43		31,184
6	Acceptable		28,349		10,673		522		101		39,645
7	Acceptable		28,509		10,481		912		147		40,049
8	Acceptable		19,588		6,657		843		104		27,192
9	Acceptable		10,770		3,136		510		88		14,504
10	OAEM		2,205		780		96		8		3,089
11	Substandard (viable)		1,546		420		140		13		2,119
12	Substandard (non-viable)		345		160		44		28		577
13 and 14	Doubtful and Loss		1								1
	Total	\$	123,343	\$	45,218	\$	3,700	\$	545	\$	172,806

⁽¹⁾ See page 52 for a discussion of loss given default categories.

⁽²⁾ The table is presented based on probability of default ratings and not the Uniform Loan Classification System. Therefore, properly executed and structured guarantees may allow a loan with a probability of default rate of 10 or worse to be classified as Acceptable.

Loan Portfolio Diversification

We make loans and provide financially-related services to qualified borrowers in the agricultural and rural sectors and to certain related entities. Our loan portfolio at the System level is diversified by commodities financed and geographic locations served, as illustrated in the following two tables.

Generally, a large percentage of agricultural operations include more than one commodity. Due to the geographic territories served by Banks and Associations, most institutions have higher geographic, borrower and commodity concentrations than does the System as a whole.

	December	31, 2022	Decembe	r 31, 2021
	Amount	Percentage	Amount	Percentage
		(\$ in m	nillions)	
Cash grains (includes corn, wheat and soybeans)	\$ 55,669	14.91%	\$ 54,230	15.77%
Cattle	33,315	8.93	31,228	9.08
Food products (includes meat, dairy and bakery products)	32,379	8.67	26,484	7.70
Rural power	27,880	7.47	23,621	6.87
Tree fruits, nuts and grapes	23,289	6.24	21,524	6.26
Rural home loans, farm landlords and part-time farms	22,326	5.98	20,707	6.02
Dairy farms	22,016	5.90	21,813	6.34
Forestry	21,444	5.74	19,917	5.79
Field crops (includes sugar beets, potatoes and vegetables)	19,440	5.21	18,668	5.43
Farm supplies and marketing	15,962	4.28	16,498	4.80
Agricultural services and fish	14,953	4.01	13,190	3.84
General farms, primarily crop	13,038	3.49	12,442	3.62
Rural communication	12,453	3.34	10,272	2.99
Agricultural export finance	10,071	2.70	7,079	2.06
Poultry and eggs	9,520	2.55	9,240	2.68
Hogs	8,413	2.25	7,937	2.31
General farms, primarily livestock	5,785	1.55	5,630	1.63
Other livestock	4,054	1.09	3,614	1.05
Rural water/waste facilities	3,882	1.04	3,122	0.91
Horticulture	3,540	0.95	3,050	0.88
Cotton	2,764	0.74	2,688	0.78
Biofuels, primarily ethanol	1,301	0.35	1,379	0.40
Other	9,772	2.61	9,596	2.79
Total	\$ 373,266	100.00%	\$ 343,929	100.00%

The System makes credit available in all 50 states, the Commonwealth of Puerto Rico, and U.S. territories under conditions set forth in the Farm Credit Act. The following table presents the geographic distribution of the System's loan portfolio based on the state the borrower is headquartered. States that represent 1% or more of the System's total loan volume during either one or both of the past two years are as follows:

California 11.94% 11.83% Texas 8.02 7.81 Illinois 5.37 5.01 Iowa 4.92 5.42 Minnesota 4.12 4.12 Ohio 3.67 3.79 Nebraska 3.53 3.75 Indiana 3.28 3.36 Kansas 2.91 3.19 Michigan 2.87 2.83 New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 <th>State</th> <th>2022</th> <th>2021</th>	State	2022	2021
Illinois 5.37 5.01 Iowa 4.92 5.42 Minnesota 4.12 4.12 Ohio 3.67 3.79 Nebraska 3.53 3.75 Indiana 3.28 3.36 Kansas 2.91 3.19 Michigan 2.87 2.83 New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57	California	11.94%	11.83%
Iowa 4.92 5.42 Minnesota 4.12 4.12 Ohio 3.67 3.79 Nebraska 3.53 3.75 Indiana 3.28 3.36 Kansas 2.91 3.19 Michigan 2.87 2.83 New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38	Texas	8.02	7.81
Minnesota 4.12 4.12 Ohio 3.67 3.79 Nebraska 3.53 3.75 Indiana 3.28 3.36 Kansas 2.91 3.19 Michigan 2.87 2.83 New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon	Illinois	5.37	5.01
Ohio 3.67 3.79 Nebraska 3.53 3.75 Indiana 3.28 3.36 Kansas 2.91 3.19 Michigan 2.87 2.83 New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 <td>Iowa</td> <td>4.92</td> <td>5.42</td>	Iowa	4.92	5.42
Nebraska 3.53 3.75 Indiana 3.28 3.36 Kansas 2.91 3.19 Michigan 2.87 2.83 New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississisppi 1.15 1.10 Louisian	Minnesota	4.12	4.12
Indiana 3.28 3.36 Kansas 2.91 3.19 Michigan 2.87 2.83 New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1)	Ohio	3.67	3.79
Kansas 2.91 3.19 Michigan 2.87 2.83 New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Nebraska	3.53	3.75
Michigan 2.87 2.83 New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Indiana	3.28	3.36
New York 2.76 2.68 Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississisppi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Kansas	2.91	3.19
Wisconsin 2.63 2.79 Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Michigan	2.87	2.83
Missouri 2.38 2.36 North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	New York	2.76	2.68
North Carolina 2.29 2.33 Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississisppi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Wisconsin	2.63	2.79
Georgia 2.25 2.18 Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Missouri	2.38	2.36
Florida 2.19 2.02 Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississisppi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	North Carolina	2.29	2.33
Colorado 2.18 2.07 South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Georgia	2.25	2.18
South Dakota 2.17 2.35 Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississisppi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Florida	2.19	2.02
Washington 2.06 2.10 Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississisppi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Colorado	2.18	2.07
Tennessee 1.97 1.89 Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississispi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	South Dakota	2.17	2.35
Arkansas 1.68 1.76 Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississisppi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Washington	2.06	2.10
Pennsylvania 1.60 1.52 Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Tennessee	1.97	1.89
Kentucky 1.53 1.58 North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississisppi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Arkansas	1.68	1.76
North Dakota 1.48 1.83 Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Pennsylvania	1.60	1.52
Idaho 1.47 1.57 Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississisppi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Kentucky	1.53	1.58
Virginia 1.44 1.38 Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	North Dakota	1.48	1.83
Alabama 1.39 1.41 Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Idaho	1.47	1.57
Oklahoma 1.22 1.29 Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Virginia	1.44	1.38
Oregon 1.21 1.18 Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Alabama	1.39	1.41
Mississippi 1.15 1.10 Louisiana 1.04 1.10 Other(1) 11.28 10.40	Oklahoma	1.22	1.29
Louisiana 1.04 1.10 Other(1) 11.28 10.40	Oregon	1.21	1.18
Other(1)	Mississippi	1.15	1.10
	Louisiana	1.04	1.10
Total 100.00% 100.00%	Other(1)	11.28	10.40
	Total	100.00%	100.00%

⁽¹⁾ Includes all other states and agricultural export finance loans

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

	_ [ecember	31, 2022]	December	31, 2021
Range		Amount tstanding	Number of Borrowers		Amount itstanding	Number of Borrowers
(\$ in thousands)			(\$ in m	illio	ns)	
\$249 and under	\$	32,599	431,758	\$	33,551	440,000
\$250 — \$499		27,900	79,666		27,047	77,312
\$500 — \$999		31,277	44,865		30,504	43,655
\$1,000 — \$4,999		75,301	38,072		72,740	36,937
\$5,000 — \$24,999		55,233	5,706		53,227	5,468
\$25,000 — \$99,999		52,916	1,102		47,667	1,004
\$100,000 — \$249,999		40,993	268		35,570	230
\$250,000 and over		57,047	130		43,623	102
Total	\$	373,266	601,567	\$	343,929	604,708

Small loans (less than \$250,000) accounted for 72% of System borrowers and 9% of System loan volume at December 31, 2022, as compared with 73% and 10% at December 31, 2021. Credit risk on small loans, in many instances, is reduced by off-farm income sources.

The ten largest borrowers accounted for \$9.350 billion or 2.5% of the System's total outstanding loans at December 31, 2022, as compared with \$8.179 billion or 2.4% at December 31, 2021. The concentration of large loans to relatively few borrowers continued to be a significant factor in assessing the credit risk associated with loans.

Although System institutions monitor credit risk individually, the System has established a quarterly process to report System large loan exposures (outstanding loan amounts plus any unfunded loan commitments). A System risk management committee reviews and monitors large loan exposures to existing individual customers. Beginning in the first quarter of 2022, the committee increased the threshold for monitoring large loan exposures to \$1.5 billion from \$1.25 billion. The increase in the exposure level reflects growth in the System's risk-bearing capacity. In certain limited circumstances, a threshold of \$1.75 billion for monitoring large loan exposures may be considered. Because 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 \$1.5 billion level or \$1.125 billion. While this process captures information regarding large loan exposures, any credit decision resides with the individual System institutions. At December 31, 2022 no exposure was above \$1.5 billion and at December 31, 2021, no exposure was above \$1.25 billion. Eight exposures at December 31, 2022 exceeded \$1.125 billion and 14 exposures at December 31, 2021 exceeded \$937.5 million.

System institutions reduce credit risk through certain federal government guarantee programs, such as the Farm Service Agency and Small Business Administration. As of December 31, 2022 and 2021, \$9.592 billion and \$8.719 billion of loans had varying levels of federal government guarantees. System

institutions also limit, to some extent, the credit risk of certain real estate mortgage loans by entering into agreements with others that provide long-term standby commitments to purchase System loans and other credit guarantees. The amount of loans under these other credit guarantees was \$3.160 billion at December 31, 2022, of which \$2.624 billion was provided by Farmer Mac, as compared with total credit guarantees of \$3.049 billion at December 31, 2021, of which \$2.427 billion was provided by Farmer Mac. Fees for credit guarantees totaled \$15 million for both years ended December 31, 2022 and 2021 and \$14 million for the year ended December 31, 2020 and are included in other operating expenses.

Loan Portfolio Maturity Distribution

The following table presents the contractual maturity distribution of loans, excluding real estate mortgage and rural residential real estate loans, at December 31, 2022:

	Due in 1 Year or Less	Due After 1 Year Through 5 Years	Due After 5 Years Through 15 Years	Due After 15 Years	Total
			(in millions)		
Production and intermediate-term	\$ 23,343	\$ 31,825	\$ 10,788	\$ 471	\$ 66,427
Agribusiness:					
Processing and marketing	14,048	16,002	10,806	1,117	41,973
Loans to cooperatives	6,282	9,220	3,986	37	19,525
Farm-related business	1,453	2,141	1,929	475	5,998
Rural infrastructure:					
Power	3,760	6,418	8,870	8,832	27,880
Communication	2,856	6,756	2,669	172	12,453
Water/waste facilities	599	1,381	970	932	3,882
Agricultural export finance	8,612	1,155	304		10,071
Lease receivables	260	2,154	1,725	7	4,146
Loans to other financing institutions	406	459	197		1,062
Total	\$ 61,619	\$ 77,511	\$ 42,244	\$ 12,043	\$193,417

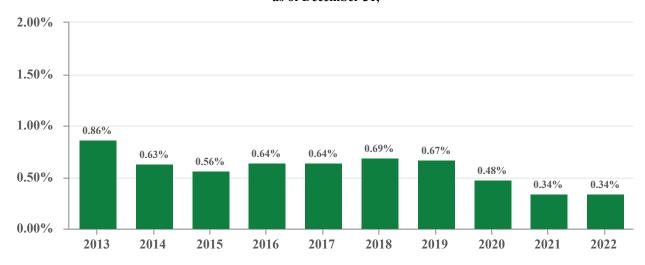
Note: Real estate mortgage and rural residential real estate loans have been excluded from the table above given the long-term maturities of such loans, including maturities of up to 40 years in certain cases.

Nonperforming Assets

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

				Dece	mber 31,			
	20	022	 2021		2020	2019	2	2018
				(in	millions)			
Nonaccrual loans:								
Real estate mortgage	\$	518	\$ 610	\$	849	\$ 912	\$	830
Production and intermediate-term		336	290		448	548		489
Agribusiness		334	121		120	315		398
Rural infrastructure		28	98		20	55		79
Rural residential real estate		32	37		46	50		53
Lease receivables		18	20		21	30		34
Total nonaccrual loans	1	,266	1,176		1,504	1,910		1,883
Accruing restructured loans:								
Real estate mortgage		149	170		181	198		173
Production and intermediate-term		44	48		62	82		86
Agribusiness		41	11		12	5		5
Rural infrastructure						2		
Rural residential real estate		31	23		7	7		8
Total accruing restructured loans		265	252		262	294		272
Accruing loans 90 days or more past due:								
Real estate mortgage		165	93		83	53		31
Production and intermediate-term		4	8		6	10		10
Agribusiness		10				4		1
Rural infrastructure						2		
Rural residential real estate		2	6		1			
Lease receivables		15	4		4	2		1
Total accruing loans 90 days or more past due		196	111		94	71		43
Total nonperforming loans	1	,727	1,539		1,860	2,275		2,198
Other property owned		28	39		37	72		84
Total nonperforming assets	\$ 1	,755	\$ 1,578	\$	1,897	\$ 2,347	\$	2,282

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



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

Nonaccrual loans increased \$90 million or 7.7% to \$1.266 billion at December 31, 2022, primarily due to credit quality deterioration impacting a limited number of borrowers. Nonaccrual loans as a percentage of total loans outstanding was 0.34% at both December 31, 2022 and 2021. Nonaccrual loans that were current as to principal and interest were 63.6% of total nonaccrual loans at December 31, 2022, as compared with 63.7% at December 31, 2021. Nonaccrual loans contractually past due with respect to either principal or interest were \$461 million and \$427 million at December 31, 2022 and 2021.

At December 31, 2022, the ten largest nonaccrual loans totaled \$498 million, while at

December 31, 2021, the ten largest nonaccrual loans totaled \$304 million.

Accruing restructured loans, including related accrued interest, were \$265 million and \$252 million at December 31, 2022 and 2021. The restructured loans include only the year-end balances of loans (and related accrued interest) on which the creditor for economic or legal reasons related to the debtor's financial difficulties grants a concession to the debtor that it would not otherwise consider. Concessions vary by program and are borrower-specific and may include interest rate reductions, term extensions, payment deferrals or the acceptance of additional collateral in lieu of payments. In limited circumstances, principal may be forgiven. Restructured loans do not include loans on which concessions have been granted but which remain in nonaccrual status. Upon restructuring, our accounting policies generally require a period of loan performance during which time the borrower complies with the restructured terms before a loan is transferred to accruing restructured status.

Accruing loans 90 days or more past due increased \$85 million to \$196 million at December 31, 2022. These loans are considered well secured and in the process of collection.

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

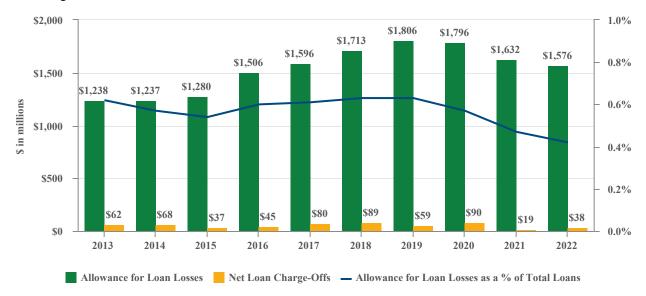
	 For the '	Year I	Ended Dece	mber	31,
	2022		2021		2020
		(in	millions)		
Balance at beginning of year	\$ 1,176	\$	1,504	\$	1,910
Additions:					
Gross amounts transferred into nonaccrual	837		687		851
Recoveries	28		41		45
Advances	167		136		279
Other, net	22		3		
Reductions:					
Charge-offs	(66)		(70)		(135)
Transfers to other property owned (book value)	(34)		(41)		(34)
Returned to accrual status	(189)		(211)		(136)
Repayments	(675)		(873)		(1,276)
Balance at end of year	\$ 1,266	\$	1,176	\$	1,504

Other property owned, which is held for sale and consists of real and personal property acquired through collection actions, decreased \$11 million during 2022 to \$28 million at December 31, 2022, primarily due to sales in excess of loans transferred into other property owned.

Loans classified under the Farm Credit Administration's Uniform Loan Classification System as Acceptable or Other Assets Especially Mentioned (OAEM) as a percentage of total loans and accrued interest receivable was 98.4% at December 31, 2022 and 98.1% at December 31, 2021. Loan delinquencies (accruing loans 30 days or more past due) as a percentage of accruing loans increased to 0.29% at December 31, 2022, as compared with 0.27% at December 31, 2021.

Allowance for Loan Losses

The following chart illustrates the System's allowance for loan losses at December 31, and year-to-date net loan charge-offs:



The allowance for loan losses was \$1.576 billion at December 31, 2022 and \$1.632 billion at December 31, 2021. Net loan charge-offs of \$38 million, \$19 million and \$90 million were recorded during 2022, 2021 and 2020.

Management of each System institution considers the allowance for loan losses at each period end to be adequate to absorb probable losses existing in and inherent to their loan portfolios. The allowance for loan losses represents the aggregate of each System entity's individual evaluation of its allowance for loan losses requirements. Although aggregated in the combined financial statements, System's 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. Additionally, borrower, industry, geographic and portfolio concentrations, along with modeling imprecision, are all considered in the determination of the allowance for loan losses.

As previously described, production agriculture is a cyclical business and therefore System borrowers will face challenges from time to time due to reduced net farm income and volatility in commodity prices. In general, System borrowers' financial positions have improved because of the rise in commodity prices and ad hoc government support provided in the past few

years. Further, System underwriting standards require strong collateral support for real estate mortgage 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.

In determining the allowance for loan losses, System institutions consider estimated credit losses for specifically identified loans, as well as estimated probable credit losses inherent in the remainder of the portfolio as of the balance sheet date. All nonperforming loans are specifically identified and are evaluated for impairment. At December 31, 2022, \$569 million of the System's \$1.727 billion of nonperforming loans had specific reserves (representing probable losses) of \$149 million. The remaining \$1.158 billion of nonperforming loans were evaluated and determined not to need a specific reserve.

One of the primary tools utilized by System institutions to determine probable losses inherent in their loan portfolios, which have not been specifically identified and evaluated for impairment, is to determine the credit risk ratings of the loans in their portfolios as indicated by the probability of default assigned to the loans multiplied by the estimated losse given default of the loans. The estimated losses derived from this calculation are aggregated, reviewed

and adjusted to best reflect current economic and industry factors. The result of the analysis provides a basis to estimate probable losses and determine reserves adequate to cover these estimated probable losses.

The following table provides credit risk information aggregating System institutions' assessments of probability of default and loss given default ratings for the System's outstanding loans at December 31, 2022:

				L	oss Gi	ven Default	(1)		
Probability of Default Rate	Uniform Loan Classification System(2)	A/B 0-3%	;	C/D >3-15%	>	E ·15-40%		F >40%	Total
					(in	millions)			
1 through 3	Acceptable	\$ 9,230	\$	1,068	\$	1	\$	2,799	\$ 13,098
4	Acceptable	18,474		11,390		1,124		1,639	32,627
5	Acceptable	28,071		36,522		3,008		2,524	70,125
6	Acceptable	37,747		36,881		3,621		2,366	80,615
7	Acceptable	34,949		37,516		7,029		1,783	81,277
8	Acceptable	23,462		23,998		6,947		1,555	55,962
9	Acceptable	12,779		9,808		3,378		620	26,585
10	OAEM	2,926		2,126		1,225		265	6,542
11	Substandard (viable)	1,990		1,357		1,373		356	5,076
12	Substandard (non-viable)	460		258		362		260	1,340
13 and 14	Doubtful and Loss	1						18	19
	Total	\$ 170,089	\$	160,924	\$	28,068	\$	14,185	\$ 373,266

⁽¹⁾ See page 52 for discussion of loss given default categories.

Note: Nonperforming loans or impaired loans generally include substandard (non-viable), doubtful and loss loans.

⁽²⁾ The table is presented based on probability of default ratings and not the Uniform Loan Classification System. Therefore, properly executed and structured guarantees may allow a loan with a probability of default rate of 10 or worse to be classified as Acceptable.

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

			For the Y	ear l	Ended Dece	mbe	r 31,	
	2022		2021		2020		2019	2018
				(\$ iı	n millions)			
Balance at beginning of year	\$ 1,632	\$	1,796	\$	1,806	\$	1,713	\$ 1,596
Charge-offs:								
Real estate mortgage	(6)		(7)		(11)		(11)	(20)
Production and intermediate-term	(14)		(40)		(57)		(53)	(58)
Agribusiness	(20)		(16)		(22)		(12)	(29)
Rural infrastructure	(27)		(3)		(42)		(7)	(3)
Rural residential real estate	(2)		(3)		(1)		(1)	(2)
Lease receivables	(2)		(1)		(2)		(4)	(8)
Total charge-offs	(71)		(70)		(135)		(88)	(120)
Recoveries:								
Real estate mortgage	5		5		7		6	9
Production and intermediate-term	23		28		33		17	17
Agribusiness	3		8		2		3	3
Rural infrastructure	1		9		1		1	1
Agricultural export finance					1			
Rural residential real estate	1		1				1	1
Lease receivables					1		1	
Total recoveries	33		51		45		29	31
Net charge-offs	(38)		(19)		(90)		(59)	(89)
Provision for loan losses (loan loss reversal)	40		(152)		107		169	194
Adjustment due to Association mergers(1)	(25)							
Reclassification (to) from reserve for unfunded commitments(2)	(33)		7		(27)		(17)	12
Balance at end of year		\$	1,632	\$	1,796	\$	1,806	\$ 1,713
Ratio of net loan charge-offs during the period to average loans outstanding during the period	0.01%	_	0.01%		0.03%		0.02%	 0.03%

⁽¹⁾ Represents the elimination of the allowance for loan losses in connection with Association mergers. See Note 11 to the accompanying combined financial statements.

⁽²⁾ Represents reclassifications between the allowance for loan losses and the reserve for unfunded commitments primarily as a result of advances on or repayments of seasonal lines of credit or other loans.

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

					Decem	ber 31,				
	2022	%	2021	%	2020	%	2019	%	2018	%
					(\$ in m	illions)				
Real estate mortgage	\$ 342	21.7%	\$ 415	25.4%	\$ 538	29.9%	\$ 492	27.2%	\$ 481	28.1%
Production and intermediate-term	368	23.4	411	25.2	473	26.3	493	27.3	448	26.1
Agribusiness	574	36.4	526	32.2	507	28.2	508	28.1	475	27.7
Rural infrastructure	196	12.4	186	11.4	172	9.6	219	12.2	217	12.7
Agricultural export finance	30	1.9	25	1.5	27	1.5	22	1.2	19	1.1
Rural residential real estate	14	0.9	15	0.9	19	1.1	18	1.0	19	1.1
Lease receivables	51	3.2	53	3.3	59	3.3	53	2.9	53	3.1
Loans to other financing institutions	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1
Total	\$ 1,576	100.0%	\$ 1,632	100.0%	\$ 1,796	100.0%	\$ 1,806	100.0%	\$ 1,713	100.0%

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

<u>_</u>]	December 31,		
Total loans	2022	2021	2020	2019	2018
Total loans	0.42%	0.47%	0.57%	0.63%	0.63%
Nonperforming assets	90	103	95	77	75
Nonaccrual loans	124	139	119	95	91

Effective January 1, 2023, System institutions adopted the current expected credit losses (CECL) accounting guidance that replaced the incurred loss guidance. CECL established a single allowance framework for all financial assets measured at amortized cost, certain off-balance sheet credit exposures, and changed the impairment recognition model for available-for-sale securities. The guidance requires management to consider in its estimate of allowance for credit losses (ACL) relevant historical events, current conditions and reasonable and supportable forecasts that affect the collectability of the assets.

The System's ACL is the aggregate of each System institution's individual evaluation of its ACL

requirements. Although aggregated in the System's combined financial statements, ACL of each System institution is specific to that institution and is not available to absorb losses realized by other System institutions. The adoption of this guidance, at January 1, 2023, resulted in a cumulative effect transition adjustment to increase retained earning by approximately \$150 million, net of tax. The adjustment also resulted in a decrease in the System's ACL on outstanding loans and unfunded commitments of approximately \$190 million, while increasing the ACL on available-for-sale investments in corporate bonds by approximately \$6 million.

The following table summarizes the maturity distribution (expiration) of unfunded credit commitments:

		Γ) ecer	nber 31, 20	22		
	Less than 1 Year	1-3 Years		3-5 Years		Over 5 Years	Total
			(ir	millions)			
Commitments to extend credit	\$ 51,803	\$ 35,102	\$	28,272	\$	10,402	\$ 125,579
Standby letters of credit	2,253	652		140		106	3,151
Commercial and other letters of credit	66	 30		12		11	119
Total commitments	\$ 54,122	\$ 35,784	\$	28,424	\$	10,519	\$ 128,849

Since many of these commitments are expected to expire without being drawn upon, the total commitments do not necessarily represent future cash credit-related requirements. These financial instruments have off-balance-sheet credit risk because their contractual amounts are not reflected on the balance sheet until funded or drawn upon. However, standby letters of credit are reflected on the balance sheet at the fair value of the liability of \$22 million and \$21 million as of December 31, 2022 and 2021. The fair value of these letters of credit is estimated based on the cost to terminate the agreement or fees currently charged for similar agreements. The credit risk associated with issuing commitments and letters of credit is substantially the same as that involved in extending loans to borrowers and the same credit policies are applied by management. Upon fully funding a commitment, the credit risk amounts are equal to the contract amounts, assuming that borrowers fail completely to meet their obligations and the collateral or other security are of no value. The amount of collateral obtained, if deemed necessary upon extension of credit, is based on management's credit evaluation of the borrower.

At December 31, 2022, the System had a reserve for unfunded commitments of \$222 million, as compared with \$189 million at December 31, 2021. The reserve for unfunded commitments is reported as other liabilities in the Combined Statement of Condition.

Interest Rate Risk Management

Interest rate risk is the risk of loss of future earnings or long-term market value of equity that may result from changes in interest rates. This risk can produce variability in the System's net interest income and the long-term value of the System's capital position. 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 interestbearing assets and liabilities 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. Loan features that provide the borrower with flexibility frequently introduce a risk exposure to the lender. For example, a fixed-rate loan 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 no measures are taken to hedge the rate guarantee, System institutions may realize a lower spread than expected when the loan is funded.

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

Interest rate caps are another form of embedded options that may be present in

certain investments and floating- and adjustable-rate loans. Interest rate caps typically prevent the investment or loan rate from increasing above a defined limit. In a rising interest rate environment, the spread may be reduced if caps limit upward adjustments to floating investment or loan rates while debt costs continue to increase.

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 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 generally managed centrally. A limited number of Associations manage their own interest rate risk associated with their retail loans and investments as part of the Associations' asset/liability management (ALM) processes. Each of these Associations orders and manages the desired mix of debt from their funding Bank and is referred to herein as an ALM Association. As of December 31, 2022 and 2021, ALM Associations had combined assets of approximately 10% of System assets.

All Banks and Associations are responsible for developing ALM policies and strategies to manage interest rate risk that are commensurate with the complexity of their business activities and for monitoring and reporting 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 generally is delegated to an ALM 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, under normal market conditions, significant flexibility in structuring the maturity and types of debt securities we issue to match asset cash flows. This ability to access the debt markets helps us minimize the risk that interest rates might change between the time loan commitments are made and the time they are 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 floating-rate Systemwide Debt Securities, we are able to minimize the basis risk exposure presented by similarly-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. See "Risk Factors" for a discussion of certain of our funding risks.

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 prior to the maturity date, some of which may be non-callable.

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

Interest Rate Risk Measurements

Each Bank and Association is required to assess and manage interest rate risk. For Banks and ALM

Associations, the primary approaches to managing interest rate risk are:

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

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

Interest Rate Risk Management Results

Interest Rate Gap Analysis

The interest rate gap analysis presents a comparison of interest-sensitive assets and liabilities in defined time segments as of December 31, 2022. The interest rate gap analysis is a static indicator, which does not reflect the dynamics of balance sheet, cash flows, interest rate and spread changes and financial instrument optionality, 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:

			Re	pric	ing Interv	als			
	_	0-6 Aonths	Months 1 Year		1-5 Years		Over 5 Years		Total
		Tontils			millions)		3 Tears	_	Total
Floating-rate loans:				(-	,				
Indexed/adjustable-rate loans	\$	78,566	\$ 155	\$	618	\$	725	\$	80,064
Administered-rate loans		54,682							54,682
Fixed-rate loans:									
Fixed-rate with prepayment or conversion fees		9,971	7,340		20,532		19,442		57,285
Fixed-rate without prepayment or conversion fees		31,665	12,165		75,026		61,113		179,969
Nonaccrual loans		31,003	12,103		75,020		1,266		1,266
Total gross loans		174,884	 19,660	_	96,176	_	82,546	_	373,266
Federal funds sold, investments and other interest-		171,001	17,000		70,170		02,510		373,200
earning assets		44,760	5,136		23,948		12,802		86,646
Total earning assets		219,644	24,796		120,124		95,348		459,912
Interest-bearing liabilities:									_
Callable bonds and notes		14,105	11,332		52,538		57,481		135,456
Noncallable bonds and notes		160,804	23,283		50,877		19,557		254,521
Subordinated debt							398		398
Other interest-bearing liabilities		8,015					47		8,062
Total interest-bearing liabilities		182,924	34,615		103,415		77,483		398,437
Effect of interest rate swaps and other derivatives		20,578	(9,814)		(12,623)		1,859		
Total interest-bearing liabilities adjusted for swaps and other derivatives		203,502	24,801		90,792		79,342		398,437
Interest rate sensitivity gap (total earning assets less total interest-bearing liabilities adjusted for swaps and other derivatives).	\$	16,142	\$ (5)	\$	29,332	\$	16,006	\$	61,475
Cumulative gap	\$	16,142	\$ 16,137	\$	45,469	\$	61,475		
Cumulative gap as a percentage of total earning assets		3.51%	 3.51%		9.89%		13.37%		

As illustrated above, the System had a positive gap position between its earning assets and interest-bearing liabilities for the zero to six months repricing interval as measured on December 31, 2022 and reflects the System's asset-sensitive position during this time period.

Typically, the net interest income of an institution that is asset sensitive will be favorably impacted in a rising rate environment and unfavorably impacted in a declining rate environment. However, the System's net interest income benefits in a declining interest rate environment due to its ability to exercise call options on callable debt.

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 earning asset or interest-bearing liability reprices. These conditions include competitive pressures on spreads or rates, the shape 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 4.83% at December 31, 2021 to 3.51% at December 31, 2022.

Sensitivity Analysis

In addition to the static view of interest rate sensitivity shown by the gap analysis, each Bank and ALM Association conducts simulations of net interest income and market value of equity. The 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 and ALM Associations also use other types of measures to manage interest rate risk including 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 a low interest rate environment, the downward shock is based on one-half of the three-month Treasury bill rate. Interest rates were low at December 31, 2021, which resulted in the use of 3 basis points for the downward shock. Under these simulations, the System's sensitivity to interest rate changes (sum of Districts' sensitivity analyses) was:

	December 31, 2022			
	-200	-100	+100	+200
Change in net interest income	-2.64%	-1.30%	2.35%	3.99%
Change in market value of equity	8.65%	4.11%	-3.76%	-7.19%
		December 31, 2021		
		-3	+100	+200
Change in net interest income		-0.08%	2.08%	3.21%
Change in market value of equity		0.11%	-3.82%	-7.39%

Each Bank's and ALM Association's interest rate risk management policy establishes limits for changes in net interest income sensitivity and market value of equity sensitivity. These limits are measured at least monthly and reported to their board of directors at least quarterly. The limits set by these institutions' boards of directors for net interest income sensitivity and market value of equity sensitivity ranged from negative 10% to negative 20% for a 200

basis point shock. During 2022 and 2021, no Bank or ALM Association exceeded its policy limits.

Further, each Bank has established a District interest rate risk sensitivity limit not to exceed a 15% reduction in net interest income and market value of equity, given a 200 basis point shock, as measured using the combined results of each Bank and its affiliated Associations. This limit is measured and reported on a quarterly basis. None of the Districts exceeded the District limit during 2022 and 2021. District measurements are presented in the Supplemental Financial Information on page F-77.

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

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

When interest rates rise, borrowers with fixedrate loans lack the incentive to prepay their loans. However, prepayments can occur in any rate environment for reasons unrelated to interest rate conditions.

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

The Banks and ALM Associations gather and maintain loan information, including prepayment data, for use in developing prepayment models for agricultural loans. These models typically specify a minimum or "baseline" level of expected prepayments that is not affected by the general level of interest

rates, along with an interest-sensitive component that projects faster prepayments as the potential refinancing advantage increases. The refinancing advantage is defined as the difference between the loan rate on an outstanding fixed-rate loan and the current loan rate offered for a new fixed-rate loan with a similar maturity. Further, model refinements may reflect differences due to the loan product type and age or "seasoning" of the loan. The Banks' and ALM Associations' agricultural loan prepayment models are based on proprietary data and may differ from institution to institution and from prepayment models developed for use with residential mortgages.

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

Duration Gap Analysis

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

A positive duration gap means there is a greater exposure to rising interest rates because it indicates that the duration of our assets exceeds the duration of our liabilities. A negative duration gap means that there is a greater exposure to declining interest rates because the duration of our assets is less than the duration of our liabilities. At December 31, 2022, the System's aggregate duration gap (the sum of each District's duration gaps) was a positive 3.7 months, as compared with a positive 3.8 months at December 31, 2021. 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 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 process and supplement our issuance of debt securities in the capital markets. Derivative financial instruments are used as hedges to manage interest rate and liquidity risks and to lower the overall cost of funds. System institutions do not hold or enter into derivative transactions for trading purposes. Derivative products are subject to regulatory compliance obligations, including, among other things, accounting, 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 summarized in the following table. For additional information, see Note 16 to the accompanying combined financial statements.

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

The aggregate notional amount of the System's derivative products, most of which consisted of interest rate swaps, increased \$27.090 billion to \$94.127 billion at December 31, 2022, as compared with \$67.037 billion at December 31, 2021. The increase was largely due to a hedging strategy to convert fixed rate bonds and discount notes to floating rates, which were at economically attractive levels,

and as part of the System's LIBOR transition strategy. The aggregate notional amount of these instruments, which is not included in the Combined Statement of Condition, is indicative of the System's activities in derivative financial instruments, but is not an indicator of the level of credit risk associated with these instruments. The exposure to credit risk is a small

fraction of the aggregate notional amount as more fully discussed on page 75.

In addition, the System had put option contracts with a total notional of 110,000 and 688,000 barrels of oil at December 31, 2022 and 2021 to protect against a decline in oil prices.

The following table presents notional amounts and weighted average interest rates by expected (contractual) maturity dates for the System's derivative financial instruments. The fair values of these derivatives were recognized in the Combined Statement of Condition. The table was prepared using the implied forward yield curve at December 31, 2022.

			34.	620	22 D	D 1 4			
			Dec	r Value at ember 31, 2022(1)					
				(\$ i	n millions)				
Receive-fixed swaps									
Notional value	\$19,357	\$9,432	\$3,214	\$ 145	\$ 157	\$ 140	\$32,445	\$	(678)
Weighted average receive rate	2.43%	2.50%	2.28%	2.37%	1.97%	2.70%	2.43%		
Weighted average pay rate	3.05%	3.01%	2.83%	4.29%	4.35%	4.27%	3.03%		
Pay-fixed and amortizing-pay fixed swaps									
Notional value	\$23,796	\$1,359	\$ 628	\$1,484	\$1,284	\$ 8,848	\$37,399	\$	907
Weighted average receive rate	2.35%	3.34%	3.94%	3.01%	3.45%	3.21%	2.68%		
Weighted average pay rate	2.26%	1.67%	1.99%	0.95%	2.17%	1.89%	2.09%		
Floating-for-floating and amortizing floating-for-floating swaps									
Notional value	\$7,650		\$ 100	\$ 650	\$ 100	\$ 300	\$8,800	\$	15
Weighted average receive rate	2.26%		3.97%	3.96%	3.65%	3.54%	2.46%		
Weighted average pay rate	4.35%		4.42%	4.01%	4.26%	4.14%	4.32%		
Customer derivative products									
Notional value	\$ 866	\$1,506	\$ 754	\$1,507	\$1,157	\$ 6,083	\$11,873	\$	(746)
Weighted average receive rate	1.67%	1.56%	1.73%	1.05%	2.09%	1.50%	1.53%		
Weighted average pay rate	4.06%	3.23%	3.28%	3.02%	3.46%	3.27%	3.31%		
Interest rate caps and floors									
Notional value	\$ 643	\$ 364	\$1,324	\$ 424	\$ 411	\$ 294	\$3,460	\$	131
Foreign exchange and other contracts									
Notional value	\$ 150						\$ 150	\$	(2)
Total notional value	\$52,462	\$12,661	\$6,020	\$4,210	\$3,109	\$15,665	\$94,127	\$	(373)
Total weighted average rates on swaps:									
Receive rate	2.36%	2.48%	2.45%	2.37%	2.79%	2.54%	2.42%		
Pay rate	2.90%	2.89%	2.82%	2.43%	2.93%	2.50%	2.81%		

⁽¹⁾ The fair value of derivative products in this table excludes variation margin settlements of \$267 million.

By using derivative instruments, System institutions 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 money on early termination of the derivative, thus creating credit risk. When the fair value of the derivative is negative, we would owe the counterparty money on early termination of the derivative, and, therefore, assume no credit risk.

To minimize the risk of credit losses for non-cleared derivatives, System institutions typically enter into master agreements that govern all derivative transactions with a counterparty, which include bilateral collateral agreements requiring the exchange of collateral to offset credit risk exposure. 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. System institutions 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.

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

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 interest rate risk by concurrently entering into offsetting agreements with non-System institutional derivative counterparties.

In addition to entering into over-the-counter derivative transactions directly with a counterparty as

described above, the Banks may also clear such transactions through a FCM with a 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 for changes in the value of cleared derivatives. The initial margin and other amounts collected from both parties to the swap protects against credit risk in the event a counterparty defaults. The initial margin and other amounts 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.

Certain over-the-counter swaps entered into by swap dealers and major swap participants, as well as certain other market participants, including financial institutions are subject to mandatory clearing. Currently, instrument types that must be cleared are interest rate swaps and credit default swaps. System institutions with less than \$10 billion in assets qualify for an exemption from clearing if the swap is used to hedge commercial risk. All System institutions also qualify for a "cooperative exemption." This exemption does not cover all swaps that are executed by System institutions, and is generally limited to transactions entered into in connection with loans to members. At December 31, 2022 and 2021, the notional amount of cleared derivatives was \$68.032 billion \$43.642 billion.

The exposure on derivatives by counterparty credit rating (Moody's) that would be owed to us due to a default or early termination by our counterparties at December 31, 2022 was:

Derivative Credit Exposure

				Yea	rs to	Matur	ity(1))								
	Number of Counterparties	Notional Principal	th	ess ian Year	1 to 5 Years		Maturity Over 5 Years (\$ in millions		Distribution Netting(2)		Credit Exposure		Collateral Held		Exposure, Net of Collateral	
Bilateral derivatives:																
Aa2	4	\$ 8,413	\$	10	\$	96	\$	175			\$	281	\$	262	\$	26
Aa3	1	900				14		11				25		26		
A1	3	3,617		6		65		123				194		199		
A3	2	1,289		3		39		41				83		85		
Baa2	1	2														
Cleared derivatives(3).	3	68,032		3		9		416	\$	(422)		6				6
Total	14	\$ 82,253	\$	22	\$	223	\$	766	\$	(422)	\$	589	\$	572	\$	32

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

Note: Due to grouping of counterparties by credit rating, exposure, net of collateral may not represent the difference between credit exposure and collateral held. The above table excludes \$11.873 billion in notional amount of derivative financial instruments at December 31, 2022 related to interest rate swaps that two Banks entered into with certain of their customers. Also excluded is \$1 million in notional amount of derivative financial instruments related to forward commitments that one Association has entered into to hedge interest rate risk on interest rate locks.

At December 31, 2022, the credit exposure, net of collateral, was \$32 million. The Banks' counterparties posted \$567 million in cash and \$5 million in securities as collateral with us. None of the Banks had posted collateral with respect to their obligations under these agreements.

The LIBOR Transition

On March 5, 2021, the United Kingdom's Financial Conduct Authority (the "UK FCA") announced that the ICE Benchmark Administration (IBA) (the entity regulated by the UK FCA that is responsible for calculating LIBOR) had notified the UK FCA of its intent, among other things, to cease providing certain US dollar LIBOR settings as of June 30, 2023. In the announcement, the UK FCA confirmed that all 35 LIBOR tenors (including with respect to US dollar LIBOR) will be discontinued or declared non-representative as of either: (a) immediately after December 31, 2021 or (b) immediately after June 30, 2023.

Each Bank, Association and the Funding Corporation has implemented LIBOR transition plans

in accordance with Farm Credit Administration's guidance and will continue to analyze potential risks associated with the LIBOR transition, including, but not limited to, financial, market, accounting, operational, legal, tax, reputational and compliance risks, and will update its LIBOR transition plan, to the extent necessary, to address these risks.

System institutions' LIBOR exposure arises from certain LIBOR-based loans made to customers, investment securities purchased, preferred stock issued, derivative transactions entered into, and Systemwide Debt Securities issued by the Funding Corporation on the Banks' behalf. Alternative reference rates that replace LIBOR may not yield the same or similar economic results over the lives of the financial instruments, which could adversely affect the value of, and return on, such financial instruments held by System institutions. Due to the uncertainty regarding the transition of LIBOR-based financial instruments, including the manner in which an alternative reference rate will apply, and the mechanisms for transitioning System institutions' LIBOR-based instruments to instruments with an

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

⁽³⁾ Represents derivative transactions cleared with central counterparties, which are not rated. Excluded from the table is initial margin posted by three Banks and one Association totaling \$260 million at December 31, 2022 related to cleared derivative transactions.

alternative rate, we cannot yet reasonably estimate the expected financial impact of the LIBOR transition on the System.

In light of the announcements by the UK FCA, the IBA and the other U.S. prudential regulators noted above, US dollar LIBOR, except in very limited circumstances, has been or will be discontinued or declared unrepresentative as of June 30, 2023. Because some of the System's financial instruments reference LIBOR, these developments could have a material impact on us, our borrowers, our investors, and System institutions' customers and counterparties.

The LIBOR transition could result in System institutions paying higher interest rates on LIBORindexed Systemwide Debt Securities, adversely affecting the yield on, and fair value of, the financial instruments we hold that reference LIBOR, and increase the costs of or affect System institutions' ability to effectively use derivative instruments to manage interest rate risk. In addition, to the extent that System institutions cannot successfully transition their LIBOR-based financial instruments to an alternative rate based index that is endorsed or supported by regulators and generally accepted by the market as a replacement to LIBOR, there could be other ramifications, including those that may arise as a result of the need to redeem or terminate such financial instruments. The foregoing risk has been largely addressed by federal legislation and related rulemaking discussed below through the amendment of certain provisions by operation of law to include a viable fallback away from LIBOR.

New York and several other states have passed laws intended to apply to US dollar LIBOR-based contracts, securities, and instruments governed by those states' laws. These laws established fallbacks for LIBOR when there is no or insufficient fallback rates in these contracts. The federal Adjustable Interest Rate (LIBOR) Act (LIBOR Act) was signed into law on March 15, 2022. The federal legislation provides a statutory fallback mechanism on a nationwide basis to replace US dollar LIBOR with a benchmark rate, selected by the Federal Reserve Board and based on SOFR, for certain contracts that reference US dollar LIBOR and contain no or insufficient fallback provisions. The New York and other state laws were superseded by the LIBOR Act.

On December 16, 2022, the Federal Reserve Board adopted a final rule implementing certain provisions of the LIBOR Act ("Regulation ZZ"). Regulation ZZ specifies that on the LIBOR replacement date, which is the first London banking day after June 30, 2023, the Federal Reserve Boardselected benchmark replacement, based on SOFR and including any tenor spread adjustment as provided by Regulation ZZ, will replace references to overnight, one-month, three-month, six-month, and 12-month LIBOR in certain contracts that do not mature before the LIBOR replacement date and that do not contain adequate fallback language. While substantially all System contracts, including Systemwide Debt Securities and loans made by System institutions, have adequate fallbacks to replace LIBOR, the LIBOR Act and Regulation ZZ could apply to certain Systemwide Debt Securities and System institution investments, preferred stock and loans that reference LIBOR and have no or inadequate fallback provisions.

To the extent necessary, substantially all Systemwide Debt Securities and System institution loans and other financial products that reference LIBOR, have been amended to incorporate adequate fallbacks, including, where appropriate, the SOFRbased fallbacks recommended by the Alternative Reference Rates Committee (the "ARRC"). ARRC is an industry-working group convened by the Federal Reserve Board and the New York Fed to lead the LIBOR transition, which, among other work, has developed industry-specific fallback language that may be used by market participants to address the cessation of US dollar LIBOR. On July 29, 2021, the ARRC formally announced that CME Term SOFR is an appropriate fallback to LIBOR to be used for certain types of currently outstanding loans, floating rate notes (which would include certain outstanding Systemwide Debt Securities) based on LIBOR when LIBOR is discontinued or deemed unrepresentative, and, in more limited circumstances, for new loans, floating rate notes and other transactions, including certain derivatives. CME Term SOFR are forwardlooking rates published by CME Group Benchmark Administration Limited for 1-month, 3-month, 6month and 12-month tenors. The ARRC's support of CME Term SOFR is expected to increase the volume of transactions quoted in SOFR, supporting the transition away from LIBOR.

The following is a summary of variable-rate Systemwide Debt Securities and other financial instruments impacted by the LIBOR transition:

	Dec	cember 31, 2022
	(in	millions)
Variable-rate Systemwide Debt Securities by interest-rate index:		
LIBOR	\$	966
SOFR		99,548
Federal funds, Prime and other		29,590
Total	\$	130,104
LIBOR-indexed Systemwide Debt Securities by contractual maturity:		
Due in 2023 on or before June 30.	\$	85
Due after June 30, 2023(1)		881
Total	\$	966

⁽¹⁾ It is anticipated that Systemwide Debt Securities totaling \$796 million with a contractual maturity after June 30, 2023 will be replaced by a CME Term SOFR-based rate pursuant to their terms. To the extent that any other Systemwide Debt Securities do not have terms that would replace their LIBOR-based rate by a non-LIBOR-based rate (at present \$85 million), pursuant to the Adjustable Interest Rate (LIBOR) Act, the LIBOR-based rate in such securities could also be replaced by operation of law with a CME Term SOFR-based rate.

	on	e in 2023 or before e 30, 2023	_	Oue after 1e 30, 2023	Total
			(in	millions)	
LIBOR-indexed variable-rate financial instruments at December 31, 2022:					
Investments	\$	32	\$	4,842	\$ 4,874
Loans(1)		3,959		21,885	25,844
Preferred stock(2)				133	133
Derivatives (notional amount)(3)		6,569		24,139	30,708

⁽¹⁾ In anticipation of the LIBOR transition described above, System institutions have amended a substantial majority of the loan agreements to provide SOFR-based fallbacks to LIBOR. System institutions continue to pursue amendments and other alternatives with respect to the transition away from LIBOR for remaining loans. To the extent that any loan has not been prepaid or amended prior to June 30, 2023 to include a non-LIBOR fallback rate, pursuant to the LIBOR Act and Regulation ZZ, the LIBOR-based rate that would have been paid under such loan will be replaced by operation of law with a CME Term SOFR-based rate.

Note: Excluded from this table are preferred stock issuances totaling \$1.425 billion that currently have fixed dividend rates but convert to LIBOR-indexed variable-rates in the future. The \$133 million of preferred stock is perpetual and may not be redeemed until July 10, 2027 or thereafter. For additional information regarding preferred stock, see Note 12 to the accompanying combined financial statement.

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 loans and other funding commitments, and the ability to fund operations all within a cost-effective manner. A primary objective of liquidity risk management is to plan for unanticipated changes in the capital markets. The Banks and Funding Corporation

⁽²⁾ Since US dollar LIBOR will no longer be available or, to the extent available, non-representative after June 30, 2023, the annual rate will be replaced by a CME Term SOFR-based rate either by bi-lateral negotiation or by operation of law. To the extent that any preferred stock has not been redeemed or amended prior to June 30, 2023 to include a non-LIBOR fallback rate, pursuant to the LIBOR Act and Regulation ZZ, the LIBOR-based rate that would have been paid after June 30, 2023 under such preferred stock will be replaced by operation of law with a CME Term SOFR-based rate.

⁽³⁾ Derivative transactions with a notional amount of \$13.608 billion that mature after June 30, 2023 are LIBOR-based over-the-counter transactions executed pursuant to an International Swaps and Derivatives Association, Inc. (ISDA) Master Agreement with major banks or other swap dealers. Pursuant to the terms of those transactions or pursuant to the LIBOR Act by operation of law after June 30, 2023 the LIBOR-based rate in such transactions will be replaced with a rate based upon a compounded SOFR-based rate calculated in arrears. The relevant clearinghouses have announced that LIBOR-based derivative transactions, cleared through such clearinghouses, with a notional amount of \$10.531 billion that mature after June 30, 2023, will also have their LIBOR-based rate transactions amended to become or be replaced by SOFR-based rate transactions pursuant to clearinghouse rules.

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.

In addition, each Bank maintains contingency funding plans that address actions each Bank would consider in the event that there is not ready access to traditional funding sources. These potential actions include drawing on existing uncommitted lines of credit with various financial institutions, borrowing overnight via federal funds, using investment securities as collateral to borrow cash, selling investment securities under repurchase agreements, using the proceeds from maturing investments and selling liquid investments.

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 certain limited circumstances. 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, 2023, 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. The Banks continually raise funds to support the mission to provide credit and related services to the agricultural and rural sectors, repay maturing Systemwide Debt Securities, build liquidity and meet government-sponsored obligations. other As enterprises, the Banks have had access to the global capital markets. This access has traditionally provided a dependable source of competitively priced debt that is critical to support our mission of providing funding to the agricultural and rural sectors. The U.S. government does not guarantee, directly or indirectly, the payment of principal or interest on any Systemwide Debt Securities issued by the Banks.

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

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

	December 31,								
	2022		2021						
	(in mi	llion	s)						
Debt maturing within:									
one day	\$ 776	\$	862						
one week	1,801		3,543						
one quarter	42,381		38,389						
six months	75,410		70,876						
one year	144,776		130,701						

Cash provided by the System's operating activities, which is primarily generated from net interest income in excess of operating expenses, was \$7.619 billion for 2022, \$7.033 billion for 2021 and \$6.166 billion for 2020 and provided an additional source of liquidity for the System that is not reflected in the individual Bank's calculation of days of liquidity, which is discussed under "Liquidity Standard" below. Further, funds in the Insurance Fund would be used to repay maturing Systemwide Debt Securities to the extent available if no other sources

existed to repay the debt. At December 31, 2022 and 2021, the assets in the Insurance Fund totaled \$6.673 billion and \$5.960 billion. (See "Insurance Fund" beginning on page 89 of this Annual Information Statement for additional information.)

Federal Funds and Available-for-Sale Investments

As permitted under Farm Credit Administration regulations, a Bank is authorized to hold Federal funds and available-for-sale investments in an amount not to exceed 35% of a Bank's average loans outstanding for the quarter. For purposes of this calculation, the 30-day average daily balance of Federal funds and investments, carried at amortized cost, is divided by the average daily balance for loans outstanding plus accrued interest for the quarter. Investments are utilized for the purposes of maintaining a diverse source of liquidity, managing short-term surplus funds and managing interest rate risk and, in so doing,

they may enhance profitability. At December 31, 2022, no Bank exceeded the 35% limit.

In addition, the Associations are authorized to hold securities as eligible risk management investments 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 with the approval of its affiliated Bank, in an amount not to exceed 10% of its total average 90-day outstanding loan balance. Associations may also hold portions of USDA Guaranteed Loans purchased in the secondary market as eligible risk management investments. At December 31, 2022, no Association exceeded the 10% limit.

Bank eligible investments (carried at fair value) must comply with the regulatory eligibility criteria and for reporting purposes are shown below by credit ratings issued by Moody's Investors Service, S&P Global Ratings, or Fitch Ratings.

Credit Ratings by Investment Type

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

The Bank's holdings of eligible investments were as follows:

Engine investments									
AAA/A	Aaa_	A	A1/P1/F1				A/A	_	Total
				(in	millions)				
		\$	13,053					\$	13,053
			6,629	\$	2,849	\$	124		9,602
					20,680				20,680
					1,680				1,680
					29,337				29,337
					2,360				2,360
					23				23
\$	952				3,552				4,504
\$	952	\$	19,682	\$	60,481	\$	124	\$	81,239
	\$	\$ 952 \$ 952	\$ 952	AAA/Aaa A1/P1/F1 \$ 13,053 6,629 \$ 952	AAA/Aaa A1/P1/F1 F (in \$ 13,053 6,629 \$ \$	Split Rated(1) (in millions)	AAA/Aaa	AAA/Aaa A1/P1/F1 Split Rated(1) (in millions) \$ 13,053 6,629 \$ 2,849 \$ 124 20,680 1,680 29,337 2,360 23 \$ 952 3,552	AAA/Aaa

	Eligible Investments									
December 31, 2021	AAA	AA/Aaa A1/P1/F1		Split Rated(1)	A/A		_	Total		
					(in millions)					
Federal funds sold and securities purchased under resale agreements			\$	6,094				\$	6,094	
Commercial paper, bankers' acceptances, certificates of deposit and other securities				3,008	\$ 1,220	\$	56		4,284	
U.S. Treasury securities					25,235				25,235	
U.S. agency securities					2,162				2,162	
Mortgage-backed securities:										
Agency collateralized					27,385				27,385	
Agency whole-loan pass through					2,719				2,719	
Private label-FHA/VA					29				29	
Asset-backed securities	\$	590			3,044				3,634	
Total	\$	590	\$	9,102	\$ 61,794	\$	56	\$	71,542	

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

As noted in the tables above, the split rating on investments in U.S. Treasury, U.S. agency and agency mortgage-backed securities is the result of 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 a Bank held investment no longer meets the regulatory eligibility criteria referred to above, the investment becomes ineligible for regulatory liquidity calculation purposes. Under Farm Credit

Administration regulations, if a Bank held 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:

Eligible Investments

- 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 statutory 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 or for

safety and soundness reasons. As of December 31, 2022, 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.

Ineligible securities (carried at fair value) held by the Banks totaled \$558 million at December 31, 2022 and \$454 million at December 31, 2021 and represented 0.7% and 0.6% of Federal funds and available-for-sale investments at December 31, 2022 and 2021, respectively.

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

	December 31, 2022							December 31, 2021						
	A	mortized Cost		Fair Value		Unrealized ains/(Losses)	A	Amortized Cost				Fair Value		Unrealized ains/(Losses)
						(in mi	llio	ns)						
Mortgage-backed securities:														
Agency collateralized	\$	31,996	\$	29,337	\$	(2,659)	\$	27,462	\$	27,385	\$	(77)		
Agency whole-loan pass through		2,768		2,360		(408)		2,729		2,719		(10)		
Private label-FHA/VA		91		80		(11)		107		100		(7)		
Total mortgage-backed securities	\$	34,855	\$	31,777	\$	(3,078)	\$	30,298	\$	30,204	\$	(94)		
Asset-backed securities:														
Small business loans	\$	3,991	\$	3,552	\$	(439)	\$	3,021	\$	3,043	\$	22		
Auto loans		608		605		(3)		107		108		1		
Equipment loans		159		158		(1)		77		77				
Credit card receivables		117		113		(4)		341		342		1		
Other		79		76		(3)		64		64				
Total asset-backed securities	\$	4,954	\$	4,504	\$	(450)	\$	3,610	\$	3,634	\$	24		

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

	 Decem	ber 3	1,
	2022		2021
	(in m	illions)
Floating-rate mortgage-backed securities	\$ 14,052	\$	12,187
Fixed-rate mortgage-backed securities	 17,725		18,017
Total mortgage-backed securities	\$ 31,777	\$	30,204
Floating-rate asset-backed securities	\$ 1,059	\$	624
Fixed-rate asset-backed securities	 3,445		3,010
Total asset-backed securities	\$ 4,504	\$	3,634

Other Investments

As mentioned above, Associations are permitted to hold investments but they are limited to securities that are issued by, or are unconditionally guaranteed or insured as to the timely payment of principal and interest, the U.S. government or its agencies. Agricultural mortgage-backed securities issued by Farmer Mac are also considered allowable investments for both Banks and Associations but are excluded from

the Banks' eligible investment limitation and the Banks' liquidity calculations. These Farmer Mac

securities are backed by farm and ranch loans or USDA-guaranteed portions of loans.

Other investments outstanding that are classified as held-to-maturity (carried at amortized cost) are as follows:

	Decen	iber 3	1,
	2022		2021
	(in m	illions)
Small Business Administration and other government guaranteed securities	\$ 2,241	\$	1,358
Farmer Mac securities	610		679
Rural America bonds and Agricultural Rural Community bonds	37		46
Total	\$ 2,888	\$	2,083

Other investments outstanding that are classified as available-for-sale (carried at fair value) are as follows:

		,		
	2022			2021
		(in mi		
U.S. Treasury securities	\$	1,449	\$	864
Small Business Administration and other government guaranteed securities		129		115
Rural home loan securities		128		176
Farmer Mac securities		10		14
Other securities		25		20
Total	\$	1,741	\$	1,189

The Banks and Associations rely on third party pricing providers for their investment valuations. Third party pricing providers were able to appropriately price all investment securities at December 31, 2022 using the same processes as yearend 2021.

An investment is considered impaired if its fair value is less than its amortized cost. The Banks and Associations performed other-than-temporary impairment assessments on impaired securities based on evaluations of both current and future market and credit conditions. Each Bank and Association has its own model that includes relevant assumptions and inputs such as housing prices, unemployment, delinquencies and loss severity trends. Subsequent changes in market or credit conditions could change these evaluations. An impaired available-for-sale security in an unrealized loss position is considered to be other-than-temporarily impaired if a Bank or Association (i) intends to sell the security, (ii) is more likely than not to be required to sell the security before recovering its cost, or (iii) does not expect to recover the security's entire amortized cost basis even if the entity does not intend to sell. If a Bank or Association intends to sell an impaired debt security or it is more likely than not to be required to sell the security before recovery of its amortized cost basis, then the impairment is other-than-temporary and the difference between amortized cost and fair value of the impaired security should be recognized currently in earnings. As of December 31, 2022, the Banks and Associations did not intend to sell available-for-sale securities in unrealized loss positions and it is not more likely than not that they will be required to sell these securities.

Liquidity Standard

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

- maintain board policies and management procedures to monitor, measure, manage and mitigate liquidity and other related risks;
- maintain a three-tiered liquidity reserve. The
 first tier of the liquidity reserve must consist
 of a sufficient amount of cash and/or cashlike instruments to cover each Bank's
 principal portion of maturing obligations and
 other borrowings for 15 days. The second and
 third tiers of the liquidity reserve must
 contain cash, cash-like instruments, and/or
 eligible highly liquid instruments that are
 sufficient to cover the Bank's obligations for
 the next 15 and subsequent 60 days,
 respectively;
- establish a supplemental liquidity buffer, in addition to the three tiers set forth

immediately above, that would provide a longer term, stable source of funding beyond the 90-day minimum and is comprised of cash and eligible investments; and

 maintain a Contingency Funding Plan to ensure sources of liquidity are sufficient to fund normal operations under a variety of stress events.

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

At December 31, 2022, each Bank met the individual tiers' minimums of the liquidity reserve and exceeded the aggregate regulatory minimum 90 days of liquidity. Each Bank's liquidity position ranged from 159 to 221 days at December 31, 2022. The Banks' aggregate liquidity position was 180 days at both December 31, 2022 and 2021. (See Note 21 for each Bank's liquidity position at December 31, 2022 and 2021.)

Contractual Obligations

We enter into contractual obligations in the ordinary course of business, including debt issuances for the funding of our business operations. Systemwide Debt Securities are the joint and several obligations of the Banks. Payments of principal and interest to the holders of Systemwide Debt Securities are insured by amounts held in the Insurance Fund as described in Note 7 to the accompanying combined financial statements. The Banks may issue certain other bonds directly to eligible purchasers. These bonds are the obligations solely of the issuing Bank and are not subject to joint and several liability of the other Banks. In addition, certain Associations have issued subordinated debt with the proceeds to be used for general corporate purposes as described in Note 10 to the accompanying combined financial statements.

Subordinated debt is the sole obligation of the issuing entity and is not guaranteed by any other System institution. Such obligations are not Systemwide Debt Securities subject to the joint and several obligations of the Banks and are not guaranteed or insured by the Insurance Fund.

We also enter into derivative transactions with counterparties that create contractual obligations. See "Derivative Products" beginning on page 71 of this Annual Information Statement for additional information. Substantially all proceeds of debt issuances were used to repay maturing debt, as well as to fund growth in loans and investment securities.

Issuance, maturity, and retirement activity of Systemwide Debt Securities for the past two years was:

	Systemwide Systemwide Medium- Bonds Term Notes				Syster Discour		Total			
	2022	2021	20	2022 2021		2021 2022		2021	2022	2021
						(in	millions)			
Balance, beginning of year	\$328,488	\$299,064	\$	64	\$	81	\$ 24,271	\$ 23,510	\$ 352,823	\$ 322,655
Issuances	147,891	165,185					239,162	249,814	387,053	414,999
Maturities/retirements	(113,817)	(135,761)		(2)		(17)	(236,080)	(249,053)	(349,899)	(384,831)
Balance, end of year	\$362,562	\$328,488	\$	62	\$	64	\$ 27,353	\$ 24,271	\$ 389,977	\$ 352,823

Weighted average interest rates and weighted average maturities for 2022 and 2021 were:

	System Box		Med	mwide lium- Notes	Syster Discour	nwide nt Notes	Total		
	2022	2021	2022	2021	2022	2021	2022	2021	
At December 31:	_								
Average interest rate	2.71%	0.85%	5.75%	5.75%	3.65%	0.07%	2.78%	0.80%	
Average remaining maturity	3.3 years	3.4 years	6.0 years	7.0 years	3.7 months	3.2 months	3.1 years	3.2 years	
Issuances during the year:									
Average interest rate	2.35%	0.57%			1.68%	0.05%	1.94%	0.26%	
Average maturity at issuance	3.0 years	4.0 years			40 days	29 days	1.2 years	1.6 years	

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

		Fixed Rate				Average Interest Rate		loating Rate	0		Total
					(\$ i	n millions)					
2023	\$	78,221		2.15%	\$	66,555	4	.18%	\$ 144,776		
2024		38,290		1.76		59,310	4	.25	97,600		
2025		28,323		1.46		2,781	4	.57	31,104		
2026		19,787		1.86		430	4	.22	20,217		
2027		17,051		1.98		742	5	.13	17,793		
2028 and thereafter		78,237		2.39		250	4	.82	78,487		
Total	\$	259,909		2.06	\$	130,068	4	.23	\$ 389,977		
Fair value at December 31, 2022	\$	241,583			\$	128,132			\$ 369,715		

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

At December 31, 2022, all Banks reported compliance with the collateral requirement. (See "Farm Credit Administration Capital Requirements" beginning on page 88 of this Annual Information Statement and Note 9 to the accompanying combined financial statements.)

Each Bank determines its participation in each issue of Systemwide Debt Securities based on its funding and operating requirements, subject to: (1) the availability of eligible collateral (as described above), (2) compliance with the conditions of participation as prescribed in the Third Amended and Restated Market Access Agreement (MAA), (3) determination by the Funding Corporation of the amounts, maturities, rates of interest and terms of each issuance, and (4) Farm Credit Administration approval. As of December 31, 2022, no Bank was limited or precluded from participation in issuances of Systemwide Debt Securities. As required by the Farm Credit Act, Systemwide Debt Securities are issued pursuant to authorizing resolutions adopted by the board of directors of each Bank. Under the MAA, each Bank's ability to withdraw its authorizing resolution is restricted and, in certain circumstances, eliminated.

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

Weighted average interest rates and weighted average maturities of other bonds for 2022 and 2021 were:

	Other Bonds							
		2022		2021				
		(in mil	lions)				
Balance, beginning of year	\$	3,623	\$	2,559				
Issuances		249,508		246,372				
Maturities/retirements		(247,532)	(245,308)				
Balance, end of year	\$	5,599	\$	3,623				

_	Other Bonds					
_	2022	2021				
At December 31:						
Average interest rate	3.22%	0.06%				
Average remaining maturity	1 day	1 day				
Issuances during the year:						
Average interest rate	1.12%	0.02%				
Average maturity at issuance	1 day	1 day				

Capital Adequacy and the Ability to Repay Systemwide Debt Securities

System Capitalization

The changes in capital for the year ended December 31, 2022 were:

	<u>Capital</u>									
	Combined Banks				Insurance Fund		Combination Entries		System Combined	
					(i	n millions)				
Balance at December 31, 2021	\$	23,244	\$	48,211	\$	5,960	\$	(7,938)	\$	69,477
Net income		2,766		5,619		713		(1,830)		7,268
Change in accumulated other comprehensive loss		(4,192)		(86)				(4)		(4,282)
Preferred stock issued		400								400
Preferred stock retired		(702)		(275)						(977)
Preferred stock dividends		(157)		(43)						(200)
Capital stock and participation certificates issued		466		100				(465)		101
Capital stock and participation certificates and retained earnings retired		(178)		(110)				141		(147)
Equity issued or recharacterized upon Association merger				820						820
Equity retired or recharacterized upon Association merger				(868)						(868)
Patronage		(1,483)		(2,746)				1,238		(2,991)
Balance at December 31, 2022	\$	20,164	\$	50,622	\$	6,673	\$	(8,858)	\$	68,601

Note: System combined capital reflected eliminations of approximately \$7.5 billion and \$6.7 billion of Bank equities held by Associations as of December 31, 2022 and 2021. System combined capital also reflected net eliminations of transactions between System entities, primarily related to accruals, and retained earnings allocations by certain Banks to their Associations. (See Notes 12 and 21 to the accompanying combined financial statements.)

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

During 2022, one Bank issued \$400 million of preferred stock and two Banks and one Association retired preferred stock totaling \$722 million. In addition during the second quarter of 2022, one Association discontinued its Class H preferred stock program and retired \$247 million of preferred stock. (See Note 12 of the accompanying combined financial statements for additional information.)

Preferred stock is the sole obligation of the issuing entity and is not guaranteed by any other System institution. Such obligations are not Systemwide Debt Securities and therefore are not subject to the joint and several obligations of the Banks and are not guaranteed or insured by the Insurance Fund.

The System continues to build capital through net income earned and retained, and to a lesser extent preferred stock issuances. Capital accumulated through earnings has been partially offset by cash patronage distributions to stockholders. Retained earnings of \$57.3 billion is the most significant component of capital. Retained earnings as a percentage of capital was 83.5% and 79.0% at December 31, 2022 and 2021. Capital as a percentage of assets decreased to 14.4% at December 31, 2022, as compared with 15.9% at December 31, 2021, primarily due to an increase in accumulated other comprehensive loss.

Accumulated other comprehensive loss, net of tax, was comprised of the following components:

	December 31,						
·		2022		2021			
·		(in mi	llions	s)			
Unrealized (losses) gains on investments available- for-sale, net	\$	(4,543)	\$	139			
Unrealized gains (losses) on cash flow hedges, net		187		(232)			
Pension and other benefit plans		(1,136)		(1,117)			
	\$	(5,492)	\$	(1,210)			

Accumulated other comprehensive loss increased \$4.282 billion during 2022 primarily as result of an increase in interest rates that decreased the fair value of existing fixed-rate investment securities, which are primarily comprised of securities issued by the U.S. government or its agencies.

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

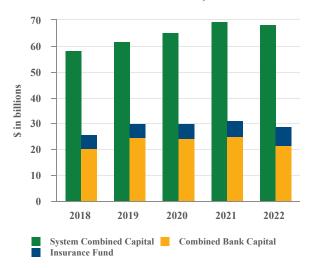
other Banks. The Banks, through the issuance of Systemwide Debt Securities, generally finance the wholesale loans to their affiliated Associations who lend the proceeds to their customers. CoBank, as an Agricultural Credit Bank, makes loans to agricultural and rural infrastructure cooperatives and businesses, 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 riskbearing capabilities of each affiliated Association through various mechanisms, including testing the reliability of each Association's credit classifications and prior-approval of certain Association loan transactions. Capital, allowance for loan losses and earnings at the Association level also reduce the credit exposure that each Bank has with respect to the loans between the Bank and its affiliated Associations.

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

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

Bank Capital and Insurance Fund

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



Combined Bank-only information is considered meaningful because only the Banks are jointly and severally liable for payment of principal and interest on Systemwide Debt Securities. Amounts in the Insurance Fund are included in the System's combined financial statements because, under the Farm Credit Act, these amounts can only be used for the benefit of the 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 decreased \$2.367 billion during 2022 \$26.837 billion at December 31, 2022, primarily due to an increase in accumulated other comprehensive loss. Combined Bank capital as a percentage of combined Bank assets decreased to 4.8% at December

Uniform Loan Classification System
Acceptable
OAEM
Total

At December 31, 2022 and 2021, none of the wholesale loans classified as OAEM are deemed a

31, 2022, as compared with 6.0% at December 31, 2021. Each Bank's capital as a percentage of its assets ranged from 3.5% to 5.4% at December 31, 2022. (See Note 21 to the accompanying combined financial statements.) The Banks have implemented and continue to evaluate capital and asset management strategies to provide sufficient capacity to meet the borrowing needs of its customers and to fulfill the System's mission of providing credit to agriculture and rural America.

Combined Bank-only net income increased \$66 million to \$2.766 billion for 2022, as compared with \$2.700 billion for 2021, primarily as a result of increases in net interest income and noninterest income. 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 loans to cooperatives and other eligible borrowers. The Banks' wholesale loans to Associations represent a majority of the assets on the combined Bank-only balance sheet. These loans carry less risk than retail loans because the Associations operate under General Financing Agreements with their affiliated Banks and a regulatory framework that includes maintaining certain minimum capital standards, adequate reserves, and prudent underwriting standards. Substantially all Association assets are pledged as collateral for their respective wholesale loan. Based on the lower risk of loans to the Associations, the Banks typically operate with more leverage and lower earnings than would be expected from a retail bank.

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

December	r 31, 2022	December	r 31, 2021							
Number of Associations	Direct Note	Number of Associations	Direct Note							
(\$ in millions)										
61	\$ 229,211	64	\$ 208,818							
2	1,604	3	2,919							
63	\$ 230,815	67	\$ 211,737							

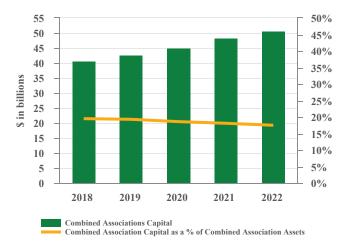
credit risk and none have an associated allowance for loan losses.

Over the past five years, a substantial portion of income earned at the Bank level has been passed on to the Associations through patronage distributions. Bank capital increased \$981 million since December 31, 2018 and decreased \$3.080 billion since December 31, 2021 to \$20.164 billion at December 31, 2022. The Banks had net income of \$2.766 billion in 2022, retaining \$1.126 billion after cash patronage and preferred stock dividends, as compared with \$2.700 billion in 2021, retaining \$605 million after cash patronage and preferred stock dividends.

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

Association Capital

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



Combined Association capital increased \$10.118 billion since December 31, 2018 and \$2.411 billion since December 31, 2021 to \$50.622 billion at December 31, 2022. The growth in Association capital during 2022 resulted primarily from income earned and retained. Combined Associations recorded \$5.619 billion of net income in 2022, retaining \$2.873 billion after patronage distributions, as compared with \$5.474 billion of net income in 2021 with \$2.857 billion retained after cash patronage distributions.

Combined Association capital as a percentage of combined Association assets decreased to 17.5% at December 31, 2022 from 18.1% at December 31, 2021. (See "Farm Credit Administration Capital Requirements" below for additional information.)

Capital Adequacy Plans

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

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

Farm Credit Administration Capital Requirements

The Farm Credit Administration sets minimum regulatory capital requirements for Banks and Associations.

The following set forth the regulatory capital ratio requirements and ratios at December 31, 2022:

Ratio	Primary Components of Numerator	Denominator	Minimum Requirement	Minimum with Buffer	Banks(1)	Associations
Common Equity Tier 1 (CET1) Capital	Unallocated retained earnings (URE) and common cooperative equities (qualifying capital stock and allocated equity)(2)	Risk-weighted assets	4.5%	7.0%	8.7% - 16.3%	9.8% - 32.3%
Tier 1 Capital	CET1 Capital and non- cumulative perpetual preferred stock	Risk-weighted assets	6.0%	8.5%	13.4% - 16.9%	11.6% - 32.3%
Total Capital	Tier 1 Capital, allowance for loan losses(3), other common cooperative equities(4), and term preferred stock and subordinated debt(5)	Risk-weighted assets	8.0%	10.5%	13.5% - 16.9%	12.1% - 33.1%
Tier 1 Leverage	Tier 1 Capital (at least 1.5% must be URE and URE equivalents)	Total assets	4.0%	5.0%	5.2% - 6.8%	10.5% - 31.3%
Permanent Capital	Retained earnings, common stock, non-cumulative perpetual preferred stock and subordinated debt, subject to certain limits	Risk-weighted assets	7.0%	N/A	13.4% - 16.9%	11.9% - 32.5%
Unallocated Retained Earnings and URE Equivalents (UREE) Leverage	URE and URE Equivalents	Total assets	1.5%	N/A	2.3% - 5.4%	5.4% - 31.0%

⁽¹⁾ See Note 21 to the accompanying combined financial statements for each Bank's Total Capital ratio and Tier 1 Leverage ratio at December 31, 2022 and 2021.

- (2) Equities subject to a minimum redemption or revolvement period of 7 or more years
- (3) Capped at 1.25% of risk-weighted assets and inclusive of the reserve for unfunded commitments
- (4) Equities subject to a minimum redemption or revolvement period of 5 years or more, but less than 7 years
- (5) Equities subject to a minimum redemption or revolvement period of 5 years or more years

Insurance Fund

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

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

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

Due to the restricted use of funds in the Insurance Fund, the assets of the Insurance Fund have been included as a restricted asset and the capital of the Insurance Fund as restricted capital in the System's combined financial statements. As of December 31, 2022 and 2021, the assets in the Insurance Fund totaled \$6.673 billion and \$5.960 billion. The aggregate amounts of additions to the Insurance Fund and the related transfers from retained earnings to restricted capital were \$713 million in 2022, \$505 million in 2021 and \$316 million in 2020. (See Note 7 to the accompanying combined financial Supplemental Combining statements and the Information on pages F-68 through F-70 for combining statements of condition and income that illustrate the impact of including the Insurance Fund in the System's combined financial statements.)

The Insurance Corporation assesses premiums to ensure the assets in the Insurance Fund for which no specific use has been identified or designated are maintained at the "secure base amount." The Farm Credit Act, as amended, requires the secure base amount to be maintained at 2% of aggregate outstanding insured debt (adjusted to reflect the reduced risk on loans or investments guaranteed by

federal or state governments) or such other percentage of aggregate outstanding insured debt as the Insurance Corporation in its sole discretion determines to be actuarially sound. Insurance premiums are established by the Insurance Corporation with the objective of maintaining the secure base amount at the level required by the Farm Credit Act.

As required by the Farm Credit Act, as amended, if at the end of any calendar year, the aggregate amount in the Insurance Fund exceeds the secure base amount, the Insurance Corporation is required to transfer the excess funds above the secure base, less the Insurance Corporation's projected annual operating expenses, to the Allocated Insurance Reserves Accounts for each Bank.

As determined by the Insurance Corporation, the assets in the Insurance Fund for which no specific use has been identified or designated were 1.97%, 1.98% and 1.93% at December 31, 2022, 2021 and 2020 of aggregate insured obligations. No amounts were allocated to the Allocated Insurance Reserves Accounts as of December 31, 2022, 2021 and 2020.

In February 2023, the Insurance Corporation reviewed the level of the secure base amount and determined that it would assess premiums of 18 basis points on adjusted insured debt and continue the assessment of an additional ten basis points on nonaccrual loans and other-than-temporarily impaired investments. For further discussion on the Insurance Fund and the Allocated Insurance Reserves Accounts, see Note 7 to the accompanying combined financial statements.

Joint and Several Liability

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

Operational Risk Management

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

- direction to management that assigns responsibility for the internal control function to an officer of the institution,
- adoption of internal audit and control procedures,
- direction for the operation of a program to review and assess its assets,
- adoption of loan, loan-related assets and appraisal review standards, including standards for scope of review selection and 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. Exposure to operational risk is typically identified by senior management with the assistance of 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 a simple error or mistake. Additionally, controls can be circumvented by individual acts, 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, controls 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, the agricultural industry in general, or government sponsored enterprises.

Given the unique structure of the System, managing reputational risk is the direct responsibility of each System entity. (See "Structural Risk Management" on pages 50 and 51 of this Annual Information Statement for a discussion on the structure of the System).

Committees or 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 committees and entities support those business and other practices that are consistent with our mission. (See page 15 of this Annual Information Statement for a discussion on the Coordinating Committee and the Presidents' Planning Committee).

Political Risk Management

Political risk to the System is the risk actions taken by the U.S. government may negatively impact the System or the agriculture industry. 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 may be significantly affected by federal legislation, such as changes to the Farm Credit Act, or indirectly, such as agricultural appropriations bills. In addition, our borrowers may also be significantly affected by changes in federal farm policy, agricultural appropriations bills and U.S. trade and tax policy.

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 their respective Districts.

Regulatory Matters

On April 14, 2022, the Farm Credit Administration approved a final rule that amends certain regulations to address changes in accounting principles generally accepted in the United States. Such changes reflect the CECL methodology that will replace the incurred loss methodology upon adoption. Credit loss allowances related to loans, lessor's net investments in leases, and held-to-maturity debt securities have been defined as adjusted allowances for credit losses and will be included in a System institution's Tier 2 capital up to 1.25% of the System institution's total risk-weighted assets. Credit loss allowances for available-for-sale debt securities and purchased credit impaired assets would not be eligible for inclusion in a System institution's Tier 2 capital. In addition, the final rule does not include a transition phase-in period for the CECL day 1 cumulative effect adjustment to retained earnings on a System institution's regulatory capital ratios. The rule became effective on January 1, 2023.

On July 8, 2021, the Farm Credit Administration approved a proposed rule to revise its regulatory capital requirements to define and establish risk-weightings for High Volatility Commercial Real Estate (HVCRE) exposures by assigning a 150% risk-weighting to such exposures, instead of the current 100%. The proposed rule would further align the Farm Credit Administration's risk-weightings with federal banking regulators and recognizes the increased risk characteristics of HVCRE exposures. The public comment period ended on January 24, 2022.

Recently Adopted or Issued Accounting Pronouncements

See pages F-13 through F-14 to the accompanying combined financial statements for the recently adopted or issued accounting pronouncements.

INDEX TO COMBINED FINANCIAL STATEMENTS AND SUPPLEMENTAL COMBINING AND FINANCIAL INFORMATION

	rage
Report on Internal Control Over Financial Reporting	F-2
Report of Independent Registered Public Accounting Firm	F-3
Combined Statement of Condition	F-6
Combined Statement of Income	F-7
Combined Statement of Comprehensive Income	F-8
Combined Statement of Changes in Capital	F-9
Combined Statement of Cash Flows	F-10
Notes to Combined Financial Statements	F-12
Supplemental Combining Information	F-68
Supplemental Financial Information (unaudited)	F-76

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

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

Managements of System institutions have completed an assessment of the effectiveness of the System's internal control over financial reporting as of December 31, 2022. In making the assessment, managements of System institutions used the framework in *Internal Control* — *Integrated Framework (2013)*, promulgated by the Committee of Sponsoring Organizations of the Treadway Commission, commonly referred to as the "COSO" criteria.

Based on the assessment performed, the Funding Corporation concluded that as of December 31, 2022, the System's internal control over financial reporting was effective based upon the COSO criteria. Additionally, based on this assessment, the Funding Corporation determined that there were no material weaknesses in the System's internal control over financial reporting as of December 31, 2022.

The System's internal control over financial reporting as of December 31, 2022 has been audited by PricewaterhouseCoopers, LLP, an independent registered public accounting firm, as stated in their accompanying report on pages F-3 through F-5 which expresses an unqualified opinion on the effectiveness of the System's internal control over financial reporting as of December 31, 2022.

Theresa E. McCabe

President and CEO

Funding Corporation

Karen R. Brenner

Managing Director — Financial

Management Division

Funding Corporation



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of the Federal Farm Credit Banks Funding Corporation:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying combined statements of condition of the Farm Credit System (the "System") as of December 31, 2022 and 2021, and the related combined statements of income, of comprehensive income, of changes in capital, and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes (collectively referred to as the "combined financial statements"). We also have audited the System's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the financial position of the System as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the System maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The System's management is responsible for these combined financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report on Internal Control Over Financial Reporting. Our responsibility is to express opinions on the System's combined financial statements and on the System's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the System in accordance with the relevant ethical requirements relating to our audit, which include standards of the American Institute of Certified Public Accountants (AICPA) Code of Professional Conduct and the Farm Credit Administration's independence rules set forth in 12 CFR Part 621, Accounting and Reporting Requirements, Subpart E, Auditor Independence.

We conducted our audits in accordance with the auditing standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the combined financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the combined financial statements included performing procedures to assess the risks of material misstatement of the combined financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the combined financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the combined financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Supplemental Information

The combining information on pages F-68 through F-75 of the 2022 Annual Information Statement as of December 31, 2022 and 2021 and for each of the three years in the period ended December 31, 2022 (the "supplemental information") has been subjected to audit procedures performed in conjunction with the audit of the System's combined financial statements. The combining information is not intended to present, and we do not express an opinion on, the financial position, results of operations and cash flows of the individual companies. The supplemental information is the responsibility of the System's management. Our audit procedures included determining whether the supplemental information reconciles to the combined financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In our opinion, the supplemental information is fairly stated, in all material respects, in relation to the combined financial statements as a whole.

Definition and Limitations of Internal Control over Financial Reporting

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

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

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the combined financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the combined financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the combined financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Allowance for Loan Losses - Loans Collectively Evaluated for Impairment

As described in Notes 2 and 4 to the combined financial statements, the allowance for loan losses was \$1.6 billion, of which \$1.4 billion is related to loans collectively evaluated for impairment as of December 31, 2022. The allowance for loan losses represents the aggregate of each System entity's individual evaluation of its allowance for loan losses requirements. Although aggregated in the combined financial statements, the allowance for loan losses of each System entity is particular to that institution and is not available to absorb losses realized by other System entities. Management of each System entity determines the allowance for loan losses on loans collectively evaluated for impairment using a two-dimensional risk rating model that incorporates a 14-point scale to identify and track the probability of borrower default and a separate scale addressing loss given default over a period of time. Probability of default is management's estimate of the probability that a borrower will experience a default within 12 months from the date of the determination of the risk rating, and loss given default is management's estimate as to the anticipated loss on a specific loan assuming default has occurred or is expected to occur within the next 12 months. As disclosed by management, judgment is also applied by management of each System entity to adjust various loss

factors, taking into consideration model imprecision, external factors and economic events that have not yet been reflected in the loss factors.

The principal considerations for our determination that performing procedures relating to the allowance for loan losses - loans collectively evaluated for impairment is a critical audit matter are (i) the significant judgment by management in determining the allowance for loan losses, which in turn led to a high degree of auditor judgment, subjectivity and effort in performing audit procedures and evaluating audit evidence relating to management's estimated probability of default and estimated loss given default assumptions, as well as management's adjustments to certain loss factors; and (ii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the combined financial statements. These procedures included testing the effectiveness of controls relating to management's allowance for loan losses estimation process, which included controls over the estimated probability of default and estimated loss given default assumptions, as well as management's adjustments to loss factors. These procedures also included, among others, testing management's process for determining the allowance for loan losses, which included (i) testing the completeness and accuracy of certain data used in the estimate; (ii) evaluating the appropriateness of the methodology and models; and (iii) evaluating the reasonableness of management's estimated probability of default and estimated loss given default assumptions, as well as the reasonableness of management's adjustments to certain loss factors. Professionals with specialized skill and knowledge were used to assist in evaluating the reasonableness of management's estimated probability of default assumptions.

New York, New York

March 1, 2023

We have served as the System's auditor since 1985.

Pricewater house Coopers LLP

COMBINED STATEMENT OF CONDITION (in millions)

	December 31,				
		2022		2021	
ASSETS					
Cash	\$	3,470	\$	5,548	
Federal funds sold and securities purchased under resale agreements		13,053		6,094	
Investments (Note 3)					
Available-for-sale (amortized cost of \$73,375 and \$65,717, respectively)		68,744		65,902	
Other investments held-to-maturity (fair value of \$2,684 and \$2,098, respectively)		2,888		2,083	
Other investments available-for-sale (amortized cost of \$1,847 and \$1,190, respectively)		1,741		1,189	
Loans (Note 4)		373,266		343,929	
Less: allowance for loan losses (Note 4)		(1,576)		(1,632)	
Net loans		371,690		342,297	
Accrued interest receivable		3,572		2,560	
Premises and equipment (Note 5)		1,718		1,637	
Other assets (Notes 6, 13, 14, 15, 16 and 17)		3,514		2,687	
Restricted assets (Note 7)		6,673		5,960	
Total assets		477,063	\$	435,957	
Systemwide Debt Securities Due within one year: Systemwide discount notes	\$	27,353	\$	24,271	
Systemwide bonds and medium-term notes		117,423	Ф	106,430	
Systemwide bonds and medium-term notes		144,776		130,701	
Due after one year:		111,770		150,701	
Systemwide bonds and medium-term notes		245,201		222,122	
Total Systemwide Debt Securities (Notes 8 and 9)		389,977		352,823	
Subordinated debt (Note 10)		398		398	
Other bonds (Note 9)		5,599		3,623	
Notes payable and other interest-bearing liabilities		2,463		1,809	
Accrued interest payable		1,762		650	
Other liabilities (Notes 6, 13, 14, 15, 16 and 17)		8,263		7,177	
Total liabilities		408,462		366,480	
Commitments and contingencies (Notes 4, 15 and 19) Capital (Note 12)					
Preferred stock		3,416		3,993	
Capital stock and participation certificates		2,134		2,069	
Additional paid-in-capital (Note 11)		4,597		3,782	
Restricted capital (Note 7)		6,673		5,960	
Accumulated other comprehensive loss, net of tax (Notes 3, 13 and 16)		(5,492)		(1,210)	
Allocated retained earnings		3,572		3,461	
Unallocated retained earnings		53,701		51,422	
Total capital		68,601		69,477	
Total liabilities and capital	\$	477,063	\$	435,957	

COMBINED STATEMENT OF INCOME (in millions)

	For the Year Ended December 31,					
	2022 2021			2020		
Interest income						
Investments, Federal funds sold and securities purchased under resale agreements	\$	1,539	\$	797	\$	1,090
Loans		15,177		11,744		12,017
Total interest income		16,716		12,541		13,107
Interest expense						
Systemwide bonds and medium-term notes		5,702		2,718		3,839
Systemwide discount notes		351		25		199
Other interest-bearing liabilities		121		34		23
Total interest expense		6,174		2,777		4,061
Net interest income		10,542		9,764		9,046
(Provision for loan losses) loan loss reversal		(40)		152		(107)
Net interest income after provision for loan losses/loan loss reversal		10,502		9,916		8,939
Noninterest income						
Loan-related fee income		367		392		368
Financially-related services income		347		308		273
Mineral income		107		66		42
Income earned on Insurance Fund assets (Note 7)		72		49		65
Gains (losses) on extinguishment of debt		1		(135)		(141)
Net (losses) gains on derivative, investment and other transactions		(30)		26		89
Other income		105		54		62
Total noninterest income		969		760		758
Noninterest expense						
Salaries and employee benefits (Note 13)		2,438		2,272		2,162
Purchased services		347		304		277
Occupancy and equipment expense		322		302		296
Other expense		930		841		788
Total noninterest expense		4,037		3,719		3,523
Income before income taxes		7,434		6,957		6,174
Provision for income taxes (Note 14)		(166)		(161)		(172)
Net income	. \$	7,268	\$	6,796	\$	6,002

COMBINED STATEMENT OF COMPREHENSIVE INCOME (in millions)

	For the Year Ended December 31,						
Net income		2022		2021		2020	
		7,268	\$	6,796	\$	6,002	
Other comprehensive (loss) income:							
Change in unrealized gains/losses on investments, including reclassification adjustments of \$3, \$36 and (\$7), respectively		(4,930)		(1,086)		952	
Change in unrealized gains/losses on cash flow hedges, including reclassification adjustments of \$43, \$50 and \$50, respectively		419		121		(157)	
Change in net periodic pension benefit cost, including reclassification adjustments of \$115, \$150 and \$150, respectively		(27)		317		6	
Income tax related to other comprehensive (loss) income		256		59		(82)	
Total other comprehensive (loss) income		(4,282)		(589)		719	
Comprehensive income	\$	2,986	\$	6,207	\$	6,721	

COMBINED STATEMENT OF CHANGES IN CAPITAL (in millions)

	Preferred Stock	Capital Stock and Participation Certificates	Additional Paid-in- Capital	Restricted Capital Farm Credit Insurance Fund	Accumulated Other Comprehensive Loss, Net of Tax	Allocated Retained Earnings	Unallocated Retained Earnings	Total Capital
Balance at December 31, 2019	\$ 3,121	\$ 2,009	\$ 3,738	\$ 5,202	\$ (1,340)	\$ 3,324	\$ 45,676	\$61,730
Comprehensive income	,		,		719		6,002	6,721
Transfer of Insurance Fund premiums and other income from retained earnings to restricted capital.				316			(316)	
Insurance Corporation distributions to System institutions				(63)			63	
Preferred stock issued by Banks	350						(4)	346
Preferred stock retired by Banks	(300)							(300)
Preferred stock issued by Associations	353							353
Preferred stock retired by Associations	(320)						(1.60)	(320)
Preferred stock dividends		106					(160)	(160)
Capital stock and participation certificates issued Capital stock and participation certificates retired Patronage:		106 (246)						106 (246)
Cash						(194)	(2,501)	(2,695)
Capital stock, participation certificates and retained earnings allocations		108				276	(384)	
Balance at December 31, 2020	3,204	1,977	3,738	5,455	(621)	3,406	48,376	65,535
Comprehensive income		,	- ,	-,	(589)	-,	6,796	6,207
Transfer of Insurance Fund premiums and other income from retained earnings to restricted capital.				505	, ,		(505)	
Preferred stock issued by Banks	425						(5)	420
Preferred stock retired by Banks	(39)		5				. ,	(34)
Preferred stock issued by Associations	732		(10)				(7)	715
Preferred stock retired by Associations	(329)							(329)
Preferred stock dividends							(178)	(178)
Capital stock and participation certificates issued		117						117
Capital stock and participation certificates retired		(124)						(124)
Equity issued or recharacterized upon Association merger			49					49
Equity retired or recharacterized upon Association merger							(53)	(53)
Patronage: Cash						(166)	(2,682)	(2,848)
Capital stock, participation certificates and retained earnings allocations		99				221	(320)	(2,010)
Balance at December 31, 2021	3,993	2,069	3,782	5,960	(1,210)	3,461	51,422	69,477
Comprehensive income	3,773	2,007	3,702	3,700	(4,282)	3,401	7,268	2,986
Transfer of Insurance Fund premiums and other income from retained earnings to restricted capital				713	(1,202)		(713)	2,,,,,
Preferred stock issued by Banks	400			,			(, ==)	400
Preferred stock retired by Banks	(702)							(702)
Preferred stock retired by Associations	(275)							(275)
Preferred stock dividends							(200)	(200)
Capital stock and participation certificates issued		101						101
Capital stock and participation certificates retired		(147)						(147)
Equity issued or recharacterized upon Association mergers		5	815					820
Equity retired or recharacterized upon Association mergers		(5)					(863)	(868)
Patronage:		~ /					. ,	` '
Cash						(147)	(2,844)	(2,991)
Capital stock, participation certificates and retained earnings allocations		111				258	(369)	
Balance at December 31, 2022	\$ 3,416	\$ 2,134	\$ 4,597	\$ 6,673	\$ (5,492)	\$ 3,572	\$ 53,701	\$68,601

COMBINED STATEMENT OF CASH FLOWS (in millions)

	For tl	For the Year Ended Decem				
			2021		2020	
Cash flows from operating activities	· · ·					
Net income	\$ 7,2	68	\$ 6,796	\$	6,002	
Adjustments to reconcile net income to net cash provided by operating activities:						
Provision for loan losses (loan loss reversal)		40	(152)		107	
Depreciation and amortization on premises and equipment	1	78	171		164	
Net losses (gains) on derivative, investment and other transactions		30	(26)		(89)	
Income on Insurance Fund assets, net of operating expenses		68)	(45)		(60)	
(Increase) decrease in accrued interest receivable			25		279	
Increase (decrease) in accrued interest payable	()		(36)		(337)	
Other, net		71	300		100	
Net cash provided by operating activities			7,033	_	6,166	
Cash flows from investing activities			-,,,,,,,	_	0,100	
Increase in loans, net	(29,4	38)	(28,511)		(28,659)	
(Increase) decrease in Federal funds sold and securities purchased under resale agreements, net	` '		(3,891)		1,681	
Investments available-for-sale:	(0,)	57)	(3,071)		1,001	
Purchases	(29,5	21)	(36,189)		(64,323)	
			30,143		56,789	
Proceeds from naturities and payments			ŕ			
Proceeds from sales	1,4	03	3,998		3,500	
Other investments held-to-maturity:	(1.2	00	(725)		(274)	
Purchases	` '		(735)		(374)	
Proceeds from maturities and payments	4	65	394		417	
Other investments available-for-sale:		c 5 \	(00.4)		(1.110)	
Purchases		65)	(884)		(1,113)	
Proceeds from maturities and payments		61	711		419	
Proceeds from sales		47			100	
Premiums paid to the Insurance Fund		60)	(255)		(223)	
Distributions by Insurance Fund to System institutions					63	
Other, net	(2	17)	(204)	_	(188)	
Net cash used in investing activities	(46,8	34)	(35,423)	_	(31,911)	
Cash flows from financing activities						
Systemwide bonds issued	147,8	91	165,185		230,625	
Systemwide bonds and medium-term notes retired	(113,1	15)	(135,650)		(206,314)	
Systemwide discount notes issued	239,1	62	249,814		190,177	
Systemwide discount notes retired	`	61)	(249,033)		(185,599)	
Subordinated debt issued, net			398			
Other bonds issued, net			1,064		598	
Increase in notes payable and other interest-bearing liabilities, net		54	109		545	
Increase in collateral held from derivative counterparties	5	66	1			
Preferred stock issued by Banks	4	00	420		346	
Preferred stock retired by Banks	(7	02)	(34)		(300)	
Preferred stock issued by Associations			715		353	
Preferred stock retired by Associations	(2	75)	(329)		(320)	
Capital stock and participation certificates issued	1	01	117		106	
Capital stock, participation certificates and retained earnings retired		78)	(166)		(323)	
Preferred stock dividends paid		00)	(175)		(166)	
Cash patronage paid			(2,565)		(2,420)	
Net cash provided by financing activities		_	29,871		27,308	
Net (decrease) increase in cash		_	1,481		1,563	
Cash at beginning of year	5,5	48	4,067		2,504	
Cash at end of year	\$ 3,4	70	\$ 5,548	\$	4,067	

COMBINED STATEMENT OF CASH FLOWS (in millions)

		For the Year Ended December 31,					
	2022		2021		2020		
Supplemental schedule of non-cash investing and financing activities:							
Loans transferred to other property owned	\$	35	\$	43	\$	34	
Patronage and dividends distributions payable		3,261		3,051		2,825	
Investments available-for-sale sold (purchased) but not yet settled, net		255		(348)		(529)	
Supplemental non-cash fair value changes related to hedging activities:							
(Decrease) increase in Systemwide bonds and medium-term notes		(697)		(256)		164	
Other, net		655		180		(214)	
Supplemental disclosure of cash flow information:							
Cash paid during the year for:							
Interest		4,677		2,766		4,382	
Taxes		97		25		103	

NOTES TO COMBINED FINANCIAL STATEMENTS

(dollars in millions, except as noted)

NOTE 1 — ORGANIZATION, OPERATIONS AND PRINCIPLES OF COMBINATION

Organization and Operations

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

At December 31, 2022, the System consisted of: (1) three Farm Credit Banks (AgFirst Farm Credit Bank: AgriBank, FCB: and Farm Credit Bank 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 longterm loans secured by agricultural real estate or rural home loans. PCAs make short- and intermediate-term loans for agricultural production or operating purposes.

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

A Bank and its affiliated Associations are financially and operationally interdependent as the Bank is statutorily required to serve as an intermediary between the financial markets and the retail lending activities of its affiliated Associations. The Banks are the primary source of funds for the Associations. Associations are not legally authorized to accept deposits and they may not borrow from other financial institutions without the approval of their affiliated

Bank. The Banks are not legally authorized to accept deposits and they principally obtain their funds through the issuance of Systemwide Debt Securities. Other less significant sources of funding for the Banks and Associations include internally generated earnings, the issuance of common and preferred equities and subordinated debt. As a result, the loans made by the Associations are substantially funded by the issuance of Systemwide Debt Securities by the Banks. In addition, CoBank makes retail loans and leases directly to agricultural and rural infrastructure cooperatives and businesses and other eligible borrowers, and the Banks purchase retail loan participations from Associations and other lenders, including other System Banks. Therefore, the repayment of Systemwide Debt Securities is dependent upon the ability of borrowers to repay their loans.

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

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

Most System institutions provide financially-related services to their customers, including credit, appraisal, estate planning, record keeping services, tax planning and preparation, and consulting. Also, many System institutions serve as agent or broker to provide crop, mortgage, life and disability insurance.

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

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

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

Principles of Combination

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

NOTE 2 — SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Accounting Principles and Reporting Practices

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

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

Recently Adopted or Issued Accounting Pronouncements

The System adopted the Financial Accounting Standards Board (FASB) guidance entitled "Measurement of Credit Losses on Financial Instruments" and other subsequently issued accounting standards updates related to credit losses on January 1, 2023. The guidance replaces the incurred loss impairment methodology with a single allowance framework for financial assets carried at amortized cost and certain off-balance sheet credit exposures. This guidance requires management to consider in its estimate of the allowance for credit losses (ACL) relevant historical events, current conditions and reasonable and supportable forecasts that affect the collectability of the assets. In addition, the guidance amends existing impairment guidance for held-tomaturity and available-for-sale investments to incorporate an allowance, which will allow for the reversal of credit impairments in the event that the credit of an issuer improves.

Also adopted effective January 1, 2023, was the updated guidance entitled "Financial Instruments -Credit Losses: Troubled Debt Restructurings and Vintage Disclosure." The guidance eliminates the accounting guidance for troubled debt restructurings (TDRs) by creditors while enhancing disclosure requirements for certain loan refinancings and restructurings when a borrower is experiencing financial difficulty. The creditor is required to determine whether a modification results in a new loan or a continuation of an existing loan among other disclosures specific to modifications with borrowers that are experiencing financial difficulties. The update also requires disclosure of current period gross writeoffs by year of origination for financing receivables and net investments in leases.

The System's ACL represents the aggregate of each System institution's individual evaluation of its allowance requirements. System institutions intend to estimate loan losses over a one to three year forecast period using a range of macroeconomic variables and then revert to their institution's historical loss experience over the remaining life of the loan.

The System does not expect credit losses on a significant portion of its held-to-maturity or available-for-sale securities as a majority of the portfolios consist of U.S. Treasury and U.S. agency securities that inherently have an immaterial risk of loss.

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

The adoption of this guidance, at January 1, 2023, resulted in a cumulative effect transition adjustment to increase retained earning by approximately \$150 million, net of tax. The adjustment also resulted in a decrease in the System's ACL on outstanding loans and unfunded commitments of approximately \$190 million, while increasing the ACL on available-for-sale investments in corporate bonds by approximately \$6 million.

In December 2022, the FASB issued an update entitled "Reference Rate Reform - Deferral of the Sunset Date of Topic 848." In March 2020, the FASB issued guidance entitled "Facilitation of the Effects of Reference Rate Reform on Financial Reporting (Reference Rate Reform)," which provided optional expedients and exceptions for applying GAAP to contracts, hedging relationships and other transactions affected by reference rate reform to ease the potential burden related to reference rate reform (transition away from the London Inter-Bank Offered Rate (LIBOR)) with the optional amendments effective as of March 12, 2020 through December 31, 2022, the sunset date. At the time the update was issued, the expectation was that LIBOR would cease to be published after December 31, 2021.

In January 2021, the FASB issued an update to Reference Rate Reform whereby certain derivative instruments could be modified to change the rate used for margining, discounting, or contract price alignment. An entity could elect to apply the new amendments on a full retrospective basis as of any date from the beginning of an interim period that includes or is subsequent to March 12, 2020, or on a prospective basis to new modifications from any date within an interim period that includes or is subsequent to the date of the update, up to the date that financial statements are available to be issued. These amendments did not apply to contract modifications made or new hedging relationships entered into after December 31, 2022, and existing hedging relationships evaluated for effectiveness in periods after December 31, 2022.

Subsequent to the issuance of the January 2021 update, it was announced that the intended cessation date for various tenors of LIBOR would be June 30, 2023, thus necessitating the update to the sunset date. The amendments in the current update defer the sunset date from December 31, 2022 to December 31, 2024, after which entities will no longer be permitted to apply the relief.

In March 2022, the FASB issued an update entitled "Derivatives and Hedging: Fair Value Hedging - Portfolio Layer Method." Under current guidance, the last-of-layer method enables an entity to apply fair value hedging to a stated amount of a closed portfolio of prepayable financial assets (or one or more beneficial interests secured by a portfolio of prepayable financial instruments) without having to consider prepayment risk or credit risk when measuring those assets. This guidance will allow entities to apply the portfolio layer method to portfolios of all financial assets, including both prepayable and nonprepayable financial assets. This scope expansion is consistent with the FASB's efforts to simplify hedge accounting and allows entities to apply the same method to similar hedging strategies. For public business entities, the amendments in this update are effective for fiscal years beginning after December 15, 2022, and interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2023, and interim periods within those fiscal years. Early adoption is permitted on any date on or after the issuance of this update for any entity that has adopted amendments previously issued. Although the System does not have a current derivative hedging strategy in which the last-of-layer method is used, System institutions are currently evaluating the impact of this update on future derivative hedging strategies.

Cash

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

Federal Funds

Federal funds, as included in the financial statements, represent excess reserve funds on deposit at the Federal Reserve that are lent to other commercial banks. These transactions represent an investment of cash balances overnight in other financial institutions at the federal funds rate. Term Federal funds are held for a period longer than overnight.

Investments

The Banks and Associations, as permitted under Farm Credit Administration regulations, hold investments for the purposes of maintaining a liquidity reserve, managing short-term surplus funds, and managing interest rate risk. These investments are generally classified as available-for-sale and carried at fair value, and unrealized holding gains and losses are

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

netted and reported as a separate component of capital. Changes in the fair value of these investments are reflected as direct charges or credits to other comprehensive income, unless the investment is deemed to be other-than-temporarily impaired. Impairment is considered to be other-than-temporary if the present value of cash flows expected to be collected from the debt security is less than the amortized cost basis of the security (any such shortfall is referred to as a "credit loss"). If an entity intends to sell an impaired debt security or is more likely than not to be required to sell the security before recovery of its amortized cost basis less any current-period credit loss, the impairment is other-than-temporary and the loss is recognized currently in earnings in an amount equal to the entire difference between fair value and amortized cost. If a credit loss exists, but an entity does not intend to sell the impaired debt security and is not more likely than not to be required to sell before recovery, the impairment is other-thantemporary and is separated into (1) the estimated amount relating to credit loss and (2) the amount relating to all other factors. Only the estimated credit loss amount is recognized currently in earnings, with the remainder of the loss amount recognized in other comprehensive income.

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

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

Banks and Associations may also hold additional investments in accordance with other investment programs approved by the Farm Credit Administration. These programs allow Banks and Associations to make investments that further the System's mission to support rural America. These investments are not included in the Banks' liquidity calculations and are not covered by the eligible

investment limitations specified by the Farm Credit Administration regulations. Other investments for which the System institution has the intent and ability to hold to maturity are classified as held-to-maturity and carried at cost, adjusted for the amortization of premiums and accretion of discounts.

Loans, Allowance for Loan Losses and Reserve for Unfunded Commitments

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

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

Impaired loans are loans for which it is probable that all principal and interest will not be collected

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

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

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

Impaired loans are generally placed in nonaccrual status when principal or interest is delinquent for 90 days (unless adequately secured and in the process of collection), circumstances indicate that collection of principal and interest is in doubt or legal action, including foreclosure or other forms of collateral conveyance, has been initiated to collect the outstanding principal and interest. When a loan is placed in nonaccrual status, accrued interest that is considered uncollectible is reversed (if accrued in the current year) or charged against the allowance for loan losses (if accrued in prior years). Loans are charged-off at the time they are determined to be uncollectible.

When loans are in nonaccrual status, interest payments received in cash are generally recognized as interest income if the collectibility of the loan principal is fully expected and certain other criteria are met. Otherwise, payments received on nonaccrual loans are applied against the recorded investment in the loan asset. Nonaccrual loans are returned to accrual status if all contractual principal and interest is current, the borrower is fully expected to fulfill the contractual repayments terms and after remaining current as to principal and interest for a sustained period or have a recent repayment pattern demonstrating future repayment capacity to make ontime payments. If previously unrecognized interest income exists at the time the loan is transferred to accrual status, cash received at the time of or subsequent to the transfer should first be recorded as interest income until such time as the recorded balance equals the contractual indebtedness of the borrower.

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

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

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

The allowance is based on a periodic evaluation of the loan portfolio in which numerous factors are considered, including economic conditions, collateral values, borrowers' financial conditions, loan portfolio

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

composition and prior loan loss experience. The allowance for loan losses encompasses various judgments, evaluations and appraisals with respect to the System's loans and their underlying collateral that, by their nature, contain elements of uncertainty and imprecision. Changes in the agricultural economy and their impact on borrower repayment capacity will cause these various judgments, evaluations and appraisals to change over time. Accordingly, actual circumstances could vary significantly from System institutions' expectations and predictions of those circumstances. Managements consider a number of factors in determining and supporting the levels of System institutions' allowances for loan losses, which include, but are not limited to, the System's concentration of lending in agriculture, combined with uncertainties associated with farmland values, commodity prices, exports, government assistance programs, regional economic effects and weatherrelated influences

The allowance for loan losses includes components for loans individually evaluated for impairment, loans collectively evaluated impairment and loans acquired with deteriorated credit quality. Generally, for loans individually evaluated the allowance for loan losses represents the difference between the recorded investment in the loan and the present value of the cash flows expected to be collected discounted at the loan's effective interest rate, or at the fair value of the collateral, if the loan is collateral dependent. For those loans collectively evaluated for impairment, the allowance for loan losses is determined using the two-dimensional loan rating model. In addition, Banks and Associations consider borrower, industry, geographic and portfolio concentrations, along with current developments within certain sectors, and modeling imprecision in the determination of the allowance for loan losses for those loans collectively evaluated.

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

Premises and Equipment

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

Other Assets

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

Employee Benefit Plans

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

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

Income Taxes

The Farm Credit Banks, a portion of CoBank's earnings, FLCAs, FLCA subsidiaries of ACAs, and the income related to the Insurance Fund are exempt from federal and other income taxes as provided in the Farm Credit Act. The remaining portion of CoBank's earnings, the ACA parent company and the PCA subsidiaries of ACAs and service organizations are not

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

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

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

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

Derivative Products and Hedging Activity

The Banks and certain Associations are party to derivative financial products, primarily interest rate swaps, which are used as hedges against interest rate and liquidity risks and to lower the overall cost of funds. Derivatives are recorded on the combined statement of condition as assets or liabilities, measured at fair value. Derivative contracts may be netted by counterparty pursuant to acceptable master netting arrangements.

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

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

System institutions that enter into derivatives designated hedging relationships formally as document all relationships between hedging instruments and hedged items, as well as the risk management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value or cash flow hedges to (1) specific assets or liabilities on the balance sheet or (2) firm commitments or forecasted transactions. These institutions also formally assess (both at the hedge's inception and on an ongoing basis, at least quarterly) whether the derivatives that are used in hedging transactions have been highly effective in offsetting changes in the fair value or cash flows of hedged items and whether those derivatives may be expected to remain highly effective in future periods. Typically regression analyses or other statistical analyses are used to assess the effectiveness of hedges. Hedge accounting is discontinued prospectively when it is determined that a hedge has not been or is not expected to be effective as a hedge. For discontinued cash flow hedges, any remaining accumulated other comprehensive income (loss) is amortized into earnings over the remaining life of the original hedged item. For discontinued fair

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

value hedges, changes in the fair value of the derivative are recorded in current period earnings. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the derivative is carried at its fair value on the balance sheet, recognizing changes in fair value in current period earnings.

Fair Value Measurement

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

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

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

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

Merger Accounting

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

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

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

received, by the acquiring institution from the acquired institution, over the par value of capital stock and participation certificates issued in the merger is considered to be additional paid-in capital or a reduction in retained earnings.

Off-Balance-Sheet Credit Exposures

Commitments to extend credit are agreements to lend to customers, generally having fixed expiration dates or other termination clauses that may require payment of a fee. Commercial letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party. These

letters of credit are issued to facilitate commerce and typically result in the commitment being funded when the underlying transaction is consummated between the customer and third party. The credit risk associated with commitments to extend credit and commercial letters of credit is substantially the same as that involved with extending loans to customers and is subject to normal credit policies. Collateral may be obtained based on management's assessment of the customer's creditworthiness.

NOTE 3 — INVESTMENTS

Available-for-Sale

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

	December 31, 2022									
	Amo	ortized Cost	Gross Unrealized Gains			Gross Unrealized Losses	Fair Value		Weighted Average Yield	
Commercial paper, bankers' acceptances, certificates of deposit and other securities	\$	10,149	\$	1	\$	(47)	\$	10,103	4.63%	
U.S. Treasury securities		21,630				(950)		20,680	1.75	
U.S. agency securities		1,787				(107)		1,680	2.76	
Mortgage-backed securities		34,855		9		(3,087)		31,777	2.70	
Asset-backed securities		4,954		2		(452)		4,504	2.85	
Total	\$	73,375	\$	12	\$	(4,643)	\$	68,744	2.71	

	December 31, 2021									
	Am	ortized Cost	Gross Unrealized Gains			Gross Unrealized Losses		Fair Value	Weighted Average Yield	
Commercial paper, bankers' acceptances, certificates of deposit and other securities	\$	4,643	\$	25	\$	(1)	\$	4,667	0.58%	
U.S. Treasury securities		25,085		225		(75)		25,235	0.94	
U.S. agency securities		2,081		82		(1)		2,162	2.09	
Mortgage-backed securities		30,298		160		(254)		30,204	1.13	
Asset-backed securities		3,610		55		(31)		3,634	1.84	
Total	\$	65,717	\$	547	\$	(362)	\$	65,902	1.09	

The System realized gross gains of \$2 million and gross losses of \$4 million during the year ended December 31, 2022 and realized gross gains of \$4 million and gross losses of \$40 million during the year ended December 31, 2021 from sales of available-for-sale investment securities.

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

A summary of the fair value and amortized cost of investments available-for-sale at December 31, 2022 by contractual maturity is as follows:

		1 Year Less	Due After 1 Year Through 5 Years			er 5 Years 10 Years	Due After	r 10 Years	Total	
	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield
Commercial paper, bankers' acceptances, certificates of deposit and other securities	\$ 9,443		\$ 423		\$ 237				\$10,103	4.63%
U.S. Treasury securities	8,290		10,176		2,214				20,680	1.75
U.S. agency securities	69		1,168		367		\$ 76		1,680	2.76
Mortgage-backed securities	11		2,678		13,731		15,357		31,777	2.70
Asset-backed securities	32		937		1,241		2,294		4,504	2.85
Total fair value	\$17,845	3.27%	\$15,382	2.22%	\$17,790	2.88%	\$17,727	2.40%	\$68,744	2.71
Total amortized cost	\$17,956		\$16,178		\$19,159		\$20,082		\$73,375	

A large portion of 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.

Other Investments Held-to-Maturity

The Banks and Associations may hold other investments for managing risk. The following is a summary of other investments held-to-maturity:

	December 31, 2022								
	Amortized Cost		Gross Unrealized Gains		Un	Gross realized Losses		Fair Value	Weighted Average Yield
Mortgage-backed securities	\$	1,708	\$	1	\$	(141)	\$	1,568	2.24%
Asset-backed securities		1,143		1		(63)		1,081	2.24
Other securities		37				(2)		35	6.29
Total	\$	2,888	\$	2	\$	(206)	\$	2,684	2.29
					Decem	ber 31, 2021	ļ		
	A	mortized Cost	Unre	ross ealized	Un	ber 31, 2021 Gross realized Losses	<u> </u>	Fair Value	Weighted Average Yield
Mortgage-backed securities	A		Unre	ross ealized	Un	Gross realized	\$		Average
Mortgage-backed securities Asset-backed securities	_	Cost	Unre Ga	ross ealized ains	Un I	Gross realized Losses		Value	Average Yield
	_	1,346	Unre Ga	ross ealized ains	Un I	Gross realized Losses (16)		1,350	Average Yield 2.45%
Asset-backed securities	_	1,346 691	Unre Ga	ross ealized ains 20 11	Un I	Gross realized Losses (16)		1,350 697	Average Yield 2.45% 0.76

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

A summary of the fair value and amortized cost of other investments held-to-maturity at December 31, 2022 by contractual maturity is as follows:

	Due After 1 Year Through 5 Years		Due After 5 Years Through 10 Years			Due After	r 10 Years	Total		
	An	ount	Weighted Average Yield	An	nount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield
Mortgage-backed securities	\$	34		\$	39		\$ 1,635		\$ 1,708	2.24%
Asset-backed securities		3			693		447		1,143	2.24
Other securities		6					31		37	6.29
Total amortized cost	\$	43	4.35%	\$	732	2.30%	\$ 2,113	2.24%	\$ 2,888	2.29
Total fair value	\$	43		\$	696		\$ 1,945		\$ 2,684	

Other Investments Available-for-Sale

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

	December 31, 2022									
	A	mortized Cost	Gross Unrealized Gains	Gross Unrealized Losses		Fair Value		Weighted Average Yield		
U.S. Treasury securities	\$	1,534		\$	(85)	\$	1,449	2.07%		
Mortgage-backed securities		156			(18)		138	2.83		
Asset-backed securities		129					129	5.92		
Other securities		28			(3)		25	5.56		
Total	\$	1,847	\$ 0	\$	(106)	\$	1,741	2.47		

	December 31, 2021									
	Aı	mortized Cost	Gross Unrealized Gains		Gross Unrealized Losses		Fair Value		Weighted Average Yield	
U.S. Treasury securities	\$	869	\$	1	\$	(6)	\$	864	0.63%	
Mortgage-backed securities		186		5		(1)		190	2.32	
Asset-backed securities		115						115	3.06	
Other securities		20						20	3.97	
Total	\$	1,190	\$	6	\$	(7)	\$	1,189	1.19	

A summary of the fair value and amortized cost of other investments available-for-sale at December 31, 2022 by contractual maturity is as follows:

	I		Year or ess			ter 1 Year sh 5 Years		Due After 5 Years Through 10 Years				after 10 ears	Total	
	An	nount	Weighted Average Yield	Aı	mount	Weighted Average Yield	Aı	nount	Weighted Average Yield	Aı	mount	Weighted Average Yield	Amount	Weighted Average Yield
U.S. Treasury securities	\$	172		\$	967		\$	310					\$ 1,449	2.07%
Mortgage-backed securities					7			3		\$	128		138	2.83
Asset-backed securities					2			36			91		129	5.92
Other securities					16						9		25	5.56
Total fair value	\$	172	0.42%	\$	992	2.55%	\$	349	2.28%	\$	228	3.94%	\$ 1,741	2.47
Total amortized cost	\$	175		\$	1,037		\$	389		\$	246		\$ 1,847	

NOTES TO COMBINED FINANCIAL STATEMENTS - (continued) (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.

	Less Than 12 Months					12 Month	is or More	
<u>December 31, 2022</u>		ir Value		realized Losses	Fa	ir Value	Unrealized Losses	
Commercial paper, bankers' acceptances, certificates of deposit and other securities	\$	6,794	\$	(45)	\$	60	\$	(7)
U.S. Treasury securities		10,120		(338)		10,445		(697)
U.S. agency securities		1,553		(97)		127		(10)
Mortgage-backed securities		20,737		(1,144)		11,233		(2,102)
Asset-backed securities		3,710		(254)		1,351		(261)
Total	\$	42,914	\$	(1,878)	\$	23,216	\$	(3,077)

	Less Than 12 Months					12 Months or More			
<u>December 31, 2021</u>	Fa	ir Value	Unrealized Losses		Fair Value			realized Losses	
Commercial paper, bankers' acceptances, certificates of deposit and other securities	\$	908	\$	(1)					
U.S. Treasury securities		12,585		(81)					
U.S. agency securities		41		(1)					
Mortgage-backed securities		12,392		(169)	\$	4,207	\$	(102)	
Asset-backed securities		1,509		(31)		186		(5)	
Total	\$	27,435	\$	(283)	\$	4,393	\$	(107)	

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

System institutions perform an evaluation quarterly on a security-by-security basis considering all available information. If a Bank or Association intends to sell the security or it is more likely than not that it would be required to sell the security, the impairment loss equals the full difference between amortized cost and fair value of the security. When a

Bank or Association does not intend to sell the security in an unrealized loss position, other-thantemporary 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 and volatility of the fair value changes. A Bank or Association uses estimated cash flows over the remaining lives of the underlying collateral to assess whether credit losses exist. In estimating cash flows, it considers factors such as expectations of relevant market and economic data, including underlying loan level data for mortgage-backed and asset-backed securities and credit enhancements. The System did not recognize any credit impairment losses in earnings for 2022, 2021 and 2020.

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

NOTE 4 — LOANS AND ALLOWANCE FOR LOAN LOSSES

The System is limited by statute to providing credit and related services to farmers, ranchers, producers and harvesters of aquatic products, rural homeowners, certain farm-related businesses, agricultural and aquatic cooperatives (or to other entities for the benefit of the cooperatives) and their customers, rural infrastructure, other eligible borrowers, and entities engaging in certain agricultural export finance transactions.

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

	December 31,							
		2022		2021				
Real estate mortgage	\$	172,806	\$	164,535				
Production and intermediate-term(1)		70,573		66,785				
Agribusiness		67,496		60,647				
Rural infrastructure		44,215		37,015				
Rural residential real estate		7,043		6,883				
Other(2)		11,133		8,064				
Total loans	\$	373,266	\$	343,929				
				_				

⁽¹⁾ Includes lease receivables.

Approximately 35% of the loan volume at both December 31, 2022 and 2021 contained terms under which the interest rate on the outstanding balance may be adjusted from time-to-time during the term of the loan. These floating-rate loans are comprised of administered-rate loans that may be adjusted at the discretion of the lending institution and indexed/adjustable loans that are periodically adjusted based on changes in specified indices. Fixed-rate loans comprised the remaining 65% of loans outstanding at both December 31, 2022 and 2021.

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:

	Decemb	oer 31,
	2022	2021
Real estate mortgage		
Acceptable	97.1%	95.9%
OAEM	1.5	2.2
Substandard/doubtful	1.4	1.9
	100.0	100.0
Production and intermediate-term		
Acceptable	95.5	93.6
OAEM	2.3	3.5
Substandard/doubtful	2.2	2.9
· · · · · · · · · · · · · · · · · · ·	100.0	100.0
Agribusiness		
Acceptable	94.9	94.5
OAEM	2.2	3.4
Substandard/doubtful	2.9	2.1
	100.0	100.0
Rural infrastructure		
Acceptable	99.0	99.2
OAEM	0.7	0.3
Substandard/doubtful	0.3	0.5
	100.0	100.0
Rural residential real estate		
Acceptable	98.7	98.2
OAEM	0.4	0.6
Substandard/doubtful	0.9	1.2
	100.0	100.0
Other		
Acceptable	100.0	99.8
OAEM	0.0	0.2
Substandard/doubtful	0.0	0.0
	100.0	100.0
Total Loans		
Acceptable	96.8	95.7
OAEM	1.6	2.4
Substandard/doubtful	1.6	1.9
:	100.0	100.0

⁽²⁾ Includes agricultural export finance loans and loans to other financing institutions.

NOTES TO COMBINED FINANCIAL STATEMENTS - (continued) (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.

	Decem	31,	
	2022		2021
Nonaccrual loans:			
Current as to principal and interest	\$ 805	\$	749
Past due	461		427
Total nonaccrual loans	1,266		1,176
Impaired accrual loans:			
Restructured accrual loans	265		252
Accrual loans 90 days or more past due	 196		111
Total impaired accrual loans	 461		363
Total impaired loans	\$ 1,727	\$	1,539

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

Total nonperforming assets consist of the following:

	Decem	ber 31,
	2022	2021
Nonaccrual loans:		
Real estate mortgage	\$ 518	\$ 610
Production and intermediate-term	354	310
Agribusiness	334	121
Rural infrastructure	28	98
Rural residential real estate	32	37
Total nonaccrual loans	1,266	1,176
Accruing restructured loans:		
Real estate mortgage	149	170
Production and intermediate-term	44	48
Agribusiness	41	11
Rural residential real estate	31	23
Total accruing restructured loans	265	252
Accruing loans 90 days or more past due:		
Real estate mortgage	165	93
Production and intermediate-term	19	12
Agribusiness	10	
Rural residential real estate	2	6
Total accruing loans 90 days or more past due	196	111
Total nonperforming loans	1,727	1,539
Other property owned	28	39
Total nonperforming assets	\$ 1,755	\$ 1,578

The following table reflects certain related credit quality statistics:

_	Decembe	er 31,
	2022	2021
Nonaccrual loans as a percentage of total loans	0.34%	0.34%
Nonperforming assets as a percentage of total loans and other property owned	0.47	0.46
Nonperforming assets as a percentage of capital	2.56	2.27

Commitments to lend additional funds to borrowers whose loans were classified as impaired were \$107 million and \$57 million at December 31, 2022 and 2021.

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

Additional impaired loan information by class is as follows:

	Dec	ember 31, 202	22	December 31, 2021						
	Recorded Investment(1)	Unpaid Principal Balance(2)	Related Allowance	Recorded Investment(1)	Unpaid Principal Balance(2)	Related Allowance				
Impaired loans with a related allowance for loan losses:										
Real estate mortgage	\$ 60	\$ 67	\$ 14	\$ 104	\$ 111	\$ 31				
Production and intermediate-term	166	181	56	135	162	41				
Agribusiness	286	296	72	78	82	35				
Rural infrastructure	28	30	6	98	99	23				
Rural residential real estate	29	28	1	20	20	1				
Total	569	602	149	435	474	131				
Impaired loans with no related allowance for loan losses:										
Real estate mortgage	772	860		769	896					
Production and intermediate-term	251	361		235	386					
Agribusiness	99	128		54	94					
Rural infrastructure		2			2					
Rural residential real estate	36	41		46	50					
Total	1,158	1,392		1,104	1,428					
Total impaired loans:		'								
Real estate mortgage	832	927	14	873	1,007	31				
Production and intermediate-term	417	542	56	370	548	41				
Agribusiness	385	424	72	132	176	35				
Rural infrastructure	28	32	6	98	101	23				
Rural residential real estate	65	69	1	66	70	1				
Total	\$ 1,727	\$ 1,994	\$ 149	\$ 1,539	\$ 1,902	\$ 131				

⁽¹⁾ 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.

⁽²⁾ Unpaid principal balance represents the contractual principal balance of the loan.

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

]	For the Y	ear En	ded				
]	Decembe	r 31, 2	022		Decembe	r 31, 2	021		Decembe	r 31, 2	020
	Im	Average Impaired Loans		Interest Income Recognized		verage ipaired Loans	Inc	erest ome gnized	Average Impaired Loans		In	terest come ognized
Impaired loans with a related allowance for loan losses:												
Real estate mortgage	\$	89	\$	2	\$	127	\$	3	\$	133	\$	3
Production and intermediate-term		141		3		183		3		243		3
Agribusiness		139				79				195		16
Rural infrastructure		78				73				51		
Rural residential real estate		26				13				8		
Total		473		5		475		6		630		22
Impaired loans with no related allowance for loan losses:												
Real estate mortgage		808		57		896		51		1,052		59
Production and intermediate-term		265		28		293		26		431		36
Agribusiness		73		6		58		18		69		19
Rural infrastructure		9				9				10		
Rural residential real estate		37		4		44		4		50		3
Total		1,192		95		1,300		99		1,612		117
Total impaired loans:												
Real estate mortgage		897		59		1,023		54		1,185		62
Production and intermediate-term		406		31		476		29		674		39
Agribusiness		212		6		137		18		264		35
Rural infrastructure		87				82				61		
Rural residential real estate		63		4		57		4		58		3
Total	\$	1,665	\$	100	\$	1,775	\$	105	\$	2,242	\$	139

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

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

	December 31, 2022											
	89 Days st Due	90 Days or More Past Due		Total Past Due			ot Past Due or ss than 30 Days Past Due	_	otal Loans nd Accrued Interest	Recorded Investment >90 Days and Accruin		
Real estate mortgage	\$ 503	\$	303	\$	806	\$	173,896	\$	174,702	\$	165	
Production and intermediate-term	279		149		428		70,919		71,347		19	
Agribusiness	118		57		175		67,685		67,860		10	
Rural infrastructure	47				47		44,342		44,389			
Rural residential real estate	62		14		76		6,989		7,065		2	
Other							11,196		11,196			
Total	\$ 1,009	\$	523	\$	1,532	\$	375,027	\$	376,559	\$	196	

	December 31, 2021											
	39 Days st Due		Days or ore Past Due	To	otal Past Due		ot Past Due or ss than 30 Days Past Due	_	otal Loans ad Accrued Interest	In	ecorded vestment 90 Days Accruing	
Real estate mortgage	\$ 553	\$	252	\$	805	\$	165,260	\$	166,065	\$	93	
Production and intermediate-term	207		126		333		66,975		67,308		12	
Agribusiness	20		15		35		60,787		60,822			
Rural infrastructure	56		56		112		37,003		37,115			
Rural residential real estate	43		16		59		6,845		6,904		6	
Other							8,078		8,078			
Total	\$ 879	\$	465	\$	1,344	\$	344,948	\$	346,292	\$	111	

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

	December 31,							
	2	022		2021	2020			
Interest income that would have been recognized under original terms	\$	128	\$	138	\$	176		
Less: interest income recognized		(90)		(99)		(133)		
Interest income not recognized	\$	38	\$	39	\$	43		

NOTES TO COMBINED FINANCIAL STATEMENTS - (continued) (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:

	es	Real state rtgage	roduction and ermediate- term	Ag	gribusiness	in	Rural frastructure	res	Rural sidential al estate	_0)ther_		Гotal
Allowance for Loan Losses:													
Balance at December 31, 2021	\$	415	\$ 464	\$	526	\$	186	\$	15	\$	26	\$	1,632
Charge-offs		(6)	(16)		(20)		(27)		(2)				(71)
Recoveries		5	23		3		1		1				33
Provision for loan losses (loan loss reversal)		(61)	(41)		97		40				5		40
Adjustment due to merger		(8)	(9)		(7)		(1)						(25)
Reclassification (to) from reserve for unfunded commitments(1)		(3)	(2)		(25)	_	(3)						(33)
Balance at December 31, 2022	\$	342	\$ 419	\$	574	\$	196	\$	14	\$	31	\$	1,576
Balance at December 31, 2020	\$	538	\$ 532	\$	507	\$	172	\$	19	\$	28	\$	1,796
Charge-offs		(7)	(41)		(16)		(3)		(3)				(70)
Recoveries		5	28		8		9		1				51
(Loan loss reversal) provision for loan losses		(122)	(61)		24		11		(2)		(2)		(152)
Reclassification (to) from reserve for unfunded commitments(1)		1	6		3		(3)						7
Balance at December 31, 2021	\$	415	\$ 464	\$	526	\$	186	\$	15	\$	26	\$	1,632
Ending balance at December 31, 2022:													
Individually evaluated for impairment.	\$	14	\$ 56	\$	72	\$	6	\$	1			\$	149
Collectively evaluated for impairment.		328	363		502		190		13	\$	31		1,427
Balance at December 31, 2022	\$	342	\$ 419	\$	574	\$	196	\$	14	\$	31	\$	1,576
Ending balance at December 31, 2021:													
Individually evaluated for impairment.	\$	31	\$ 41	\$	35	\$	23	\$	1			\$	131
Collectively evaluated for impairment.		384	423		491		163		14	\$	26		1,501
Balance at December 31, 2021	\$	415	\$ 464	\$	526	\$	186	\$	15	\$	26	\$	1,632
Recorded Investments in Loans Outstanding:													
Ending balance at December 31, 2022:													
Loans individually evaluated for impairment	\$	931	\$ 400	\$	377	\$	28	\$	568	\$	146	\$	2,450
Loans collectively evaluated for impairment	17	73,771	70,947		67,483		44,361		6,497	1	1,050	3	74,109
Balance at December 31, 2022	\$ 17	74,702	\$ 71,347	\$	67,860	\$	44,389	\$	7,065	\$1	1,196	\$ 3	76,559
Ending balance at December 31, 2021:													
Loans individually evaluated for impairment	\$	1,004	\$ 371	\$	133	\$	97	\$	654	\$	84	\$	2,343
Loans collectively evaluated for impairment	16	65,061	66,937		60,689	_	37,018		6,250		7,994	3	43,949
Balance at December 31, 2021	\$ 10	66,065	\$ 67,308	\$	60,822	\$	37,115	\$	6,904	\$	8,078	\$ 3	46,292

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

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

A restructuring of a loan constitutes a troubled debt restructuring, also known as formally restructured, if the creditor for economic or legal reasons related to the borrower's financial difficulties grants a concession to the borrower 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 impaired loans under nonaccrual or accruing restructured loans. All impaired loans are analyzed within our allowance for loan losses.

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

]	For the	Year End	ed Dec	ember 31	,			
		202	22			202	21		2020			
	modifi Outsta Reco	Pre- modification Outstanding Recorded Investment Post- modification Outstanding Recorded Investment			modi Outs Rec	Pre- ification standing corded estment	modi Outs Rec	ost- fication tanding orded stment	modi Outst Rec	re- fication tanding orded stment	Post- modification Outstanding Recorded Investment	
Troubled debt restructurings:												
Real estate mortgage	\$	31	\$	31	\$	52	\$	52	\$	68	\$	68
Production and intermediate- term		48		48		46		48		53		53
Agribusiness		14		14		32		32		12		12
Rural infrastructure		33		12								
Rural residential real estate		17		18		21		22		2		2
Total	\$	143	\$	123	\$	151	\$	154	\$	135	\$	135

Note: 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 following table presents information regarding troubled debt restructurings that occurred within the previous 12 months and for which there was a payment default during the period:

	Recorded Investment at December 31										
	20	22	20	21	20	20					
Troubled debt restructurings that subsequently defaulted:											
Real estate mortgage	\$	2	\$	4	\$	5					
Production and intermediate-term		1		2		1					
Rural residential real estate		3		1							
Total	\$	6	\$	7	\$	6					

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

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

	Loan	s Modified : Restruc		Trou		Restructurings in al Status(1)		
		ember 31, 2022	mber 31, 2021		ember 31, 2022	December 31, 2021		
Real estate mortgage	\$	215	\$ 252	\$	66	\$	82	
Production and intermediate-term		90	109		46		61	
Agribusiness		45	20		4		9	
Rural infrastructure		12	2		12		2	
Rural residential real estate		37	28		6		5	
Total	\$	399	\$ 411	\$	134	\$	159	

⁽¹⁾ Represents the portion of loans modified as troubled debt restructurings that are in nonaccrual status.

Additional commitments to lend to borrowers whose loans have been modified in troubled debt restructurings were \$14 million at both December 31, 2022 and 2021.

NOTE 5 — PREMISES AND EQUIPMENT

Premises and equipment consisted of the following:

	December 31,							
		2022		2021				
Land, buildings and improvements	\$	1,814	\$	1,696				
Furniture and equipment		1,004		961				
		2,818		2,657				
Less: accumulated depreciation		(1,100)		(1,020)				
Total	\$	1,718	\$	1,637				

Loans held for sale were \$7 million and \$33 million at December 31, 2022 and 2021. Such loans are included in other assets and are carried at the lower of cost or fair value.

NOTE 6 — OTHER ASSETS AND OTHER LIABILITIES

Other assets consisted of the following:

	December 31,							
	2022 2021							
Interest rate swaps and other derivatives	\$	1,059	\$	483				
Equipment held for lease		665		718				
Accounts receivable		573		328				
Investments in rural business investment companies		347		239				
Assets held in non-qualified benefits trusts		218		244				
Operating lease right-of- use assets		148		158				
Equity investments in other System institutions		132		124				
Prepaid expenses		118		101				
Other property owned		28		39				
Net deferred tax assets		9		8				
Loans held for sale		7		33				
Collateral pledged to derivative counterparties				106				
Other		210		106				
Total	\$	3,514	\$	2,687				

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

Other liabilities consisted of the following:

	December 31,							
		2022	2021					
Patronage and dividends payable	\$	2,943	\$	2,764				
Interest rate swaps and other derivatives		1,165		412				
Accounts payable		897		1,154				
Pension and other postretirement benefit plan liabilities		693		769				
Collateral held from derivative counterparties		567		1				
Accrued salaries and employee benefits		483		460				
Net deferred tax liabilities		430		653				
Reserve for unfunded commitments		222		189				
Operating lease liabilities		162		173				
Liabilities held in non- qualified benefit trusts		145		159				
Bank drafts payable		130		141				
Other		426		302				
Total	\$	8,263	\$	7,177				

NOTE 7 — FARM CREDIT INSURANCE FUND

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

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

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

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

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

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

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

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

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

In the event a Bank is unable to pay on a timely basis an insured debt obligation for which that Bank is primarily liable, the Insurance Corporation must expend amounts in the Insurance Fund to the extent available to insure the timely payment of principal and interest on the debt obligation. The provisions of the Farm Credit Act providing for joint and several

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

liability of the Banks on the obligation cannot be invoked until the Insurance Fund is exhausted. However, because of other mandatory and discretionary uses of the Insurance Fund, there is no assurance that there will be sufficient funds to pay principal or interest on the insured debt obligation. The insurance provided through use of the Insurance Fund is not an obligation of and is not a guarantee by the U.S. government.

The System does not have a guaranteed line of credit from the U.S. Treasury or the Federal Reserve. However, the Insurance Corporation has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation under certain limited circumstances. 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, 2023, 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 December 31, 2022, total assets in the Insurance Fund aggregated \$6.673 billion and consisted of cash and cash equivalents of \$1 million, which includes investments in U.S. Treasury obligations with original maturities of 90 days or less, investments of \$5.994 billion, accrued interest receivable of \$33 million and premiums receivable from System institutions of \$645 million accrued on the basis of adjusted outstanding insured debt at December 31, 2022.

If at the end of any calendar year, the aggregate amount in the Insurance Fund exceeds the secure base amount, the Insurance Corporation is required to transfer the excess funds above the secure base to the Allocated Insurance Reserves Accounts for each Bank.

As determined by the Insurance Corporation, the assets in the Insurance Fund for which no specific use has been identified or designated were 1.97%, 1.98% and 1.93% at December 31, 2022, 2021 and 2020 of aggregate insured obligations. No amounts were allocated as of December 31, 2022, 2021 and 2020.

At December 31, 2022 and 2021, the investments in the Insurance Fund, which are classified as restricted assets and are carried at amortized cost, consisted of the following:

	December 31, 2022									
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value						
U.S. Treasury obligations	\$ 5,994	\$ 2	\$ (210)	\$ 5,786						
		Decembe	r 31, 2021							
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value						
U.S. Treasury obligations	\$ 5,472	\$ 27	\$ (14)	\$ 5,485						

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

The amortized cost and fair value at December 31, 2022 by contractual maturity were as follows:

	An	Amortized Cost		Fair Value
Due in one year or less	\$	2,036	\$	1,995
Due one year through five years		3,958		3,791
	\$	5,994	\$	5,786

NOTE 8 — SHORT-TERM BORROWINGS

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

	2022				202	21	
	Amount		Weighted Average Interest Rate		Average Interest		Weighted Average Interest Rate
Systemwide discount notes:							
Outstanding at December 31	\$	27,353		3.65%	\$	24,271	0.07%
Average during year		23,514		1.49		20,568	0.12
Maximum month-end balance during year		27,353				24,271	
Systemwide bonds(1):							
Outstanding at December 31		25,226		3.00		22,887	0.29
Average during year		27,045		1.56		23,084	0.35
Maximum month-end balance during year		25,226				26,273	

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

NOTE 9 — SYSTEMWIDE DEBT SECURITIES AND OTHER BONDS

Aggregate maturities and the weighted average interest rate of Systemwide Debt Securities were as follows at December 31, 2022:

_	Bon	ds	Medium-term no		Discount	t notes	Total		
	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate	
2023	\$ 117,423	2.95%		· ·	\$ 27,353	3.65%	\$ 144,776	3.08%	
2024	97,600	3.27					97,600	3.27	
2025	31,104	1.74					31,104	1.74	
2026	20,217	1.91					20,217	1.91	
2027	17,793	2.11					17,793	2.11	
2028 and thereafter	78,425	2.40	\$ 62	5.75%			78,487	2.40	
Total	\$ 362,562	2.71	\$ 62	5.75	\$ 27,353	3.65	\$ 389,977	2.78	

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

Included in Systemwide Debt Securities at December 31, 2022 are callable debt securities, which are summarized below:

Year of Maturity/Next Call Date	Maturing Amount		 Callable Amount
2023	\$	17,769	\$ 126,906
2024		19,135	6,180
2025		15,197	1,562
2026		13,695	395
2027		11,189	413
2028 and thereafter		58,471	
Total	\$	135,456	\$ 135,456

Systemwide Debt Securities are the joint and several obligations of the Banks. Payments of principal and interest to the holders of Systemwide Debt Securities are insured by amounts held in the Insurance Fund as described in Note 7.

The average maturity of Systemwide discount notes was 3.7 months and 3.2 months at December 31, 2022 and 2021. Pursuant to authorization by the Farm Credit Administration, the maximum amount of Systemwide discount notes that Banks in the aggregate may have outstanding at any one time is currently \$100 billion. There is no limit on the amount of Systemwide bonds that may be outstanding at any one time.

Certain other bonds are debt issued directly by individual Banks and are the obligations solely of the issuing Bank. Payments on other bonds are not insured by the Insurance Corporation. The aggregate amount of bonds issued directly by the Banks was \$5.599 billion at December 31, 2022 and \$3.623 billion at December 31, 2021. These bonds had an average maturity of one day and a weighted average interest rate of 3.22% for 2022 and 0.06% for 2021.

The Farm Credit Act and Farm Credit Administration regulations require each Bank to maintain specified eligible assets at least equal in value to the total amount of debt securities outstanding for which it is primarily liable as a condition for participation in the issuance of Systemwide Debt

Securities. Each Bank was in compliance with these requirements as of December 31, 2022. At December 31, 2022, the combined Banks had specified eligible assets of \$416.8 billion, as compared with \$397.3 billion of Systemwide Debt Securities and other bonds, and accrued interest payable at that date. The specified eligible asset requirement does not provide holders of the securities with a security interest in any assets of the Banks.

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

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

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

NOTE 10 — SUBORDINATED DEBT

The following table sets forth each issuance of subordinated debt outstanding as of December 31, 2022:

	Issue Date Amount		Amount General Terms				
<u>Institution</u>							
American AgCredit, ACA	June 2021	\$	198	3.375% unsecured subordinated notes, beginning June 15, 2031 interest will accrue at a benchmark rate (expected to be 3-month SOFR) plus 2.12%. Redeemable on June 15, 2031 and any interest payment date thereafter.			
Compeer Financial, ACA	May 2021		150	3.375% unsecured subordinated notes, beginning June 1, 2031 interest will accrue at 3-month SOFR plus 1.965%. Redeemable at any time after a date 10 years from the closing date.			
Compeer Financial, ACA	May 2021		50	2.75% unsecured subordinated notes, beginning June 1, 2026 interest will accrue at 3-month SOFR plus 2.03%. Redeemable at any time after a date 5 years from the closing date.			
Total		\$	398				

Subordinated debt is unsecured and subordinate to all other categories of creditors, including any claims of holders of Systemwide Debt Securities and general creditors, and senior to all classes of shareholders. The proceeds will be used by the Associations for general corporate purposes.

NOTE 11 — MERGERS OF SYSTEM INSTITUTIONS AND OTHER TRANSACTIONS

The primary reason for System entity mergers is based on a determination that the combined organization would be financially and operationally stronger with an enhanced ability to fulfill its mission. System Banks and Associations are cooperatives that are owned and controlled by their members who use the cooperatives' products or services. As such, their capital stock provides no significant interest in corporate earnings or growth. Specifically, due to restrictions in applicable regulations and their bylaws, the capital stock is not tradable, and the capital stock can be retired only for the lesser of par value or book value. In these and other respects, the shares of capital stock in one institution that were converted to shares of another institution had identical rights and attributes. For this reason, the outstanding capital stock and other equities of the acquired institutions were converted into a like amount of capital stock and equities of the acquiring institutions. Mergers do not have a material impact on the System's financial condition or results of operations because the incomes of the acquired institutions have previously been reflected in the Combined Statement of Income

Subordinated debt is the sole obligation of the issuing entity and is not guaranteed by any other System institution. Such obligations are not Systemwide Debt Securities and therefore are not subject to the joint and several obligations of the Banks and are not guaranteed or insured by the Insurance Fund.

Effective November 1, 2022, two Associations in the CoBank District merged and, on July 1, 2022, two Associations in the AgFirst District merged. Also, on January 1, 2022, two Associations in the AgriBank District merged and another two Associations in the CoBank District merged.

Effective January 1, 2021, two Associations in the CoBank District merged. No Bank or Association mergers occurred during 2020.

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

E . X/ 1

	Fai	r Value			
	Li	abilities	Net Assets Acquired		
\$ 270	\$	205	\$	65	
2,683		2,244		439	
2,034		1,548		486	
262		213		49	
A	2,683 2,034	Total Assets Acquired Line Assets 270 \$ 2,683 2,034	Acquired Assumed \$ 270 \$ 205 2,683 2,244 2,034 1,548	Total Assets Acquired Total Liabilities Assumed A \$ 270 \$ 205 \$ 2,683 2,034 1,548	

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

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

		Loans cquired at Fair Value	Co	Loans equired at ontractual Amount	Gross Contractual Amount Not Expected to be Collected		
Merger Date							
November 1, 2022	\$	253	\$	269	\$	0	
July 1, 2022		2,625		2,766		0	
January 1, 2022		1,922		1,940		1	
January 1, 2021		245		248		0	

On May 1, 2022, one Association in the AgriBank District with assets of less than \$50 million, that had previously determined to voluntarily dissolve, sold its loan portfolio to another District Association. The remaining assets are under the control of the liquidation agent. The timing of the final liquidation is unknown.

NOTE 12 — CAPITAL STRUCTURE

Capital consisted of the following at December 31, 2022:

	_	ombined Banks	Combined Associations		Combination Entries		System Combined	
Preferred stock	\$	2,633	\$	783			\$	3,416
Capital stock and participation certificates		9,176		502	\$	(7,544)		2,134
Additional paid-in-capital		64		4,533				4,597
Restricted capital — Insurance Fund						6,673		6,673
Accumulated other comprehensive loss		(4,339)		(254)		(899)		(5,492)
Retained earnings		12,630		45,058		(415)		57,273
Total capital	\$	20,164	\$	50,622	\$	(2,185)	\$	68,601

Combined System retained earnings reflected net eliminations of \$415 million representing transactions between the Banks, the Associations and/or the Insurance Fund. Capital stock and participation certificates of the Banks amounting to \$7.5 billion were owned by the Associations. These amounts have been eliminated in the accompanying combined financial statements. Restricted capital is only available for the uses described in Note 7 and is not available for payment of dividends or patronage distributions.

Preferred Stock

As of December 31, 2022, \$3.413 billion of preferred stock was issued and outstanding by the three Banks and four Associations, plus an additional

\$3 million of Class H stock was issued and outstanding by one other Association. The preferred stock is generally held by institutional investors or knowledgeable, high net worth individuals. The purchase of the Class H preferred stock is limited to existing common stockholders of the issuing Association. The Association's board of directors sets the dividend rate on Class H preferred stock, and at its discretion, may retire the stock.

Preferred stock is the sole obligation of the issuing entity and is not guaranteed by any other System institution and is not considered a Systemwide Debt Security subject to the provisions of joint and several liability. Preferred stock is not guaranteed or insured by the Insurance Fund.

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

The following table presents the general terms of the preferred stock outstanding issued by the Banks as of December 31, 2022 (par amount in whole dollars):

	Issue Date	Amount	Shares Issued and Outstanding	Par Amount	Security Type and Dividend Rate	Key Terms
AgriBank	October 2013	\$ 250.00	2,500,000	\$ 100	Non-cumulative perpetual 6.875% payable quarterly	Beginning January 1, 2024, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 4.225%. Redeemable on January 1, 2024 and any dividend payment date thereafter.
Texas	July 2013	300.00	3,000,000	100	Non-cumulative perpetual 6.75% payable quarterly	Beginning September 15, 2023, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 4.019%. Redeemable on September 15, 2023 and any dividend payment date thereafter.
Texas	June 2018	100.00	100,000	1,000	Non-cumulative perpetual 6.20% payable quarterly	Beginning June 15, 2028, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 3.223%. Redeemable on June 15, 2028 and any dividend payment date thereafter.
Texas	July 2020	350.00	350,000	1,000	Non-cumulative subordinated perpetual 5.70% payable quarterly	Beginning September 15, 2025, dividends will accrue at an annual rate equal to the five year Treasury rate plus 5.415%. Redeemable on September 15, 2025 and any dividend payment date thereafter.
CoBank	January 2012	132.65	132,645	1,000	Non-cumulative perpetual three- month LIBOR plus 1.18% payable quarterly	Redeemable on July 10, 2012 and each five year anniversary thereafter.
CoBank	November 2014	300.00	3,000,000	100	Non-cumulative perpetual 6.20% payable quarterly	Beginning January 1, 2025, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 3.744%. Redeemable on January 1, 2025 and any dividend payment date thereafter.
CoBank	April 2016	375.00	375,000	1,000	Non-cumulative perpetual 6.25% payable semi- annually	Beginning October 1, 2026, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 4.66% payable quarterly. Redeemable on October 1, 2026 and any dividend payment date thereafter.
CoBank	December 2021	425.00	425,000	1,000	Non-cumulative perpetual 4.25% payable quarterly	Beginning January 1, 2027, dividends will accrue at an annual rate equal to the 5-year Treasury rate, reset every five years, plus 3.049% payable quarterly. Redeemable on January 1, 2027 and any dividend payment date thereafter.
CoBank	August 2022	400.00	400,000	1,000	Non-cumulative perpetual 6.45% payable quarterly	Beginning October 1, 2027, dividends will accrue at an annual rate equal to the 5-year Treasury rate, reset every five years, plus 3.487% payable quarterly. Redeemable on October 1, 2027 and any dividend payment date thereafter.
Total		\$2,632.65				

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

The following table presents the general terms of the preferred stock outstanding issued by four Associations as of December 31, 2022 (par amount in whole dollars):

	Issue Date	Amount	Shares Issued and Outstanding	Par Amount	Security Type and Dividend Rate	Key Terms
AgTexas Farm Credit Services	October 2021	\$ 80.00	80,000	\$ 1,000	Non-cumulative perpetual 5.75% payable quarterly	Beginning October 15, 2026, dividends will accrue at the 5-year Treasury rate, reset every five years, plus 4.74%. Redeemable on October 15, 2026 and any dividend payment date thereafter.
American AgCredit, ACA	June 2021	300.00	300,000	1,000	Non-cumulative perpetual 5.25% payable quarterly	Beginning June 15, 2026, dividends will accrue at the 5-year Treasury rate as of the most recent reset determination date plus 4.50%. Redeemable on June 15, 2026 and any dividend payment date thereafter.
Capital Farm Credit, ACA	January 2021	200.00	200,000	1,000	Non-cumulative perpetual 5.00% payable quarterly	Beginning March 15, 2026, dividends will accrue at the annual 5-year Treasury rate plus 4.523%. Redeemable on March 15, 2026 and any dividend payment date thereafter.
Compeer Financial, ACA	May 2013	100.00	100,000	1,000	Non-cumulative perpetual 6.75% payable quarterly	Beginning August 15, 2023, dividends will accrue at an annual rate equal to 3-month USD LIBOR plus 4.58%. Redeemable on August 15, 2023 and any dividend payment date thereafter.
Compeer Financial, ACA	May 2021	100.00	100,000	1,000	Non-cumulative perpetual 4.875% payable quarterly	Beginning August 15, 2026, dividends will accrue at the 5-year Treasury rate, reset quarterly, plus 4.10%. Redeemable on August 15, 2026 and any dividend payment date thereafter.
Total		\$ 780.00				

In the tables above, since US dollar LIBOR will no longer be available or, to the extent available, non-representative after June 30, 2023, the annual rate will be replaced by a CME Term SOFR-based rate either by bi-lateral negotiation or by operation of law. To the extent that any preferred stock has not been redeemed or amended prior to June 30, 2023 to include a non-LIBOR fallback rate, pursuant to the LIBOR Act and Regulation ZZ, the LIBOR-based rate that would have been paid after June 30, 2023 under such preferred stock will be replaced by operation of law with a CME Term SOFR-based rate.

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

Capital Stock and Participation Certificates

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

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

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

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

Additional Paid-In-Capital

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

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

Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss, net of tax, at December 31, 2022 and 2021 was comprised of the following components:

December 31, 2022					December 31, 2021						
Before Tax		Deferred Tax		Net of Tax		Before Tax		Deferred Tax		Net of Tax	
\$	(4,741)	\$	198	\$	(4,543)	\$	189	\$	(50)	\$	139
	179		8		187		(240)		8		(232)
	(1,157)		21		(1,136)		(1,130)		13		(1,117)
\$	(5,719)	\$	227	\$	(5,492)	\$	(1,181)	\$	(29)	\$	(1,210)
	\$	### Refore Tax \$ (4,741) 179 (1,157)	Before Tax D 179 (1,157)	Before Tax Deferred Tax \$ (4,741) \$ 198 179 8 (1,157) 21	Before Tax Deferred Tax \$ (4,741) \$ 198 179 8 (1,157) 21	Before Tax Deferred Tax Net of Tax \$ (4,741) \$ 198 \$ (4,543) 179 8 187 (1,157) 21 (1,136)	Before Tax Deferred Tax Net of Tax \$ (4,741) \$ 198 \$ (4,543) \$ 179 8 187 (1,157) 21 (1,136)	Before Tax Deferred Tax Net of Tax Before Tax \$ (4,741) \$ 198 \$ (4,543) \$ 189 179 8 187 (240) (1,157) 21 (1,136) (1,130)	Before Tax Deferred Tax Net of Tax Before Tax \$ (4,741) \$ 198 \$ (4,543) \$ 189 179 8 187 (240) (1,157) 21 (1,136) (1,130)	Before Tax Deferred Tax Net of Tax Before Tax Deferred Tax \$ (4,741) \$ 198 \$ (4,543) \$ 189 \$ (50) 179 8 187 (240) 8 (1,157) 21 (1,136) (1,130) 13	Before Tax Deferred Tax Net of Tax Before Tax Deferred Tax \$ (4,741) \$ 198 \$ (4,543) \$ 189 \$ (50) \$ 179 8 187 (240) 8 (1,157) 21 (1,136) (1,130) 13

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

	Unrealiz gains/losse investme availabl for-sale,	es on nts	Unrealized gains/losses on cash flow hedges, net			Pension nd other benefit plans		ccumulated other nprehensive loss
Balance at December 31, 2021	\$	139	\$	(232)	\$	(1,117)	\$	(1,210)
Other comprehensive (loss) income before reclassifications	(4,	685)		377		(133)		(4,441)
Amounts reclassified from accumulated other comprehensive loss to income		3		42		114		159
Net current period other comprehensive (loss) income	(4,	682)		419		(19)		(4,282)
Balance at December 31, 2022	\$ (4,	543)	\$	187	\$	(1,136)	\$	(5,492)
	Unrealized Unrealized gains on losses on investments cash flow available- hedges, for-sale, net net							
	gains o investme availabl	n nts e-	lo ca	osses on ash flow nedges,	a	Pension nd other benefit plans		ccumulated other nprehensive loss
Balance at December 31, 2020	gains o investme availabl for-sale,	n nts e-	lo ca	osses on ash flow nedges,		nd other benefit		other aprehensive
Balance at December 31, 2020 Other comprehensive (loss) income before reclassifications	gains o investme availabl for-sale, \$ 1,	n nts e- net	lo ca ł	osses on ash flow nedges, net		nd other benefit plans	con	other nprehensive loss
Other comprehensive (loss) income before	gains o investme availabl for-sale, \$ 1,	n nts le- net	lo ca ł	osses on ash flow nedges, net (353)		nd other benefit plans (1,425)	con	other apprehensive loss (621)
Other comprehensive (loss) income before reclassifications Amounts reclassified from accumulated other	gains o investme availabl for-sale, \$ 1, (1,	n nts le- net 157	lo ca ł	osses on ush flow needges, net (353)		nd other benefit plans (1,425)	con	other apprehensive loss (621)

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

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

	For the Year End	led December 31,	Location of Gain/Loss Recognized in
	2022	2021	Combined Statement of Income
Unrealized gains/losses on investments available-for-sale, net:			
Sales gains and losses	\$ (3)	\$ (36)	Net gains on derivative, investment and other transactions
Deferred tax		9	Provision for income taxes
Net amounts reclassified	(3)	(27)	
Unrealized gains/losses on cash flow hedges, net:			
Interest rate contracts	(41)	(51)	Interest expense/interest income
Other contracts	(2)	1	Interest income
Deferred tax	1		Provision for income taxes
Net amounts reclassified	(42)	(50)	
Pension and other benefit plans:			
Net actuarial loss	(116)	(152)	Other expense
Prior service cost	1	2	Salaries and employee benefits
Deferred tax	1	3	Provision for income taxes
Net amounts reclassified	(114)	(147)	
Total reclassifications	\$ (159)	\$ (224)	

As discussed in Notes 9 and 21, only the Banks are statutorily liable for the payment of principal and interest on Systemwide Debt Securities. Under each Bank's bylaws, the Bank is authorized under certain circumstances to require its affiliated Associations and certain other equity holders to purchase additional Bank equities. In most cases, the Banks are limited as to the amounts of these purchases that may be required, generally with reference to a percentage of the Association's or other equity holder's direct loan from the Bank, and calls for additional equity investments may be subject to other limits or conditions. However, the Banks also generally possess indirect access to certain financial resources of their affiliated Associations through loan-pricing provisions and through Bank-influenced District operating and financing policies and agreements.

In case of liquidation or dissolution, preferred stock, capital stock, participation certificates and unallocated retained earnings would be distributed to equity holders, after the payment of all liabilities in accordance with Farm Credit Administration regulations, in the following order: (1) retirement of preferred stock at par, (2) retirement of all common stock and participation certificates at par, (3) retirement of all patronage surplus in amounts equal to the face amount of the applicable nonqualified written notices of allocation or such other notice, and (4) remaining unallocated retained earnings and reserves would be paid to the holders of voting stock, nonvoting stock and participation certificates in proportion to patronage to the extent possible.

Regulatory Capital Requirements

Farm Credit Administration's capital regulations require that the Banks and Associations maintain minimum regulatory capital ratio requirements. At December 31, 2022, all System institutions reported compliance with these standards.

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

The following set forth the regulatory capital ratio requirements and ratios at December 31, 2022:

Ratio	Primary Components of Numerator	Denominator	Minimum Requirement	Minimum with Buffer	Banks(1)	Associations
Common Equity Tier 1 (CET1) Capital	Unallocated retained earnings (URE) and common cooperative equities (qualifying capital stock and allocated equity)(2)	Risk-weighted assets	4.5%	7.0%	8.7% - 16.3%	9.8% - 32.3%
Tier 1 Capital	CET1 Capital and non- cumulative perpetual preferred stock	Risk-weighted assets	6.0%	8.5%	13.4% - 16.9%	11.6% - 32.3%
Total Capital	Tier 1 Capital, allowance for loan losses(3), other common cooperative equities(4), and term preferred stock and subordinated debt(5)	Risk-weighted assets	8.0%	10.5%	13.5% - 16.9%	12.1% - 33.1%
Tier 1 Leverage	Tier 1 Capital (at least 1.5% must be URE and URE equivalents)	Total assets	4.0%	5.0%	5.2% - 6.8%	10.5% - 31.3%
Permanent Capital	Retained earnings, common stock, non-cumulative perpetual preferred stock and subordinated debt, subject to certain limits	Risk-weighted assets	7.0%	N/A	13.4% - 16.9%	11.9% - 32.5%
Unallocated Retained Earnings and URE Equivalents (UREE) Leverage	URE and URE Equivalents	Total assets	1.5%	N/A	2.3% - 5.4%	5.4% - 31.0%

⁽¹⁾ See Note 21 for each Bank's Total Capital ratio and Tier 1 Leverage ratio at December 31, 2022 and 2021.

System institutions are prohibited from reducing capital by retiring stock (other than protected borrower stock) or making certain distributions to shareholders if, after or due to the retirement or distribution, the institution would not meet the minimum capital adequacy standards established by the Farm Credit Administration under the Farm Credit Act.

By regulation, the Farm Credit Administration is empowered to direct a transfer of funds or equities by one or more Banks or Associations to another Bank or Association, under specified circumstances. The System has never been called on to initiate any transfers pursuant to this regulation and is not aware of any proposed action under this regulation.

NOTE 13 — EMPLOYEE BENEFIT PLANS

The Banks and substantially all Associations participate in defined benefit retirement plans. The Banks and Associations, except for CoBank and certain affiliated 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 defined benefit pension plans. In addition, certain System institutions provide healthcare and other postretirement benefits to eligible retired employees. Employees of System institutions may eligible for healthcare become and postretirement benefits if they reach normal retirement age while working for the System.

⁽²⁾ Equities subject to a minimum redemption or revolvement period of 7 or more years

⁽³⁾ Capped at 1.25% of risk-weighted assets and inclusive of the reserve for unfunded commitments

⁽⁴⁾ Equities subject to a minimum redemption or revolvement period of 5 years or more, but less than 7 years

⁽⁵⁾ Equities subject to a minimum redemption or revolvement period of 5 years or more years

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

The following tables set forth the funding status and the amounts recognized in the System's Combined Statement of Condition for pension and other postretirement benefit plans:

	Pens Ben		Otl Ben		
	Decem	ber 31,	Decem	ber 3	1,
	2022	2021	2022	2	2021
Change in benefit obligation:					
Benefit obligation at beginning of year	\$ 4,651	\$ 4,906	\$ 322	\$	336
Service cost	58	64	3		3
Interest cost	119	107	9		9
Plan participants' contributions			4		4
Plan amendments	4	6			
Actuarial gain	(829)	(105)	(65)		(14)
Benefits and premiums paid	(348)	(327)	(18)		(16)
Benefit obligation at end of year	\$ 3,655	\$ 4,651	\$ 255	\$	322
Change in plan assets:					
Fair value of plan assets at beginning of year	\$ 4,204	\$ 4,064			
Actual return on plan assets	(836)	238			
Employer contributions	197	229	\$ 14	\$	12
Plan participants' contributions			4		4
Benefits and premiums paid	(348)	(327)	(18)		(16)
Fair value of plan assets at end of year.	\$ 3,217	\$ 4,204	\$ 0	\$	0
Funded status at end of year	\$ (438)	\$ (447)	\$ (255)	\$	(322)
Amounts recognized in the balance sheet consist of:					
Pension liability	\$ (438)	\$ (447)	\$ (255)	\$	(322)
Net amount recognized	\$ (438)	\$ (447)	\$ (255)	\$	(322)

The accumulated benefit obligation for all defined benefit pension plans was \$3.413 billion, \$4.347 billion and \$4.551 billion at December 31, 2022, 2021 and 2020.

The following represent the amounts included in accumulated other comprehensive loss (pre-tax) at December 31:

		sion efits		Otl Ben		
	2022	2021	2	022	2021	
Net actuarial loss	\$1,181	\$1,090	\$	(27)	\$	41
Prior service costs	6	4		(3)		(5)
Total amount recognized in AOCL	\$1,187	\$1,094	\$	(30)	\$	36

Information for pension plans with an accumulated benefit obligation in excess of plan assets:

	December 31,				
		2022		2021	
Accumulated benefit obligation	\$	1,472	\$	1,485	
Fair value of plan assets		1,236		1,197	

Information for pension plans with a projected plan obligation in excess of plan assets:

	Decem	ber .	31,
	2022		2021
Projected benefit obligation	\$ 3,592	\$	4,196
Fair value of plan assets	3,154		3,713

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

The net periodic pension cost for defined benefit plans and other postretirement benefit plans included in the Combined Statement of Income and changes in plan assets and benefit obligations recognized in other comprehensive income (loss) are as follows:

	Pension Benefits					Other Benefits						
				'ear Ei iber 31			For The Year Ended December 31,					
	20	2022		21	2020		2022		2021		2	020
Net periodic benefit cost:												
Service cost	\$	58	\$	64	\$	63	\$	3	\$	3	\$	3
Interest cost		119		107		136		9		9		11
Expected return on plan assets	(202)	(201)		(197)						
Net amortization and deferral		115		147		148		1		3		2
Curtailments and settlements		5		18								
Net periodic benefit cost		95		135		150		13		15		16
Other changes in plan assets and benefit obligations:												
Net actuarial loss (gain)		205	(159)		129		(65)		(14)		15
Prior service cost		3		6								
Amortization of net actuarial loss	(114)	(147)		(147)		(3)		(5)		(4)
Amortization of prior service (cost) credit		(1)				(1)		2		2		2
Total recognized in other comprehensive income (loss)		93	(300)		(19)		(66)		(17)		13
Total recognized in net periodic benefit cost and other comprehensive income (loss)	\$	188	\$ (165)	\$	131	\$	(53)	\$	(2)	\$	29

The components of net periodic benefit cost other than the service cost component are included in

the line item other expense in the Combined Statement of Income.

Weighted average assumptions used to determine benefit obligations at December 31:

		Pension Benefits				
	2022	2021	2020	2022	2021	2020
Discount rate	5.11%-5.20%	2.71%-2.96%	2.31%-2.66%	5.07%-5.25%	2.34%-3.15%	1.82%-2.80%
Rate of compensation increase	3.40%-7.20%	3.40%-5.40%	3.40%-4.60%	N/A	N/A	N/A
Interest crediting rate	3.25%-5.00%	1.37%-5.00%	0.68%-5.00%	N/A	N/A	N/A

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

Weighted average assumptions used to determine net periodic benefit cost for years ended December 31:

		Pension Benefits					
	2022	2021	2020	2022	2021	2020	
Discount rates:							
Single weighted average rate	2.80%-3.00%	2.40%-2.66%	3.20%-3.31%	2.95%-3.15%	2.60%-2.80%	3.30%-3.45%	
Spot rate							
Projected benefit obligation	2.71%-2.91%	2.31%-2.57%	3.11%-3.27%	2.34%-2.90%	1.82%-2.56%	2.81%-3.31%	
Service cost	2.91%-3.02%	2.59%-2.72%	3.27%-3.38%	3.13%-3.14%	2.87%-2.88%	3.46%-3.55%	
Interest cost	2.13%-2.42%	1.62%-1.97%	2.69%-2.91%	1.80%-2.33%	1.22%-1.84%	2.46%-2.87%	
Expected long-term return on							
plan assets	4.00%-6.80%	3.50%-6.00%	4.75%-6.00%	N/A	N/A	N/A	
Rate of compensation increase	3.40%-4.60%	3.40%-4.50%	3.50%-5.40%	N/A	N/A	N/A	
Interest crediting rate	1.37%-5.00%	0.68%-5.00%	1.70%-5.00%	N/A	N/A	N/A	

The discount rates used by certain plans to estimate service and interest components of net periodic benefit cost are calculated using a full yield curve method developed by an independent actuary. The approach maps a high-quality bond yield curve to the duration of the plans' liabilities, thus approximating each cash flow of the liability stream to be discounted at an interest rate specifically applicable to its respective period in time.

The expected long-term rate of return assumption is determined independently for each defined benefit pension plan. Generally, plan trustees use historical return information to establish a best-estimate range for each asset class in which the plans are invested. Plan trustees select the most appropriate rate for each plan from the best-estimate range, taking into consideration the duration of plan benefit liabilities and plan sponsor investment policies.

For measurement purposes, an annual rate increase of 5.75%-7.70% in the per capita cost of covered health benefits was assumed for 2023. The rates were assumed to step down to 4.50%-5.00% in various years beginning in 2029-2030, and remain at that level thereafter.

Plan Assets

The trustees of each defined benefit pension plan and other postretirement benefit plan set investment policies and strategies for each plan, including target allocation percentages for each category of plan asset. Generally, the funding objectives of the pension plans are to achieve and maintain plan assets adequate to cover the accumulated benefit obligations and to provide competitive investment returns and reasonable risk levels when measured against appropriate benchmarks. Plan trustees develop asset allocation policies based on plan objectives, characteristics of pension liabilities, capital market expectations, and projections. Substantially asset-liability postretirement healthcare plans have no plan assets and are funded on a current basis by employer contributions and retiree premium payments.

	Pension Benefits Target Allocation for Next Year
Asset Category	
Equity securities	12%-55%
Debt securities	43%-83%
Other	0%-26%

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

The fair values of the System's pension plan assets at December 31, 2022 and 2021 by asset category are as follows:

	Fair Value Measurement Using							Total	
<u>December 31, 2022</u>	Level 1 Level 2		2 Level 3		Level 3 F			Fair Value	
Cash and cash equivalents	\$	132					\$	132	
Debt securities		285	\$	657				942	
Mutual and Exchange Traded Funds:									
International funds		187		41				228	
Fixed income funds		56						56	
Domestic funds		217		9				226	
Bond funds		50		391				441	
Real estate equity funds					\$	8		8	
Other funds		20		60		117		197	
Investment insurance contracts						5		5	
Total	\$	947	\$	1,158	\$	130		2,235	
Investments measured at net asset value(1)								982	
Total assets at fair value							\$	3,217	

	Fair Value Measurement Using							Total				
<u>December 31, 2021</u>	I	Level 1 Level 2		Level 2 Level		Level 2 L		Level 2 Level 3		vel 3		ir Value
Cash and cash equivalents	\$ 114						\$	114				
Debt securities			\$	854				854				
Mutual and Exchange Traded Funds:												
International funds		324		69				393				
Fixed income funds		32		24				56				
Domestic funds		410		19				429				
Bond funds		87		642				729				
Real estate equity funds					\$	6		6				
Other funds		35		97		53		185				
Investment insurance contracts						5		5				
Total	\$	1,002	\$	1,705	\$	64		2,771				
Investments measured at net asset value(1)								1,433				
Total assets at fair value							\$	4,204				

⁽¹⁾ The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the net assets in the pension plans.

There were no material changes in Level 3 pension plan assets for the years ended December 31, 2022 and 2021. In addition, there were no plan assets for other benefit plans at December 31, 2022 and 2021.

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

Concentrations of Credit Risk

The plan assets are diversified into various investment types as shown in the preceding table. The plan assets are primarily spread among various mutual funds, with numerous fund managers. Diversification is also obtained by selecting fund managers whose funds are not concentrated in individual stock, or individual countries for the international funds.

Contributions

The Banks and Associations expect to contribute \$98 million to their pension plans and \$13 million to their other postretirement benefit plans in 2023.

The Banks and Associations expect to pay the following benefit payments, which reflect expected future service, as appropriate.

<u>Year</u>	 ension enefits	_	ther nefits
2023	\$ \$ 276		14
2024	297		14
2025	291		15
2026	293		16
2027	290		16
2028 to 2032	1,386		86

The Banks and Associations also participate in defined contribution savings plans. Certain plans require Banks and Associations to match a percentage of employee contributions. Employer contributions to these plans were \$156 million, \$145 million and \$136 million for the years ended December 31, 2022, 2021 and 2020.

NOTE 14 — INCOME TAXES

The provision for income taxes was comprised of the following amounts:

	For The Year Ended December 31,							
	2022	2021	2020					
Current:								
Federal	\$ 102	\$ 79	\$ 19					
State and local	31	18	13					
Deferred:								
Federal	34	50	134					
State	(1)	14	6					
Provision for income taxes	\$ 166	\$ 161	\$ 172					

The deferred income tax provision (benefit) results from differences between amounts of assets and liabilities as measured for income tax return and financial reporting purposes. The significant components of deferred tax assets and liabilities at December 31, 2022 and 2021 were as follows:

	Decem	ber 31,
	2022	2021
Deferred tax assets:		
Allowance for loan losses	\$ 256	\$ 252
Unrealized net losses on investments available-for-sale	207	
Loss carryforwards	85	79
Employee benefit plan obligations	70	63
Loan origination fees	27	22
Nonaccrual loan interest	15	16
Other	93	88
Gross deferred tax assets	753	520
Less: valuation allowance	(143)	(154)
Deferred tax assets, net of valuation allowance	610	366
Deferred tax liabilities:		
Direct financing leases	(899)	(844)
Patronage allocated by Banks to Associations	(51)	(53)
Unrealized net gains on investments available-for-sale		(42)
Pensions	(34)	(30)
Other	(47)	(42)
Gross deferred tax liabilities	(1,031)	(1,011)
Net deferred tax liability	\$ (421)	\$ (645)
System entities with net deferred tax assets (included in other assets)	\$ 9	\$ 8
System entities with net deferred tax liabilities (included in other liabilities)	(430)	(653)
	\$ (421)	\$ (645)

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

The provision for income taxes differs from the amount of income tax determined by applying the applicable U.S. statutory federal income tax rate to pre-tax income from continuing operations as a result of the following differences:

	Year Ended December 31,					
	2022	2021	2020			
Federal tax at statutory rate	\$1,561	\$1,461	\$1,297			
State tax, net	22	24	17			
Effect of nontaxable entities	(1,118)	(1,046)	(865)			
Patronage distributions allocated by taxable entities	(251)	(234)	(224)			
Other	(48)	(44)	(53)			
Provision for income taxes	\$ 166	\$ 161	\$ 172			

System entities have unrecognized tax benefits of \$10 million, \$11 million and \$7 million at December 31, 2022, 2021 and 2020 for which liabilities have been established.

System entities recognize interest and penalties related to unrecognized tax benefits as an adjustment to income tax expense. The amounts of interest and penalties recognized in 2022, 2021 and 2020 were not significant. System entities did not have any positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly increase or decrease within the next 12 months. The tax years that remain open for federal and major state income tax jurisdictions are 2018 and forward.

NOTE 15 — FAIR VALUE MEASUREMENTS

Accounting guidance defines fair value as the exchange price that would be received for an asset or paid to transfer a liability in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability. See Note 2 — Summary of Significant Accounting Policies for additional information. Assets and liabilities measured at fair value on a recurring basis at December 31, 2022 and 2021 for each of the fair value hierarchy levels are summarized below:

Fair Value Measurement Using					– Total		
L	evel 1	Level 2		Level 2 Level 3			
		\$	13,053			\$	13,053
			10,103	\$	25		10,128
			22,129				22,129
			1,680				1,680
			31,847		68		31,915
			4,633				4,633
			1,059				1,059
\$	218						218
\$	218	\$	84,504	\$	93	\$	84,815
		\$	1,165			\$	1,165
\$	7		560				567
				\$	22		22
\$	7	\$	1,725	\$	22	\$	1,754
	\$ \$	\$ 218 \$ 218 \$ 7	\$ 218 \$ 218 \$ 218 \$ \$ 7	Level 1 Level 2 \$ 13,053 10,103 22,129 1,680 31,847 4,633 1,059 \$ 218 \$ 218 \$ 1,165 \$ 7 560	Level 1 Level 2 I \$ 13,053 10,103 \$ \$ \$ 22,129 1,680 31,847 4,633 1,059 \$ 218 \$ 84,504 \$ \$ 1,165 \$ 560 \$	Level 1 Level 2 Level 3 \$ 13,053 10,103 \$ 25 22,129 1,680 31,847 68 68 4,633 1,059 \$ 218 \$ 218 \$ 84,504 \$ 93 \$ 1,165 \$ 560 \$ 22	Level 1 Level 2 Level 3 Framework \$ 13,053 \$ \$ 10,103 \$ 25 22,129 1,680 31,847 68 4,633 1,059 \$ 218 \$ 84,504 \$ 93 \$ 1,165 \$ \$ 7 560 \$ 22

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

	Fair Value Measurement Using					- Total		
December 31, 2021	L	evel 1	Level 2		Level 2 Level 3		Fair Value	
Assets:								
Federal funds sold and securities purchased under resale agreements			\$	6,094			\$	6,094
Commercial paper, bankers' acceptances, certificates of deposit and other securities				4,667	\$	20		4,687
U.S. Treasury securities				26,099				26,099
U.S. agency securities				2,162				2,162
Mortgage-backed securities				30,249		145		30,394
Asset-backed securities				3,749				3,749
Derivative assets				483				483
Assets held in non-qualified benefits trusts	\$	244						244
Total assets	\$	244	\$	73,503	\$	165	\$	73,912
Liabilities:								
Derivative liabilities			\$	412			\$	412
Collateral liabilities				1				1
Standby letters of credit					\$	21		21
Total liabilities	\$	0	\$	413	\$	21	\$	434

The tables below summarize the activity of all Level 3 assets and liabilities measured at fair value on a recurring basis:

	Commercial paper, bankers' acceptances, certificates of deposit and other securities	Mortgage-backed securities	Standby letters of credit	
Balance at December 31, 2021	\$ 20	\$ 145	\$ 21	
Total gains or (losses) realized/unrealized:				
Included in other comprehensive loss	(2)	(6)		
Purchases	16	134		
Issuances			21	
Settlements	(9)	(14)	(20)	
Transfers from Level 3 into Level 2		(191)		
Balance at December 31, 2022	\$ 25	\$ 68	\$ 22	
The amount of gains/losses for the period included in other comprehensive income attributable to the change in unrealized gains or losses relating to assets or liabilities still held at December 31, 2022	\$ (2)	\$ (6)	\$ 0	

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

	Commercial paper, bankers' acceptances, certificates of deposit and other securities	Mortgage-backed Asset-backed securities securities		acceptances, es of deposit Mortgage-backed Asset-backed		Standby letters of credit
Balance at December 31, 2020	\$ 13	\$ 183	\$ 0	\$ 17		
Total gains or (losses) realized/unrealized:						
Included in other comprehensive loss		(1)				
Purchases	7	497	12			
Issuances				17		
Settlements		(22)		(13)		
Transfers from Level 3 into Level 2		(512)	(12)			
Balance at December 31, 2021	\$ 20	\$ 145	\$ 0	\$ 21		
The amount of gains/losses for the period included in other comprehensive income attributable to the change in unrealized gains or losses relating to assets or liabilities still held at December 31, 2021.	\$ 0	\$ (1)	\$ 0	\$ 0		

There were no losses included in earnings during 2022 and 2021 that were attributable to the change in unrealized gains or losses relating to assets or liabilities still held at December 31, 2022 and 2021. The transfers between Level 3 and Level 2 during 2022 and 2021 were due to changes in the sources of pricing information.

Level 3 assets measured at fair value on a non-recurring basis included loans of \$423 million and other property owned of \$32 million at December 31, 2022, as compared to \$333 million and \$43 million at December 31, 2021.

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

	December 31, 2022									
	Total			Fair Va	Jsing	- Total Fair				
	Carrying Amount		Level 1		Level 2		Level 3		Value	
Assets:										
Cash	\$	3,470	\$	3,470					\$	3,470
Other investments held-to-maturity		2,888			\$	928	\$	1,756		2,684
Net loans		371,690						356,591		356,591
Total assets	\$	378,048	\$	3,470	\$	928	\$	358,347	\$	362,745
Liabilities:										
Systemwide Debt Securities	\$	389,977					\$	369,715	\$	369,715
Subordinated debt		398						306		306
Other bonds		5,599						5,599		5,599
Other interest bearing liabilities		2,463			\$	10		2,302		2,312
Total liabilities	\$	398,437	\$	0	\$	10	\$	377,922	\$	377,932
Other financial instruments:										
Commitments to extend credit							\$	265	\$	265

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

	December 31, 2021										
	Total Carrying		Fair Value Measurement Using							– Total Fair	
	Amount		Level 1		Level 2		Level 3		Value		
Assets:											
Cash	\$	5,548	\$	5,548					\$	5,548	
Other investments held-to-maturity		2,083			\$	462	\$	1,636		2,098	
Net loans		342,297						350,369		350,369	
Total assets	\$	349,928	\$	5,548	\$	462	\$	352,005	\$	358,015	
Liabilities:											
Systemwide Debt Securities	\$	352,823					\$	353,306	\$	353,306	
Subordinated debt		398						397		397	
Other bonds.		3,623						3,623		3,623	
Other interest bearing liabilities		1,809			\$	11		1,787		1,798	
Total liabilities	\$	358,653	\$	0	\$	11	\$	359,113	\$	359,124	
Other financial instruments:		·				·	_		_		
Commitments to extend credit							\$	244	\$	244	

Uncertainty of Fair Value Measurements

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 have resulted in a significantly lower (higher) fair value measurement.

Generally, a change in the assumption used for the probability of default would have been accompanied by a directionally similar change in the assumption used for the loss severity and a directionally opposite change in the assumption used for prepayment rates.

Quoted market prices are generally not available for the instruments presented below. Accordingly, fair values are based on judgments regarding anticipated cash flows, future expected loss experience, current economic conditions, risk characteristics of various financial instruments, and other factors. These estimates involve uncertainties and matters of judgment, and therefore cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

Quantitative Information about Recurring and Nonrecurring Level 3 Fair Value Measurements

	Fair Value		Valuation Technique(s)	Unobservable Input	Range of Inputs			
	December 31, 2022	December 31, 2021			December 31, 2022	December 31, 2021		
Commercial paper, bankers' acceptances, certificates of deposit and other securities	\$ 25	\$ 20	Discounted cash flow	Prepayment rate	0.0%	0.0%		
Mortgage-backed securities	\$ 10 58	\$ 14 131	Discounted cash flow Vendor priced	Prepayment rate	3.0%-32.1%	1.4%-44.5%		
	\$ 68	\$ 145						
Standby letters of credit	\$ 22	\$ 21	Discounted cash flow	Rate of funding Risk-adjusted spread	50% 0.1%-1.3%	50% 0.1%-1.4%		

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

With regard to nonrecurring measurements for impaired loans and other property owned, it is not practicable to provide specific information on inputs as each collateral property is unique. System institutions utilize appraisals to value these loans and

other property owned and take into account unobservable inputs such as income and expense, comparable sales, replacement cost and comparability adjustments.

Information about Recurring and Nonrecurring Level 2 Fair Value Measurements

	Valuation Technique(s)	Input
Federal funds sold and securities purchased under resale agreements	Carrying value	Par/principal and appropriate interest yield
Investment securities available-for-sale	Discounted cash flow	Constant prepayment rate Probability of default Loss severity
	Quoted prices	Price for similar security
Interest rate swaps, 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, 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, but not limited to, U.S. Treasury, U.S. agency and the substantial majority of mortgage-backed and asset-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 primarily consist of certain mortgage-backed securities including those issued by Farmer Mac and private label-FHA/VA securities.

To estimate the fair value of the majority of the investments held, the Banks and Associations obtain prices from third party pricing services. For the valuation of securities not actively traded, including certain mortgage-backed securities, the Banks and Associations utilize either a third party cash flow

model or an internal model. The significant inputs for the valuation models include yields, probability of default, loss severity and prepayment rates.

Derivatives

Exchange-traded derivatives valued using quoted prices would be classified within Level 1 of the valuation hierarchy. However, few classes of derivative contracts are listed on an exchange; thus, the majority of the derivative positions are valued using internally developed models that use as their basis readily observable market parameters and are classified within Level 2 of the valuation hierarchy. Such derivatives include basic interest rate swaps and options.

The models used to determine the fair value of derivative assets and liabilities use an income approach based on observable market inputs, including the LIBOR, SOFR 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.

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

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.

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 16 — DERIVATIVE PRODUCTS AND HEDGING ACTIVITIES

The Banks and Associations maintain an overall interest rate risk management strategy that incorporates the use of derivative products to minimize significant unplanned fluctuations in earnings that are caused by interest rate volatility. The 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 resulting from changes in interest rates.

In addition, derivative transactions, particularly interest rate swaps, are entered into to lower funding 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. 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 investments) that tend to be medium-term floating-rate instruments, while the related interest-bearing liabilities tend to be short- or medium-term fixed-rate obligations. Given this asset-liability mismatch, interest rate swaps 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).

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

In addition, the System had put option contracts with a total notional of 110,000 and 688,000 barrels of

oil at December 31, 2022 and 2021 to protect against a decline in oil prices impacting mineral income.

The primary types of derivative instruments used and the amount of activity (notional amount of derivatives) during 2022 and 2021 are summarized in the following tables:

	Receive- Fixed Swaps	Pay-Fixed and Amortizing Pay- Fixed Swaps		Floating-for- Floating and Amortizing Floating-for- Floating		Ra	nterest te Caps d Floors	_ Do	Other erivatives	Total
Balance at December 31, 2021	\$ 17,847	\$	31,775	\$	1,400	\$	4,143	\$	11,872	\$ 67,037
Additions	21,874		112,251		19,900		278		7,738	162,041
Maturities/amortization	(6,097)		(104,965)		(12,500)		(899)		(6,199)	(130,660)
Terminations	(1,179)		(1,662)				(62)		(1,388)	(4,291)
Balance at December 31, 2022	\$ 32,445	\$	37,399	\$	8,800	\$	3,460	\$	12,023	\$ 94,127
					oating-for-					

	Receive- Fixed Swaps	Pay-Fixed and Amortizing Pay- Fixed Swaps		Floating and Amortizing Floating-for- Floating		Ra	nterest ate Caps d Floors	D	Other erivatives	Total
Balance at December 31, 2020	\$ 14,780	\$	23,466	\$	2,000	\$	6,196	\$	11,297	\$ 57,739
Additions	8,959		87,368				206		6,122	102,655
Maturities/amortization	(5,892)		(77,797)		(600)		(509)		(5,002)	(89,800)
Terminations			(1,262)				(1,750)		(545)	(3,557)
Balance at December 31, 2021	\$ 17,847	\$	31,775	\$	1,400	\$	4,143	\$	11,872	\$ 67,037

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 derivative are monitored and transactions are almost exclusively entered into with non-customer counterparties that have an investment grade or better credit rating from a major rating Nonperformance by any 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 had a net exposure to counterparties of \$32 million and \$7 million at December 31, 2022 and 2021.

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 prequalify 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 for changes in the value of cleared derivatives. The initial margin and other amounts collected from both parties to the swap protects against credit risk in the event a counterparty defaults. The initial margin and other amounts 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.

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

Derivative activities are monitored by an Asset-Liability 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 risk-management strategies.

Fair Value Hedges

For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item (principally, debt securities) attributable to the hedged risk are recognized in current earnings. The System includes the gain or loss on the hedged items in the same line item (interest expense) as the offsetting loss or gain on the related interest rate swaps. As of December 31, 2022 and 2021, the following amounts were recorded on the Combined Statement of Condition related to cumulative basis adjustments for fair value hedges:

		ng Amount of ledged Item	Cumulative Amount of Fair Value Hedging Adjustmen Included in the Carrying Amour of the Hedged Item				
	Dec	ember 31, 2022	December 31, 2022				
Systemwide debt securities	\$	32,214	\$	(614)*			
		ng Amount of ledged Item	Fair Value He Included in the	ve Amount of dging Adjustment Carrying Amount edged Item			
	December 31, 2021		December 31, 2021				
Systemwide debt securities	\$	18,926	\$	79			

^{*} Excluded from this amount is a (\$24) million hedging adjustment on discontinued hedging relationships, which will be amortized over the remaining life of the original hedging relationships.

Cash Flow Hedges

For derivative instruments that are designated and qualify as cash flow hedges, the gain or loss on the derivative is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings.

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 (losses) gains on derivative, investment and other transactions" in the Combined Statement of Income.

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

Fair Values of Derivative Instruments

The following table represents the fair value of derivative instruments:

	Balance Sheet Classification Assets	Fair Value at December 31, 2022	Fair Value at December 31, 2021	Balance Sheet Classification Liabilities	Fair Value at December 31, 2022	Fair Value at December 31, 2021
Derivatives designated as hedging instruments:						
Receive-fixed swaps	Other assets		\$ 120	Other liabilities	\$ 611	\$ 40
Pay-fixed and amortizing pay-fixed swaps	Other assets	\$ 101		Other liabilities	3	46
Interest rate caps and floors	Other assets	114	23			
Floating-for-floating and amortizing floating-for-floating swaps	Other assets	16		Other liabilities		1
Foreign exchange contracts	Other assets		1	Other liabilities	2	1
Total derivatives designated as hedging instruments		231	144		616	88
Derivatives not designated as hedging instruments:						
Pay-fixed and amortizing pay-fixed swaps	Other assets	11		Other liabilities		3
Derivatives entered into on behalf of customers	Other assets	829	389	Other liabilities	828	327
Other derivative products	Other assets		1			
Total derivatives not designated as hedging instruments		840	390		828	330
Variation margin settlement		(12)	(50)		(279)	(5)
Total derivatives		\$ 1,059	\$ 484		\$ 1,165	\$ 413

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

	(Loss	Amount of Gain or (Loss) Recognized in OCI on Derivatives			Location of	Amount of Gain or (Loss) Reclassified from AOCI into Income					
	D	ecer	nber 3	1,	Gain or (Loss) Reclassification from	December 31,					
Derivatives — Cash Flow Hedging Relationships	2022	2022 2021		2020	AOCI into Income	2022	2021	2020			
Pay-fixed and amortizing pay-fixed swaps	\$ 274	\$	75	\$(211)	Interest expense	\$ (28)	\$ (36)	\$ (31)			
Floating-for-floating and amortizing floating-for-floating swaps	15			1	Interest expense	(3)	(1)	(1)			
Interest rate caps and floors	90		(6)	2	Interest expense/ interest income	(10)	(14)	(19)			
Foreign exchange contracts	(2)		2		Interest income	(1)	1	1			
Total	\$ 377	\$	71	\$(208)		\$ (42)	\$ (50)	\$ (50)			

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

The following table sets forth the effect of fair value and cash flow hedge accounting on the Combined Statement of Income:

Location and Amount of Gain or Loss Recognized in Income on	
Fair Value and Cash Flow Hadging Polationships	

Fair Value and Cash Flow Hedging Relationships										
For the Year Ended December 31, 2022					For the Year Ended December 31, 2021					
Interest Income		Interest Expense		Interest Income		Inter	est Expense			
\$	16,716	\$	6,174	\$	12,541	\$	2,777			
			691				258			
			(693)				(256)			
			28				36			
			3				1			
			(7)							
	3		13		7		14			
	(1)				1					
	1									
		Interest Income \$ 16,716	December 31, 26 Interest Income Interest	December 31, 2022 Interest Income	December 31, 2022	December 31, 2022 December	December 31, 2022 December 31, 2 Interest Income Interest Expense Interest Income Interest Income \$ 16,716 \$ 6,174 \$ 12,541 \$ \$ 691 (693) \$ 28 \$ 3 (7) \$ 3 13 7 \$ (1) \$ 1			

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

		For The Year Ended December 31,							
Derivatives Not Designated as Hedging Instruments	Location of Gain or (Loss)	2022		2021		2020			
Pay-fixed and amortizing pay-fixed swaps	Noninterest income	\$	14	\$	7	\$	(10)		
Derivatives entered into on behalf of customers	Noninterest income		(68)		(33)		31		
Other derivative products	Noninterest income						(4)		
Total		\$	(54)	\$	(26)	\$	17		

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

NOTE 17 — ASSET/LIABILITY OFFSETTING

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

		Gross	Net Amounts		s Amounts Not Offset i ined Statement of Con-		
December 31, 2022	Gross Amounts Recognized	Amounts Offset in the Combined Statement of Condition	Presented in the Combined Statement of Condition	Securities Received/ Pledged	ceived/ Cash Collateral		Net Amount
Assets:							
Interest rate swaps and other derivatives	\$ 1,059		\$ 1,059	\$ (5)	\$ (567)	\$ 60	\$ 547
Federal Funds sold and securities purchased under resale agreements	13,053		13,053	(9,950)			3,103
Liabilities:							
Interest rate swaps and other derivatives	1,165		1,165			(200)	965
		Gross	Net Amounts		s Amounts Not Offset i ined Statement of Con		
December 31, 2021	Gross Amounts Recognized	Gross Amounts Offset in the Combined Statement of Condition	Net Amounts Presented in the Combined Statement of Condition				Net Amount
December 31, 2021 Assets:	Amounts	Amounts Offset in the Combined Statement of	Presented in the Combined Statement of	Securities Received/	ined Statement of Con Cash Collateral	dition Cleared Derivative Initial Margin	
	Amounts Recognized	Amounts Offset in the Combined Statement of	Presented in the Combined Statement of Condition	Securities Received/	ined Statement of Con Cash Collateral	dition Cleared Derivative Initial Margin Pledged	
Assets: Interest rate swaps	Amounts Recognized	Amounts Offset in the Combined Statement of Condition	Presented in the Combined Statement of Condition	Securities Received/	ined Statement of Con Cash Collateral Received/Pledged	dition Cleared Derivative Initial Margin Pledged	Amount
Assets: Interest rate swaps and other derivatives Federal Funds sold and securities purchased under resale	Amounts Recognized \$ 484	Amounts Offset in the Combined Statement of Condition	Presented in the Combined Statement of Condition	Securities Received/ Pledged	ined Statement of Con Cash Collateral Received/Pledged	dition Cleared Derivative Initial Margin Pledged	* 491

NOTE 18 — RELATED PARTY TRANSACTIONS

In the normal course of business, the Banks and Associations may enter into loan transactions with their officers and directors and non-System organizations with which such persons may be associated. These loans are subject to special approval requirements contained in Farm Credit Administration regulations and are, in the view of the lending System institution's management, made on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with

unrelated borrowers. As of December 31, 2022 and 2021, all related party loans were made in accordance with established policies and on the same terms as those prevailing at the time for comparable transactions.

Total loans outstanding to related parties were \$3.7 billion and \$3.2 billion at December 31, 2022 and 2021. During 2022 and 2021, \$7.0 billion and \$4.2 billion of new loans were made to related persons and repayments totaled \$6.5 billion and \$4.1 billion. In the opinions of Bank and Association managements, all such loans outstanding at December 31, 2022 and

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

2021 did not involve more than a normal risk of collectability, except for a loan to one Association director totaling \$113 thousand in 2022 and loans to one Association director totaling \$2.4 million in 2021.

NOTE 19 — COMMITMENTS AND CONTINGENCIES

In February 2022, a complaint was filed in the United States District Court for the Southern District of New York by purported beneficial owners of AgriBank's 9.125% subordinated notes originally scheduled to mature in 2019 ("Subordinated Notes"). AgriBank redeemed the Subordinated Notes at par plus accrued interest on July 15, 2016 due to the occurrence of a Regulatory Event (as defined under the terms of the Subordinated Notes). The plaintiffs 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 Subordinated Notes. On June 20, 2022, AgriBank entered into a settlement agreement with the plaintiffs on all claims and the case was dismissed.

At December 31, 2022, various other lawsuits were pending or threatened against System institutions. Each System institution to which a pending or threatened lawsuit relates intends to vigorously defend against such action. 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.

The Banks and Associations may participate in financial instruments with off-balance-sheet risk to satisfy the financing needs of their borrowers and to manage their exposure to interest-rate risk. In the

normal course of business, various commitments are made to customers, such as commitments to extend credit and letters of credit, which represent credit-related financial instruments with off-balance-sheet risk.

A summary of the contractual amount of creditrelated instruments is presented in the following table:

	De	2022
Commitments to extend credit	\$	125,579
Standby letters of credit		3,151
Commercial and other letters of credit		119

Since many of these commitments are expected to expire without being drawn upon, the total commitments do not necessarily represent future cash requirements. However, these credit-related financial instruments have off-balance-sheet credit risk because their contractual amounts are not reflected on the balance sheet until funded or drawn upon. Standby letters of credit are reflected on the balance sheet at fair value of the liability. The credit risk associated with issuing commitments and letters of credit is substantially the same as that involved in extending loans to borrowers and the same credit policies are applied by management. Upon fully funding a commitment, the credit risk amounts are equal to the contract amounts, assuming that borrowers fail completely to meet their obligations and the collateral or other security is of no value. The amount of collateral obtained, if deemed necessary upon extension of credit, is based on management's credit evaluation of the borrower.

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

NOTE 20 — QUARTERLY FINANCIAL DATA (UNAUDITED)

The unaudited results of operations by quarter for the past three years are presented below:

				2022 Qua	rter Eı	ıded		
	M	March 31		June 30		Sept. 30		Dec. 31
Net interest income	\$	2,560	\$	2,619	\$	2,657	\$	2,706
Loan loss reversal (provision for loan losses)		5		(6)		10		(49)
Net noninterest expense		(759)		(759)		(726)		(824)
Provision for income taxes		(48)		(45)		(59)		(14)
Net income	\$	1,758	\$	1,809	\$	1,882	\$	1,819
	2021 Quarter Ended							
	M	larch 31	June 30		Sept. 30		Dec. 31	
Net interest income	\$	2,392	\$	2,429	\$	2,439	\$	2,504
(Provision for loan losses) loan loss reversal		(28)		58		112		10
Net noninterest expense		(623)		(693)		(745)		(898)
Provision for income taxes		(48)		(46)		(46)		(21)
Net income	\$	1,693	\$	1,748	\$	1,760	\$	1,595
	2020 Quarter Ended							
	M	larch 31		June 30		Sept. 30		Dec. 31
Net interest income	\$	2,191	\$	2,214	\$	2,277	\$	2,364
(Provision for loan losses) loan loss reversal		(57)		(101)		(7)		58
Net noninterest expense		(655)		(629)		(646)		(835)
Provision for income taxes		(47)		(43)		(51)		(31)
Net income	\$	1,432	\$	1,441	\$	1,573	\$	1,556

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

NOTE 21 — COMBINING BANK-ONLY INFORMATION

The following condensed combining statements include the statement of condition, statement of comprehensive income and statement of changes in capital for the combined Banks without the affiliated Associations or other System institutions.

Combining Bank-Only Statement of Condition

December 31, 2022

	AgFirst Farm Credit Bank	A	griBank, FCB	Farm Credit Bank of Texas	(CoBank, ACB	Co	ombination Entries	C	Combined Banks
Assets										
Cash	\$ 746	\$	1,357	\$ 142	\$	896			\$	3,141
Federal funds sold and securities purchased under resale agreements	350			302		12,401				13,053
Investments (Note 3)	9,076		20,094	6,655		33,097				68,922
Loans										
To Associations(1)	21,218		118,660	19,500		71,437				230,815
To others(2)	10,251		14,811	8,765		68,651	\$	(352)		102,126
Less: allowance for loan losses	(26)		(32)	(16)		(681)				(755)
Net loans	31,443		133,439	28,249		139,407		(352)		332,186
Accrued interest receivable	125		1,028	122		749				2,024
Other assets	333		545	520		2,293		(98)		3,593
Total assets	\$ 42,073	\$	156,463	\$ 35,990	\$	188,843	\$	(450)	\$	422,919
Liabilities and Capital										
Systemwide Debt Securities (Notes 8 and 9):										
Due within one year	\$ 14,171	\$	39,326	\$ 11,637	\$	79,642			\$	144,776
Due after one year	25,969		105,709	22,335		91,188				245,201
Total Systemwide Debt Securities	40,140		145,035	33,972		170,830				389,977
Accrued interest payable	137		644	136		843				1,760
Other liabilities	344		3,598	259		6,945	\$	(128)		11,018
Total liabilities	40,621		149,277	34,367		178,618		(128)		402,755
Capital (Note 12)										
Preferred stock			250	750		1,633				2,633
Capital stock and participation certificates	301		4,665	545		4,000		(335)		9,176
Additional paid-in-capital	64									64
Accumulated other comprehensive loss	(994)		(869)	(540)		(1,927)		(9)		(4,339)
Retained earnings	2,081		3,140	868		6,519		22		12,630
Total capital	1,452		7,186	1,623		10,225		(322)		20,164
Total liabilities and capital	\$ 42,073	\$	156,463	\$ 35,990	\$	188,843	\$	(450)	\$	422,919

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

Combining Bank-Only Statement of Condition

December 31, 2021

	AgFirst Farm Credit Bank	A	griBank, FCB	Farm Credit Bank of Texas	(CoBank, ACB	Co	ombination Entries	C	ombined Banks
Assets										
Cash	\$ 625	\$	1,305	\$ 158	\$	3,197			\$	5,285
Federal funds sold and securities purchased under resale agreements	400			194		5,500				6,094
Investments (Note 3)	9,337		18,393	6,560		31,841				66,131
Loans										
To Associations(1)	19,740		108,166	18,277		65,554				211,737
To others(2)	8,796		13,828	7,397		62,975	\$	(367)		92,629
Less: allowance for loan losses	(20)		(37)	(12)		(651)				(720)
Net loans	28,516		121,957	25,662		127,878		(367)		303,646
Accrued interest receivable	85		518	68		379				1,050
Other assets	312		244	451		1,511		(36)		2,482
Total assets	\$ 39,275	\$	142,417	\$ 33,093	\$	170,306	\$	(403)	\$	384,688
Liabilities and Capital	 		_							_
Systemwide Debt Securities (Notes 8 and 9):										
Due within one year	\$ 13,257	\$	37,452	\$ 11,591	\$	68,401			\$	130,701
Due after one year	23,100		95,214	19,199		84,609				222,122
Total Systemwide Debt Securities	36,357		132,666	30,790		153,010				352,823
Accrued interest payable	41		260	63		286				650
Other liabilities	 574		2,485	 242		4,776	\$	(106)		7,971
Total liabilities	36,972		135,411	31,095		158,072		(106)		361,444
Capital (Note 12)										
Preferred stock	32		250	750		1,903				2,935
Capital stock and participation certificates	299		3,826	477		4,013		(313)		8,302
Additional paid-in-capital	64									64
Accumulated other comprehensive income										
(loss)	19		(211)	(97)		155		(13)		(147)
Retained earnings	1,889		3,141	868		6,163		29		12,090
Total capital	2,303	_	7,006	1,998		12,234		(297)	_	23,244
Total liabilities and capital	\$ 39,275	\$	142,417	\$ 33,093	\$	170,306	\$	(403)	\$	384,688

⁽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, approximately 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.

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

Combining Bank-Only Statement of Comprehensive (Loss) Income

For the year ended December 31,

	AgFirst Farm Credit Bank	Ag	griBank, FCB	F	Farm Credit Bank of Texas	C	oBank, ACB	nbination Intries	ombined Banks
2022									
Interest income	\$ 1,125	\$	3,108	\$	914	\$	4,748	\$ (2)	\$ 9,893
Interest expense	(519)		(2,254)		(532)		(2,864)	37	(6,132)
Net interest income	606		854		382		1,884	35	3,761
(Provision for loan losses) loan loss reversal	(8)		6		(4)		(111)		(117)
Noninterest income	44		113		42		366	(159)	406
Noninterest expense	(230)		(182)		(150)		(580)	(32)	(1,174)
Provision for income taxes							(110)		(110)
Net income	412		791		270		1,449	(156)	2,766
Other comprehensive (loss) income	(1,013)		(658)		(443)		(2,082)	 4	 (4,192)
Comprehensive (loss) income	\$ (601)	\$	133	\$	(173)	\$	(633)	\$ (152)	\$ (1,426)
<u>2021</u>									
Interest income	\$ 828	\$	1,967	\$	650	\$	2,869	\$ 86	\$ 6,400
Interest expense	(180)		(1,187)		(287)		(1,143)	42	(2,755)
Net interest income	648		780		363		1,726	128	3,645
Provision for loan losses	(3)		(1)		(2)		(18)		(24)
Noninterest income	34		146		45		198	(212)	211
Noninterest expense	(193)		(160)		(151)		(490)	(36)	(1,030)
Provision for income taxes							(102)		(102)
Net income	486		765		255		1,314	(120)	2,700
Other comprehensive (loss) income	(167)		(98)		(68)		(533)	4	(862)
Comprehensive income	\$ 319	\$	667	\$	187	\$	781	\$ (116)	\$ 1,838
<u>2020</u>	 								
Interest income	\$ 926	\$	2,324	\$	705	\$	3,313	\$ 82	\$ 7,350
Interest expense	 (345)		(1,610)		(372)		(1,746)	23	(4,050)
Net interest income	581		714		333		1,567	105	3,300
(Provision for loan losses) loan loss reversal	6		(11)		(1)		(21)		(27)
Noninterest income	(10)		177		44		282	(171)	322
Noninterest expense	(159)		(171)		(125)		(435)	(37)	(927)
Provision for income taxes							(130)		(130)
Net income	418		709		251		1,263	(103)	2,538
Other comprehensive income (loss)	138		(35)		23		594	 (3)	717
Comprehensive income	\$ 556	\$	674	\$	274	\$	1,857	\$ (106)	\$ 3,255

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

Combining Bank-Only Statement of Changes in Capital

	(gFirst Farm Credit Bank	_	riBank, FCB	B	Farm Credit Bank of Texas	(CoBank, ACB	 mbination Entries	ombined Banks
Balance at December 31, 2019	\$	2,331	\$	6,182	\$	1,844	\$	10,567	\$ (259)	\$ 20,665
Comprehensive income		556		674		274		1,857	(106)	3,255
Preferred stock issued, net						46				46
Preferred stock dividends		(1)		(17)		(45)		(84)		(147)
Capital stock and participation certificates issued				569		28		204	(10)	791
Capital stock, participation certificates, and retained earnings retired		(17)		(140)		(3)		(39)	7	(192)
Patronage		(391)		(688)		(152)		(595)	82	(1,744)
Balance at December 31, 2020		2,478		6,580		1,992		11,910	(286)	22,674
Comprehensive income		319		667		187		781	(116)	1,838
Preferred stock issued, net								420		420
Preferred stock retired		(17)						(22)		(39)
Preferred stock dividends		(1)		(17)		(47)		(83)		(148)
Capital stock and participation certificates issued				466		56			(2)	520
Capital stock, participation certificates, and retained earnings retired		(17)		(30)		(6)		(33)	7	(79)
Additional paid-in-capital		5								5
Patronage		(464)		(660)		(184)	_	(739)	 100	(1,947)
Balance at December 31, 2021		2,303		7,006		1,998		12,234	(297)	23,244
Comprehensive (loss) income		(601)		133		(173)		(633)	(152)	(1,426)
Preferred stock issued, net								400		400
Preferred stock retired		(32)						(670)		(702)
Preferred stock dividends				(17)		(47)		(93)		(157)
Capital stock and participation certificates issued				400		64		5	(3)	466
Capital stock, participation certificates, and retained earnings retired		(3)		(22)		(3)		(157)	7	(178)
Patronage		(215)		(314)		(216)		(861)	123	(1,483)
Balance at December 31, 2022	\$	1,452	\$	7,186	\$	1,623	\$	10,225	\$ (322)	\$ 20,164

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

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

	AgFirst Farm Credit Bank	AgriBank, FCB	Farm Credit Bank of Texas	CoBank, ACB
<u>December 31, 2022</u>				
Return on average assets	1.02%	0.53%	0.77%	0.80%
Return on average capital	21.32%	11.36%	14.55%	13.17%
Nonperforming assets as a percentage of loans and other property owned	0.26%	0.03%	0.11%	0.12%
Allowance for loan losses as a percentage of loans	0.08%	0.02%	0.06%	0.49%
Capital as a percentage of total assets	3.45%	4.59%	4.51%	5.41%
Tier 1 Leverage ratio	6.09%	5.15%	5.94%	6.80%
Total Capital ratio	15.5%	16.9%	13.5%	14.3%
Permanent capital ratio	15.3%	16.9%	13.4%	13.5%
Liquidity in days	221	159	197	183
Average liquidity in days during 2022	232	155	181	178
<u>December 31, 2021</u>				
Return on average assets	1.31%	0.57%	0.84%	0.82%
Return on average capital	18.33%	11.13%	12.17%	10.98%
Nonperforming assets as a percentage of loans and other property owned	0.23%	0.05%	0.03%	0.10%
Allowance for loan losses as a percentage of loans	0.07%	0.03%	0.05%	0.51%
Capital as a percentage of total assets	5.86%	4.92%	6.04%	7.18%
Tier 1 Leverage ratio	6.87%	5.15%	6.37%	7.47%
Total Capital ratio	18.9%	17.5%	15.2%	15.6%
Permanent capital ratio	18.7%	17.4%	15.1%	14.8%
Liquidity in days	235	158	185	180
Average liquidity in days during 2021	222	160	178	181

Bank-only information is considered meaningful because only the Banks are jointly and severally liable for the payment of principal and interest on Systemwide Debt Securities (See Notes 7 and 9 for additional information.) That means that each Bank is primarily liable for the payment of principal and interest on Systemwide Debt Securities issued to fund its lending activities and is also jointly and severally liable with respect to Systemwide Debt Securities issued to fund the other Banks.

The Associations are the primary owners of the Farm Credit Banks. The Agricultural Credit Bank (CoBank) is principally owned by cooperatives, other eligible borrowers and its affiliated Associations. Due to the financial and operational interdependence of the Banks and Associations, capital at the Association

level reduces the Banks' credit exposure with respect to the direct loans between the Banks and each of their affiliated Associations. However, capital of the Associations may not be available if the provisions of joint and several liability were to be invoked. There are various limitations and conditions with respect to each Bank's access to the capital of its affiliated Associations, as more fully discussed in Note 12.

In the event a Bank is unable to timely pay principal or interest on an insured debt obligation for which the Bank is primarily liable, the Insurance Corporation must expend amounts in the Insurance Fund to the extent available to insure the timely payment of principal and interest on the insured debt obligation. The provisions of the Farm Credit Act providing for joint and several liability of the Banks

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

on the obligation cannot be invoked until the amounts in the Insurance Fund have been exhausted. However, because of other mandatory and discretionary uses of the Insurance Fund, there is no assurance that there will be sufficient funds to pay the principal or interest on the insured debt obligation.

Once joint and several liability is triggered, the Farm Credit Administration is required to make "calls" to satisfy the liability first on all non-defaulting Banks in the proportion that each non-defaulting Bank's available collateral (collateral in excess of the aggregate of the Bank's collateralized obligations) bears to the aggregate available collateral of all non-defaulting Banks.

If these calls do not satisfy the liability, then a further call would be made in proportion to each non-defaulting Bank's remaining assets. On making a call on non-defaulting Banks with respect to a Systemwide Debt Security issued on behalf of a defaulting Bank, the Farm Credit Administration is required to appoint the Insurance Corporation as the receiver for the defaulting Bank. The receiver would be required to expeditiously liquidate the Bank.

NOTE 22 — SUBSEQUENT EVENTS

Effective January 1, 2023, two Associations in the AgFirst District merged and another two Associations in the CoBank District merged. The mergers are accounted for as described in Note 11.

The Banks and Associations have evaluated subsequent events through March 1, 2023, which is the date the financial statements were issued and determined that there were no other events requiring disclosure.

SUPPLEMENTAL COMBINING INFORMATION

The following condensed Combining Statements of Condition and Comprehensive Income present Combined 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. These supplemental schedules have been prepared in accordance with the Farm Credit Administration regulations and are not intended to be presented in accordance with GAAP due to the exclusion of all required disclosures.

COMBINING STATEMENT OF CONDITION — (Condensed) December 31, 2022 (in millions)

					Eliminations				Insurance Fund		System combined
Cash and investments	\$	85,116	\$	4,887	\$	(107)	\$	89,896			\$ 89,896
Loans		332,941		271,104		(230,779)		373,266			373,266
Less: allowance for loan losses		(755)		(821)				(1,576)			(1,576)
Net loans		332,186		270,283		(230,779)		371,690			371,690
Other assets		5,617		14,073		(10,886)		8,804			8,804
Restricted assets									\$	6,673	6,673
Total assets	\$	422,919	\$	289,243	\$	(241,772)	\$	470,390	\$	6,673	\$ 477,063
Systemwide Debt Securities and subordinated debt	\$	389,977	\$	398			\$	390,375			\$ 390,375
Other liabilities		12,778		238,223	\$	(232,914)		18,087			18,087
Total liabilities		402,755		238,621		(232,914)		408,462			408,462
Capital											
Preferred stock		2,633		783				3,416			3,416
Capital stock and participation certificates		9,176		502		(7,544)		2,134			2,134
Additional paid-in-capital		64		4,533				4,597			4,597
Restricted capital									\$	6,673	6,673
Accumulated other comprehensive loss		(4,339)		(254)		(899)		(5,492)			(5,492)
Retained earnings		12,630		45,058		(415)		57,273			57,273
Total capital		20,164		50,622		(8,858)		61,928		6,673	68,601
Total liabilities and capital	\$	422,919	\$	289,243	\$	(241,772)	\$	470,390	\$	6,673	\$ 477,063

SUPPLEMENTAL COMBINING INFORMATION - (continued)

COMBINING STATEMENT OF CONDITION — (Condensed) December 31, 2021 (in millions)

	(Combined Banks	Combined ssociations	El	liminations	Combined without nsurance Fund	surance Fund	System ombined
Cash and investments	\$	77,510	\$ 3,356	\$	(50)	\$ 80,816		\$ 80,816
Loans		304,366	251,351		(211,788)	343,929		343,929
Less: allowance for loan losses		(720)	(912)			(1,632)		(1,632)
Net loans		303,646	250,439		(211,788)	342,297		342,297
Other assets		3,532	12,725		(9,373)	6,884		6,884
Restricted assets							\$ 5,960	5,960
Total assets	\$	384,688	\$ 266,520	\$	(221,211)	\$ 429,997	\$ 5,960	\$ 435,957
Systemwide Debt Securities and subordinated debt	\$	352,823	\$ 398			\$ 353,221		\$ 353,221
Other liabilities		8,621	217,911	\$	(213,273)	13,259		 13,259
Total liabilities		361,444	218,309		(213,273)	366,480		366,480
Capital								
Preferred stock		2,935	1,058			3,993		3,993
Capital stock and participation certificates		8,302	512		(6,745)	2,069		2,069
Additional paid-in-capital		64	3,718			3,782		3,782
Restricted capital							\$ 5,960	5,960
Accumulated other comprehensive loss		(147)	(168)		(895)	(1,210)		(1,210)
Retained earnings		12,090	43,091		(298)	54,883		54,883
Total capital		23,244	48,211		(7,938)	63,517	 5,960	69,477
Total liabilities and capital	\$	384,688	\$ 266,520	\$	(221,211)	\$ 429,997	\$ 5,960	\$ 435,957

SUPPLEMENTAL COMBINING INFORMATION - (continued)

COMBINING STATEMENT OF COMPREHENSIVE INCOME — (Condensed) For the Year Ended December 31, (in millions)

	C	ombined	Co	ombined			V	ombined vithout isurance	Iı	isurance		Combina	ation	5	System
	_	Banks	Ass	ociations	El	iminations	_	Fund	_	Fund		Entri	es	Co	mbined
<u>2022</u>															
Net interest income	\$	3,761	\$	6,751	\$	30	\$	10,542						\$	10,542
(Provision for loan losses) loan loss reversal		(117)		77				(40)							(40)
Noninterest income		406		2,681		(2,190)		897	\$	717	\$	(645)	(a)		969
Noninterest expense		(1,174)		(3,834)		330		(4,678)		(4)		645	(a)		(4,037)
Provision for income taxes		(110)		(56)				(166)							(166)
Net income		2,766		5,619		(1,830)		6,555		713		0			7,268
Other comprehensive loss		(4,192)		(86)		(4)		(4,282)							(4,282)
Comprehensive income (loss)	\$	(1,426)	\$	5,533	\$	(1,834)	\$	2,273	\$	713	\$	0		\$	2,986
<u>2021</u>															
Net interest income	\$	3,645	\$	6,155	\$	(36)	\$	9,764						\$	9,764
Loan loss reversal (provision for loan losses)		(24)		176				152							152
Noninterest income		211		2,666		(2,166)		711	\$	509	\$	(460)	(a)		760
Noninterest expense		(1,030)		(3,464)		319		(4,175)		(4)		460	(a)		(3,719)
Provision for income taxes		(102)		(59)				(161)							(161)
Net income		2,700		5,474		(1,883)		6,291		505		0			6,796
Other comprehensive (loss) income		(862)		2		271		(589)							(589)
Comprehensive income	\$	1,838	\$	5,476	\$	(1,612)	\$	5,702	\$	505	\$	0		\$	6,207
<u>2020</u>															
Net interest income	\$	3,300	\$	5,803	\$	(57)	\$	9,046						\$	9,046
Provision for loan losses		(27)		(80)				(107)							(107)
Noninterest income		322		2,314		(1,880)		756	\$	320	\$	(318)	(a)(b)		758
Noninterest expense		(927)		(3,124)		277		(3,774)		(4)		255	(a)		(3,523)
Provision for income taxes		(130)		(42)				(172)							(172)
Net income		2,538		4,871		(1,660)		5,749		316		(63)			6,002
Other comprehensive income (loss).		717		(3)		5		719							719
Comprehensive income	<u> </u>	3,255	\$	4,868	\$	(1,655)	\$	6,468	\$	316	\$	(63)		\$	6,721
premenor. o moonio	Ψ	2,222	_	.,000	<u> </u>	(1,000)	Ψ	5,100	Ψ	310	Ψ	(03)		Ψ	~, · - 1

Combination entry (a) eliminates the Insurance Fund premiums of \$645 million, \$460 million, and \$255 million expensed by the Banks during the years ended 2022, 2021, and 2020 and the related income recognized by the Insurance Corporation.

Combination entry (b) eliminates \$63 million of income recognized by System institutions for excess funds that were returned from the Insurance Corporation during the first quarter of 2020.

SUPPLEMENTAL COMBINING INFORMATION - (continued)

The chartered territories of the Banks and their affiliated Associations (collectively, the District) include all or portions of the states and territories set forth below:

AgFirst Farm Credit Bank	Alabama, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Ohio, Pennsylvania, Puerto Rico, South Carolina, Tennessee, Virginia, and West Virginia
AgriBank, FCB	Arkansas, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Tennessee, Wisconsin, and Wyoming
Farm Credit Bank of Texas	Alabama, Louisiana, Mississippi, New Mexico, and Texas
CoBank, ACB	Supports eligible customers nationwide and Associations in the states of Alaska, Arizona, California, Colorado, Connecticut, Hawaii, Idaho, Kansas, Maine, Massachusetts, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, Oklahoma, Oregon, Rhode Island, Utah, Vermont, Washington, and Wyoming

Although the Banks are not commonly owned or controlled, they fund their operations primarily through the issuance of Systemwide Debt Securities for which they are jointly and severally liable. Further, each District operates in such an interdependent manner that we believe the financial results of the Banks combined with their affiliated Associations are more meaningful to investors in Systemwide Debt

Securities than providing financial information of the Banks and Associations on a stand-alone basis. For the purpose of additional analysis, the following presentation reflects each District, the Insurance Fund and combination entries. These schedules are not intended to be presented in accordance with GAAP due to the exclusion of all required disclosures.

SUPPLEMENTAL COMBINING INFORMATION - (continued)

COMBINING BANK AND ASSOCIATION (DISTRICT)

STATEMENT OF CONDITION — (Condensed) December 31, 2022 (in millions)

]	AgFirst District ombined	agriBank District combined	_ (Texas District Combined	CoBank District ombined	F Co	nsurance und and mbination Entries	System Combined
Cash and investments	\$	10,202	\$ 24,388	\$	7,232	\$ 48,074			\$ 89,896
Loans		38,103	152,142		36,421	152,605	\$	(6,005)	373,266
Less: allowance for loan losses		(181)	(321)		(86)	(988)			(1,576)
Net loans		37,922	151,821		36,335	151,617		(6,005)	371,690
Other assets		783	3,152		1,013	4,245		(389)	8,804
Restricted assets								6,673	6,673
Total assets	\$	48,907	\$ 179,361	\$	44,580	\$ 203,936	\$	279	\$ 477,063
Systemwide Debt Securities and subordinated debt	\$	40,140	\$ 145,235	\$	33,972	\$ 171,028			\$ 390,375
Other liabilities		2,182	6,048		5,302	10,277	\$	(5,722)	18,087
Total liabilities		42,322	151,283		39,274	181,305		(5,722)	408,462
Capital									
Preferred stock			450		1,030	1,936			3,416
Capital stock and participation certificates		191	383		147	1,930		(517)	2,134
Additional paid-in-capital		355	2,443		222	1,577			4,597
Restricted capital								6,673	6,673
Accumulated other comprehensive loss		(1,244)	(1,386)		(566)	(2,289)		(7)	(5,492)
Retained earnings		7,283	26,188		4,473	19,477		(148)	57,273
Total capital		6,585	28,078		5,306	22,631		6,001	68,601
Total liabilities and capital	\$	48,907	\$ 179,361	\$	44,580	\$ 203,936	\$	279	\$ 477,063

SUPPLEMENTAL COMBINING INFORMATION - (continued)

COMBINING BANK AND ASSOCIATION (DISTRICT)

STATEMENT OF CONDITION — (Condensed) December 31, 2021 (in millions)

]	AgFirst District ombined	agriBank District combined	Texas District Combined	CoBank District ombined]	Insurance Fund and ombination Entries	System Combined
Cash and investments	\$	10,398	\$ 21,790	\$ 7,037	\$ 41,591			\$ 80,816
Loans		34,861	140,459	33,175	140,847	\$	(5,413)	343,929
Less: allowance for loan losses		(212)	(373)	(85)	(962)			(1,632)
Net loans		34,649	140,086	33,090	139,885		(5,413)	342,297
Other assets		697	2,566	837	3,031		(247)	6,884
Restricted assets							5,960	5,960
Total assets	\$	45,744	\$ 164,442	\$ 40,964	\$ 184,507	\$	300	\$ 435,957
Systemwide Debt Securities and subordinated debt	\$	36,357	\$ 132,866	\$ 30,790	\$ 153,208			\$ 353,221
Other liabilities		2,057	4,249	4,693	7,257	\$	(4,997)	13,259
Total liabilities		38,414	137,115	35,483	160,465		(4,997)	366,480
Capital								
Preferred stock		32	450	1,050	2,461			3,993
Capital stock and participation certificates		189	363	139	1,846		(468)	2,069
Additional paid-in-capital		88	2,085	222	1,387			3,782
Restricted capital							5,960	5,960
Accumulated other comprehensive loss		(245)	(642)	(159)	(112)		(52)	(1,210)
Retained earnings		7,266	25,071	4,229	18,460		(143)	54,883
Total capital		7,330	27,327	5,481	24,042		5,297	 69,477
Total liabilities and capital	\$	45,744	\$ 164,442	\$ 40,964	\$ 184,507	\$	300	\$ 435,957

SUPPLEMENTAL COMBINING INFORMATION - (continued)

COMBINING BANK AND ASSOCIATION (DISTRICT)

STATEMENT OF COMPREHENSIVE INCOME — (Condensed)

For the Year Ended December 31, (in millions)

	AgFirst District Combined		AgriBank District Combined		Texas District Combined]	CoBank District ombined	Fu Cor	surance and and nbination Entries	System ombined
<u>2022</u>											
Net interest income	\$	1,348	\$	3,972	\$	1,116	\$	4,064	\$	42	\$ 10,542
(Provision for loan losses) loan loss reversal		15		57		(2)		(110)			(40)
Noninterest income		93		459		91		487		(161)	969
Noninterest expense		(692)		(1,800)		(516)		(1,635)		606	(4,037)
Provision for income taxes		(2)		(50)				(114)			(166)
Net income		762		2,638		689		2,692		487	7,268
Other comprehensive (loss) income.		(999)		(744)		(407)		(2,177)		45	(4,282)
Comprehensive income (loss)	\$	(237)	\$	1,894	\$	282	\$	515	\$	532	\$ 2,986
<u>2021</u>				_				_			
Net interest income	\$	1,344	\$	3,597	\$	1,019	\$	3,697	\$	107	\$ 9,764
Loan loss reversal		4		121		11		16			152
Noninterest income		98		428		93		334		(193)	760
Noninterest expense		(632)		(1,591)		(481)		(1,431)		416	(3,719)
Provision for income taxes		(2)		(53)		(1)		(105)			(161)
Net income		812		2,502		641		2,511		330	6,796
Other comprehensive (loss) income		(80)		(40)		(18)		(470)		19	(589)
Comprehensive income	\$	732	\$	2,462	\$	623	\$	2,041	\$	349	\$ 6,207
<u>2020</u>											
Net interest income	\$	1,251	\$	3,434	\$	911	\$	3,364	\$	86	\$ 9,046
Provision for loan losses		(4)		(41)		(8)		(54)			(107)
Noninterest income		47		355		89		461		(194)	758
Noninterest expense		(564)		(1,446)		(414)		(1,309)		210	(3,523)
Provision for income taxes		(1)		(40)				(131)			 (172)
Net income		729		2,262		578		2,331		102	6,002
Other comprehensive income (loss).		149		(45)		12		612		(9)	719
Comprehensive income	\$	878	\$	2,217	\$	590	\$	2,943	\$	93	\$ 6,721

SUPPLEMENTAL COMBINING INFORMATION - (continued)

COMBINING BANK AND ASSOCIATION (DISTRICT) STATEMENT OF CHANGES IN CAPITAL — (Condensed) (in millions)

	AgFirst District Combined	AgriBank District Combined	Texas District Combined	CoBank District Combined	Insurance Fund and Combination Entries	System Combined
Balance at December 31, 2019	\$ 6,673	\$ 24,727	\$ 4,701	\$ 20,999	\$ 4,630	\$ 61,730
Comprehensive income	878	2,217	590	2,943	93	6,721
Preferred stock issued, net			46	33		79
Preferred stock dividends	(1)	(24)	(46)	(89)		(160)
Capital stock and participation certificates issued	45	68	14	9	(30)	106
Capital stock, participation certificates, and retained earnings retired	(37)	(138)	(11)	(68)	8	(246)
Patronage	(450)	(1,048)	(307)	(1,017)	127	(2,695)
Balance at December 31, 2020	7,108	25,802	4,987	22,810	4,828	65,535
Comprehensive income	732	2,462	623	2,041	349	6,207
Preferred stock issued (retired), net	(17)	98	275	421		777
Preferred stock dividends	(1)	(26)	(58)	(93)		(178)
Capital stock and participation certificates issued	51	76	15	9	(34)	117
Capital stock, participation certificates, and retained earnings retired	(44)	(33)	(12)	(41)	6	(124)
Additional paid-in-capital	5		(3)	(7)		(5)
Equity issued or recharacterized upon Association merger				49		49
Equity retired or recharacterized upon Association merger				(53)		(53)
Patronage	(504)	(1,052)	(346)	(1,094)	148	(2,848)
Balance at December 31, 2021	7,330	27,327	5,481	24,042	5,297	69,477
Comprehensive income (loss)	(237)	1,894	282	515	532	2,986
Preferred stock retired, net	(32)		(20)	(525)		(577)
Preferred stock dividends		(29)	(62)	(109)		(200)
Capital stock and participation certificates issued	47	62	12	7	(27)	101
Capital stock, participation certificates, and retained earnings retired	(50)	(45)	(11)	(49)	8	(147)
Equity issued or recharacterized upon Association mergers	269	361		190		820
Equity retired or recharacterized upon Association mergers	(308)	(365)		(195)		(868)
Patronage	(434)	(1,127)	(376)	(1,245)	191	(2,991)
Balance at December 31, 2022	\$ 6,585	\$ 28,078	\$ 5,306	\$ 22,631	\$ 6,001	\$ 68,601

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.

	AgFirst District Combined	AgriBank District Combined	Texas District Combined	CoBank District Combined
December 31, 2022				
Return on average assets	1.62%	1.55%	1.59%	1.38%
Return on average capital	10.73%	9.46%	12.39%	11.52%
Net interest margin	2.91%	2.38%	2.65%	2.12%
Operating expense as a % of net interest income and noninterest income.	48.06%	40.46%	42.70%	35.73%
Net loan charge-offs (recoveries) as a % of average loans	0.00%	(0.01%)	0.00%	0.03%
Nonperforming assets as a % of loans and other property owned	0.88%	0.42%	0.51%	0.39%
Allowance for loan losses as a % of loans	0.48%	0.21%	0.24%	0.65%
Capital as a % of total assets	13.46%	15.65%	11.90%	11.10%
Capital and allowance for loan losses as a % of loans	17.76%	18.67%	14.80%	15.48%
Debt to capital	6.43:1	5.39:1	7.40:1	8.01:1
December 31, 2021				
Return on average assets	1.87%	1.61%	1.69%	1.45%
Return on average capital	10.87%	9.33%	11.60%	10.68%
Net interest margin	3.16%	2.35%	2.75%	2.18%
Operating expense as a % of net interest income and noninterest income	43.80%	39.45%	43.28%	35.46%
Net loan charge-offs as a % of average loans	0.01%	0.01%	0.00%	0.00%
Nonperforming assets as a % of loans and other property owned	0.99%	0.48%	0.37%	0.31%
Allowance for loan losses as a % of loans	0.61%	0.27%	0.26%	0.68%
Capital as a % of total assets	16.02%	16.62%	13.38%	13.03%
Capital and allowance for loan losses as a % of loans	21.63%	19.72%	16.78%	17.75%
Debt to capital	5.24:1	5.02:1	6.47:1	6.67:1

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. 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 a low interest rate environment, the downward shock is based on one-half of the three-month Treasury bill rate. Interest rates were low at December 31, 2021, which resulted in the use of 3 basis points for the downward shock.

_	Chan	ge in Market	Value of Equ	ity	Ch	ange in Net In	terest Income	2			
		December	31, 2022		December 31, 2022						
District	-200	-100	+100	+200	-200	-100	+100	+200			
AgFirst	10.67%	4.68%	-3.92%	-7.06%	-3.31%	-1.85%	2.46%	5.00%			
AgriBank	9.06	4.28	-3.83	-7.29	-3.28	-1.59	3.63	5.41			
Texas	12.28	5.95	-5.33	-9.93	-3.06	-1.54	1.73	3.55			
CoBank	6.99	3.41	-3.32	-6.56	-1.65	-0.75	1.16	2.32			

	Change in M	1arket Value	of Equity	Change in	Net Interest	Income			
	Dece	ember 31, 20	21	Dece	December 31, 2021				
District	-3	+100	+200	-3	+100	+200			
AgFirst	0.12%	-4.25%	-8.52%	-0.11%	2.29%	3.66%			
AgriBank	0.10	-3.52	-6.82	-0.07	3.28	4.36			
Texas	0.17	-5.82	-11.78	-0.06	1.76	3.18			
CoBank	0.09	-3.60	-6.75	-0.07	0.73	1.73			

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 affiliated Associations. Accordingly, in addition to the supplemental District information provided on pages F-72 to F-75, selected financial information regarding Associations with asset size greater than \$2 billion is provided below for the purpose of additional analysis.

December 31, 2022 (\$ in millions)

	Total Assets	Gross Loans	Return on Average Assets	Return on Average Capital	Net Interest Margin	Allowance for Loan Losses as a % of Gross Loans	Nonperforming Assets as a % of Gross Loans and Other Property Owned	Total Capital Ratio
AgFirst District								
Horizon Farm Credit, ACA	\$ 6,209	\$ 6,056	2.64%	13.14%	2.81%	0.38%	1.09%	16.63%
First South Farm Credit, ACA	3,062	2,936	2.24	11.85	2.45	0.70	0.13	17.47
AgCredit, ACA	2,974	2,873	2.31	13.79	2.15	0.24	0.15	20.46
AgSouth Farm Credit, ACA	2,158	2,082	2.94	13.57	3.37	0.69	1.01	22.07
Farm Credit of the Virginias, ACA	2,136	2,090	2.02	8.88	2.61	0.83	1.71	21.93
AgriBank District								
Farm Credit Services of America, ACA	40,420	38,310	1.98	10.82	2.31	0.15	0.35	15.00
Farm Credit Mid-America, ACA	32,159	29,275	1.51	8.31	2.13	0.20	0.81	16.63
Compeer Financial , ACA	29,673	26,720	1.85	11.25	2.32	0.20	0.43	14.92
GreenStone Farm Credit Services, ACA	13,204	12,670	2.31	13.03	2.49	0.32	0.26	15.36
AgCountry, ACA	12,240	11,644	1.80	8.58	2.54	0.26	0.25	16.78
FCS Financial, ACA	6,281	5,984	1.89	10.39	2.48	0.29	0.27	15.65
Farm Credit Illinois, ACA	5,789	5,354	1.77	8.00	2.47	0.17	0.08	17.66
AgHeritage Farm Credit Services, ACA	2,200	2,103	1.97	10.42	2.68	0.54	0.26	16.00
Texas District								
Capital Farm Credit, ACA	11,841	11,487	2.51	16.36	2.91	0.19	0.60	13.33
AgTexas Farm Credit Services	2,992	2,743	2.15	15.15	2.37	0.29	1.14	13.05
Lone Star, ACA	2,547	2,489	2.06	12.41	2.82	0.23	0.12	15.50
Texas Farm Credit Services	2,294	2,218	2.11	18.07	2.60	0.14	0.48	12.72
CoBank District								
American AgCredit, ACA	18,502	17,432	2.05	12.68	2.98	0.28	1.06	12.81
Northwest Farm Credit Services, ACA	15,794	14,331	2.31	11.53	2.85	0.47	0.35	17.81
Farm Credit West, ACA	14,820	13,295	2.57	14.90	2.88	0.59	0.50	14.67
Farm Credit East, ACA	11,003	10,563	2.59	13.88	2.76	0.49	0.41	17.05
Yosemite Farm Credit, ACA	4,316	4,103	2.15	13.00	2.76	0.30	0.19	13.97
Frontier Farm Credit, ACA	2,814	2,649	1.90	9.14	2.52	0.14	0.23	16.11
Golden State Farm Credit, ACA	2,302	2,169	2.34	13.16	2.84	0.24	0.27	14.23
Farm Credit of New Mexico, ACA	2,165	2,051	1.94	8.46	3.05	0.57	0.56	20.13

SUPPLEMENTAL FINANCIAL INFORMATION - (continued) (unaudited)

SELECTED ASSOCIATION KEY FINANCIAL INFORMATION December 31, 2021 (\$ in millions)

	Total Assets	Gross Loans	Return on Average Assets	Return on Average Capital	Net Interest Margin	Allowance for Loan Losses as a % of Gross Loans	Nonperforming Assets as a % of Gross Loans and Other Property Owned	Total Capital Ratio
AgFirst District								
MidAtlantic Farm Credit, ACA(1)	\$ 3,120	\$ 3,041	2.99%	13.15%	2.64%	1.00%	2.19%	20.70%
First South Farm Credit, ACA	2,901	2,773	2.67	14.32	2.52	0.71	0.15	17.17
AgCredit, ACA	2,680	2,578	3.28	18.46	2.55	0.28	0.20	20.58
AgChoice Farm Credit, ACA(1)	2,664	2,588	3.05	16.12	2.52	0.56	0.24	16.86
AgSouth Farm Credit, ACA	2,119	2,032	3.56	16.41	3.42	0.87	0.94	21.93
Farm Credit of the Virginias, ACA	2,085	2,029	2.51	10.64	2.55	0.87	2.06	22.50
AgriBank District								
Farm Credit Services of America, ACA	37,380	35,719	2.23	11.86	2.40	0.21	0.41	16.06
Farm Credit Mid-America, ACA	29,541	27,258	1.57	8.22	2.10	0.26	0.83	18.21
Compeer Financial , ACA	27,008	24,490	1.96	11.68	2.27	0.26	0.57	15.78
GreenStone Farm Credit Services, ACA	11,927	11,492	2.37	13.09	2.36	0.48	0.46	16.44
AgCountry, ACA	9,533	9,104	1.96	9.07	2.44	0.25	0.17	17.90
FCS Financial, ACA	5,719	5,468	1.95	10.21	2.42	0.31	0.23	16.69
Farm Credit Illinois, ACA	5,136	4,823	1.86	7.90	2.35	0.16	0.08	19.48
AgHeritage Farm Credit Services, ACA	2,005	1,927	2.13	11.05	2.65	0.51	0.19	16.67
Texas District								
Capital Farm Credit, ACA	10,749	10,453	2.71	15.91	2.99	0.22	0.47	14.49
AgTexas Farm Credit Services	2,927	2,709	1.99	15.01	2.35	0.26	0.56	14.36
Lone Star, ACA	2,334	2,288	2.14	11.96	2.93	0.32	0.15	16.45
Texas Farm Credit Services	2,081	2,019	2.48	18.95	2.68	0.15	0.45	12.79
CoBank District								
American AgCredit, ACA	16,968	15,935	2.25	13.65	3.03	0.24	0.51	13.71
Northwest Farm Credit Services, ACA	14,827	13,611	2.52	12.11	3.06	0.44	0.42	17.91
Farm Credit West, ACA	13,506	12,434	2.59	13.15	2.81	0.56	0.62	14.35
Farm Credit East, ACA	9,422	9,074	2.33	11.97	2.78	0.89	0.22	17.13
Yosemite Farm Credit, ACA	3,987	3,798	1.97	11.71	2.71	0.28	0.13	13.81
Frontier Farm Credit, ACA	2,557	2,408	2.13	9.84	2.60	0.17	0.21	17.51
Farm Credit of New Mexico, ACA	2,125	2,020	1.65	7.27	2.88	0.65	0.33	20.12
Golden State Farm Credit, ACA	2,118	2,004	2.32	12.48	2.84	0.23	0.10	14.26

⁽¹⁾ Effective July 1, 2022, AgChoice Farm Credit, ACA merged with and into MidAtlantic Farm Credit, ACA. After the merger the Association changed its name to Horizon Farm Credit, ACA.

SUPPLEMENTAL FINANCIAL INFORMATION - (continued) (unaudited)

Young, Beginning and Small Farmers and Ranchers

In line with our mission, we have policies and programs for making credit available to young, beginning and small farmers and ranchers.

The definitions of young, beginning and small farmers and ranchers (YBS) are:

- Young: A farmer, rancher, or producer or harvester of aquatic products who is age 35 or younger as of the date the loan was originally made.
- Beginning: A farmer, rancher, or producer or harvester of aquatic products who has 10 years or less farming or ranching experience as of the date the loan was originally made.
- Small: A farmer, rancher or producer or harvester of aquatic products who normally generates less than \$250 thousand in annual gross sales of agricultural or aquatic products at the date the loan was originally made.

It is important to note that farmers/ranchers may be included in multiple categories since they are included in each category in which the definition is met.

The following table summarizes information regarding loans to young and beginning farmers and ranchers:

_	At December 31, 202	
	Number of loans	Volume
	(\$ in m	illions)
Total loans and commitments	957,161	\$383,268
Loans and commitments to young farmers and ranchers	188,761	\$ 39,339
% of loans and commitments to young farmers and ranchers	19.7%	10.3%
Loans and commitments to beginning farmers and ranchers	305,761	\$ 70,849
% of loans and commitments to beginning farmers and ranchers	31.9%	18.5%

The following table summarizes information regarding new loans made during 2022 to young and beginning farmers and ranchers:

	For The Year Ended December 31, 2022 Number of new loans Volume	
	(\$ in m	nillions)
Total new loans and commitments	313,295	\$136,049
New loans and commitments to young farmers and ranchers	56,105	\$ 13,086
% of new loans and commitments to young farmers and ranchers	17.9%	9.6%
New loans and commitments to beginning farmers and ranchers	78,761	\$ 21,525
% of new loans and commitments to beginning farmers and ranchers	25.1%	15.8%

SUPPLEMENTAL FINANCIAL INFORMATION - (continued) (unaudited)

The following table summarizes information regarding loans to small farmers and ranchers at December 31, 2022:

					Loan Size		
		thousand or less	-	50 to \$100 thousand	\$100 to \$250 thousand	Over \$250 thousand	Total
					(\$ in millions)		
Total number of loans and commitments	3	13,450	1	68,188	226,296	249,227	957,161
Number of loans and commitments to small farmers and ranchers	19	90,434		93,782	115,399	73,985	473,600
% of loans and commitments to small farmers and ranchers		60.8%		55.8%	51.0%	29.7%	49.5%
Total loan and commitment volume	\$	6,993	\$	12,062	\$ 35,875	\$328,338	\$383,268
Total loan and commitment volume to small farmers and ranchers	\$	4,145	\$	6,642	\$ 17,740	\$ 41,817	\$ 70,344
% of loan and commitment volume to small farmers and ranchers		59.3%		55.1%	49.4%	12.7%	18.4%

The following table summarizes information regarding new loans made during 2022 to small farmers and ranchers:

]	Loan Size		
	\$5	0 thousand or less	-	50 to \$100 thousand	-	00 to \$250 housand	Over \$250 thousand	Total
					(\$	in millions)		
Total number of new loans and commitments	1	00,659		56,983	(69,570	86,083	313,295
Number of new loans and commitments to small farmers and ranchers		60,369		26,646	2	24,846	17,347	129,208
% of new loans and commitments to small farmers and ranchers		60.0%		46.8%		35.7%	20.2%	41.2%
Total new loan and commitment volume	\$	2,472	\$	4,216	\$	11,432	\$117,929	\$136,049
Total new loan and commitment volume to small farmers and ranchers	\$	1,471	\$	1,965	\$	3,992	\$ 11,653	\$ 19,081
% of loan and commitments volume to small farmers and ranchers		59.5%		46.6%		34.9%	9.9%	14.0%

INDEX TO SUPPLEMENTAL INFORMATION (unaudited)

	Page
Directors and Management	S-2
Compensation of Chief Executive Officers	S-22
Audit Committee Report	S-26
Audit and Other Fees	S-27
Evaluation of Disclosure Controls and Procedures	S-28
Certifications	S-29
Index to Annual Information Statement	S-31
Farm Credit System Entities	S-32

DIRECTORS AND MANAGEMENT

Boards of Directors

Each Bank is governed by a board of directors that is responsible for establishing policies and procedures for the operation of the Bank. Each Bank's bylaws provide for the number, term, manner of election and qualifications of the members of the Bank's board. Farm Credit Administration regulations require at least two members of each Bank's board of directors be outside directors appointed by the other directors. Outside appointed directors cannot be a director, officer, employee, agent or stockholder of a System institution.

The following information sets forth the directors of each Bank as of December 31, 2022. The information includes the director's name, age, and business experience, including principal occupation and employment during at least the past five years. For additional discussion and information on the compensation of each Bank's board of directors, see the Bank's annual report.

AgFirst Farm Credit Bank

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
Gary L. Baldosser	12/2023	Principal Occupation:
Age : 56		Owner/operator Baldosser Farms, Inc., a cow/calf and row crop operation and Garbec Farms.
Board Appointment : 2020		Board Committees:
		Audit Committee
		Other Affiliations:
		Board member: AgCredit Agricultural Credit Association; Sunrise Co-op Clyde Condominium Association; Tri-Grain, LLC Trustee; Bloc-B, LLC member.
Jack W. Bentley, Jr.	12/2022	Principal Occupation:
Age : 65		Owner/operator A&J Dairy, a dairy, beef, pasture, crop and timberland operation.
Board Appointment : 2019		Board Committees:
Also Served: 2010-2017		Audit Committee
		Other Affiliations:
		Board member: AgFirst Plan Sponsor Committee; Chairman - AgGeorgia Farm Credit, ACA; Chairmain - USDA Farm Service Agency; American Dairy Association; Lone Star Milk Producers and Wilkes County Farm Bureau.
Jenny R. Black	12/2023	Principal Occupation:
Age: 48		Certified Project Manager and owner/operator Jenny Black Consulting, LLC, an information technology consulting company. Serves as manager for citrus and agricultural operations of Ridge Investments, LLC, Black & Myers Properties and BHB Holdings, LLC.
Board Appointment : 2018		Board Committees:
		Risk Policy Committee
		Other Affiliations:
		Board member: Farm Credit of Central Florida, ACA; The Farm Credit Council; Polk County Florida 4-H Foundation, Volunteers in Service to the Elderly; All Saints Academy Independent School.
Sherry E. Bowden	12/2023	Principal Occupation:
Age: 61		Retired CFO State Street Corporation. Certified public accountant and certified personal property appraiser.
Board Appointment : 2020		Board Committees:
		Coordinating Committee and Chair of Audit Committee

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
		Other Affiliations:
		Member: South Carolina Association of CPAs, National Society of Accountants for Cooperatives.
William K. Jackson	12/2024	Principal Occupation:
Age : 67		Partner in Jackson Farms, a dairy operation with other farming interests. President of Jackson Farms 2, LLC, a small dairy processing facility that bottles milk, makes ice cream, and operates a convenience store. President of Jackson Farms 3, LLC and Jackson Farms Limited Partnership, which are involved in the production of natural gas.
Board Appointment : 2013		Board Committees:
		Compensation, Coordinating and Chair of Governance Committees
		Other Affiliations:
		Board member: Horizon Farm Credit, ACA; The Farm Credit Council; President of Fayette County Agricultural Improvement Association Board.
Dwain K. Lanier	12/2025	Principal Occupation:
Age : 65		Managing Partner of Pareto Consulting LLC, a performance consulting business. President of Aspire Higher LLC, a real estate rental company. Retired Vice President of Operational and Regulatory Assurance for Tennessee Valley Authority, a federally owned electric utility company. Former President of MEMCO Barge Lines, a barge company. Former Vice President of Progress Energy, an electric utility company.
Board Appointment : 2022		Board Committees:
		Risk Policy Committee
		Other Affiliations:
		Board member: Southeast Raleigh YMCA; Accounting Advisory Board, Poole College of Management, N.C. State University.
Fred R. Moore, Jr.	12/2025	Principal Occupation:
Age : 70		President of Fred R. Moore & Son, Inc. d/b/a Collins Wharf Sod, a turf and grain operation. Partner of F&E Properties, LLC, a rental business. Partner of F&E Moore Properties, LLC, a land holding partnership.
Board Appointment : 2014		Board Committees:
		Coordinating, Governance and Chair of Board Compensation Committees
		Other Affiliations:
		Board member: Horizon Farm Credit, ACA; Wicomico Soil Conservation District; Wicomico County Farm Bureau; Allen Volunteer Fire Company.
Michael W. Patrick	12/2023	Principal Occupation:
Age : 57		Partner in Patrick Farms Joint Venture, a cotton, corn, soybean and timber operation.
Board Appointment : 2020		Board Committees:
		Compensation and Governance Committees
		Other Affiliations:
		Board member: First South Farm Credit, ACA; Commissioner: Madison County Soil and Water Commission; Madison County USDA FSA County Committee.

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
John Whitworth Player	12/2025	Principal Occupation:
Age : 56		Owner/operator of J. Whit Player Farms, a farming operation. Owner/operator of Players Stoney Run Farms, a farming operation. Vice President and part owner of St. Charles Gin Company, a cotton ginning company. Forestry Technician, South Carolina Forestry Commission, a state agency overseeing forestry management.
Board Appointment : 2022		Board Committees:
		Risk Policy Committee
		Other Affiliations:
		Board member: ArborOne, ACA; Carolina Cotton Growers Cooperative; SC Boll Weevil Eradication Program; Part Owner: Canoe Slough LLC.
Thomas E. Porter, Jr.	12/2022	Principal Occupation:
Age : 69		President of Porter Farms, Inc., a farming operation consisting of a sow farrow unit to wean hog operation, poultry, pullet houses and breeder hen houses, a cow/calf operation, and greenhouses. Manages the Farm at Brush Arbor, LLC, an agritourism business on his farm.
Board Appointment : 2019		Board Committees:
Also Served : 2014-2017		Risk Policy Committee
		Other Affiliations:
		Board member: Carolina Farm Credit, ACA; Cabarrus County Ag Advisory; Union Power Cooperative; Three Rivers Land Trust; Cabarrus County Farm Bureau (president); Cabarrus County Extension Advisory (chairman); Cabarrus County Soil and Water Conservation District; Water Committee for the American Farm Bureau; Food Innovation Committee; Commissioners Circle North Carolina Commissioner of Agriculture.
David L. Richesin	12/2025	Principal Occupation:
Age : 56		Owner/operator of Cherry Brook Farm, a farming operation.
Board Appointment : 2022		Board Committees:
		Audit Committee
		Other Affiliations:
		Board member: Chairman - River Valley AgCredit, ACA; Board member- London County Farm Bureau; Tennessee Farm Bureau Federation; Tennessee Farmers Service; Tennessee Rural Health; Tennessee Farmers Mutual.
William T. Robinson	12/2023	Principal Occupation:
Age : 55		Owner/operator of Robinson Family Farm, which consists of corn, cattle and timber. Owner/operator of MMR Consultants, LLC, a business consulting firm specializing in utility and industrial market segments. Former Executive Director for the SEFA Group. Retired from the Department of Treasury and Corporate Financial Planning at Santee Cooper.
Board Appointment : 2016		Board Committees:
		Vice Chariman of the Board; Coordinating, Governance and Compensation Committees
		Other Affiliations:
		Board member: AgSouth Farm Credit, ACA; Tri-County Electric Cooperative; Member: Farm Credit System Audit Committee.
Michael T. Stone	12/2022	Principal Occupation:
Age : 51		Owner/operator of P & S Farms, Inc. and Bo Stone Farms, LLC.

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
Board Appointment : 2015		Board Committees:
		Chairman of the Board; Chair of the Coordinating Committee, and ex-officio member of all Board Committees
		Other Affiliations:
		Board member: Cape Fear Farm Credit, ACA; Southeastern Health hospital; North Carolina Farm Bureau Energy and Transportation Committee; The Farm Credit Council and Farm Credit Council Services. Appointed member and Chair: AgFirst Plan Sponsor Committee; AgFirst/FCBT Plan Sponsor Committee.
Ellis W. Taylor	12/2023	Principal Occupation:
Age : 53		Owner/operator of Mush Island Farms, LLC, a row crop operation. Part owner of Roanoke Cotton Company, LLC, which operates cotton gins and a warehouse.
Board Appointment : 2012		Board Committees:
		Audit Committee
		Other Affiliations:
		Board member: AgCarolina Farm Credit, ACA and Chair of Audit Committee; Northampton County Farm Bureau; Northampton County Voluntary Ag District; Federal Farm Credit Banks Funding Corporation.

In 2022, each member of AgFirst FCB's board of directors received base compensation of \$84,546 plus expenses. Additional honorarium was paid to some members for leadership positions on the board.

AgriBank, FCB

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
Jeff Austman	03/2025	Principal Occupation:
Age : 51		Self-employed farmer at Austman Farms, a corn and soybean farming operation in Forrest, Ill.
Board Appointment : 2021		Board Committees:
		Risk Committee
		Other Affiliations:
		Secretary of Austman, Inc., a property management operation including farmland and timber in Forrest, Ill. Board Member for Gibson Area Fire Hospital Foundation, a charitable fundraising organization for a hospital in Gibson City, Ill.
Donald Blankenship	03/2024	Principal Occupation:
Age : 48		Self-employed crops and livestock farmer in Murfreesboro, Tenn.
Board Appointment : 2020		Board Committees:
		Vice Chair of the Risk Committee
		Other Affiliations:
		Board Member for the Kittrell Fire Department, a volunteer fire department in Readyville, Tenn.
Laura Braun	03/2026	Principal Occupation:
Age : 63		Member Golden Maple Farms, LLC, a cash crop farming operation in Ovid, Mich.
Board Appointment : 2022		Board Committees:
		Audit and Government Relations Committees

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
		Other Affiliations:
		Chair of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn.; Director of the Farm Credit Council.
Robert Bruxvoort	03/2024	Principal Occupation:
Age : 68		President of Bruxvoort Ag., Inc., a crop farming operation in New Sharon, Iowa; Former Partner of Madison Pork, LLC, a livestock farming operation in New Sharon, Iowa.
Board Appointment : 2020		Board Committees:
		Compensation Committee
Ivar Chhina	03/2025	Principal Occupation:
Age : 60		Retired executive in Bellevue, Wash.
Board Appointment : 2021		Board Committees:
		Outside director and financial expert; Chair of the Audit Committee
		Other Affiliations:
		Director and Chair of the Audit Committee: Malibu Boats, Inc.; Sage Dental Management, LLC; PPV Holding Company, LLC; Lone Peak Holdings, LLC; Independent board observer for Aptive Environmental, LLC.
Stan Claussen	03/2024	Principal Occupation:
Age: 69		Self-employeed grain farmer in Montevideo, Minn. Owner of Claussen Land, LLP, a land holding company in Benson, Minn. Owner of Claussen Farms, LLP, a grain and sugar beet farming operation in Benson, Minn. Owner of Claussen Land Improvement, LLP, a tiling company in Benson, Minn.
Board Appointment : 2016		Board Committees:
		Vice Chair; Audit Committee and Vice Chair of the Government Relations Committee
		Other Affiliations:
		Investor/Member: Vice President of the Board of Bushmills Ethanol, Inc.; Director: Fairland Management Company; AgriBank District Farm Credit Council; The Farm Credit Council; Investor: Limited Partnership, Riverview, LLP; Board Chair: Admiral Point 2/Sailfish Pass Homeowners Association.
Dale Crawford	03/2025	Principal Occupation:
Age : 66		Self-employed crop farmer in Sullivan, Ill.
Board Appointment : 2017		Board Committees:
		Government Relations Committee and Vice Chair of the Compensation Committee
		Other Affiliations:
		Secretary/Treasurer: Moultrie-Sullivan Fair Association; Director: AgriBank District Farm Credit Council.
Steve Cunningham	03/2023	Principal Occupation:
Age : 53		CFO Enova International, a non-bank financial services entity in Chicago, Illinois.
Board Appointment : 2022		Board Committees:
		Outside director; Vice Chair of the Audit Committee

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
Randy Peters	03/2024	Principal Occupation:
Age : 69		Owner and President of Randy Peters Seed Farms, Inc., a seed business and grain and livestock operation in McCook, Neb. Owner and President of Triple R Farms, Inc., a farming operation in McCook, Neb.
Board Appointment : 2020		Board Committees:
		Risk Management Committee
Mark Pierce	03/2026	Principal Occupation:
Age : 64		President and owner of Rippling Water Farms Inc, a crop and livestock farming operation in Dekalb, Missouri.
Board Appointment : 2022		Board Committees:
		Governance Committee
		Other Affiliations:
		Director: Buchanan County Farm Bureau Board; Progressive Community Services Board. Community event coordinator DeKalb Homecoming Board.
Chris Roberts	03/2026	Principal Occupation:
Age : 52		Owner/Operator Delta Terre Planting LLC, a row crop farming operation in Ark.
Board Appointment : 2022		Board Committees:
		Governance Committee
		Other Affiliations:
		Director of the AgriBank District Farm Credit Council.
Timothy Rowe	03/2025	Principal Occupation:
Age : 62		Owner and President of Rowe, Inc, a grain and livestock farming operation in Elwood, Neb. Owner and President of T. Rowe, Inc, a grain and livestock farming operation in Elwood, Neb.
Board Appointment : 2017		Board Committees:
Also Served : 2010-2014		Government Relations Committee and Chair of the Risk Management Committee
		Other Affiliations:
		Board Chair: Country Partners Cooperative. Director: Nebraska Cooperative Council; AgriBank District Farm Credit Council; Farm Credit Council.
John Schmitt	03/2023	Principal Occupation:
Age : 66		Self-employed grain and beef cattle farmer in Quincy, Ill.
Board Appointment : 2007		Board Committees:
		Vice Chair of the Governance Committee and Chair of the Government Relations Committee
		Other Affiliations:
		Director: AgriBank District Farm Credit Council; The Farm Credit Council.
George Stebbins	03/2026	Principal Occupation:
Age : 69		Owner of Stebbins Farms, Ltd., a crop farming operation in Englewood, Ohio. Owner of Stebbins Land Company, Ltd., a land holding company in Englewood, Ohio. Owner of WGTS Farms, Ltd., a land holding company in Englewood, Ohio.
Board Appointment : 2018		Board Committees:
		Risk Management Committee

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations	
		Other Affiliations:	
		Director: Miami County Zoning Commission.	
Rollin Tonneson	03/2023	Principal Occupation:	
Age : 70		Owner of Tonneson Brothers, a grain farming operation in Souris, N.D. Owner of Tonneson Farms, a grain farming operation in Souris, N.D.	
Board Appointment : 2019		Board Committees:	
		Chair of the Compensation Committee	
		Other Affiliations:	
		Board Member: Grace Lutheran Brethren Church; Chairman: Emmanuel Lutheran Brethren Church Foundation; Employee: Benjamin Tonneson Farms.	
Nick Vande Weerd	03/2023	Principal Occupation:	
Age : 41		Owner of PVW Family Farms, LLC, a grain and livestock farming operation in Brookings, S.D. Owner of Vande Weerd Family Farms, LLC, a grain and livestock farming operation in Brookings, S.D.	
Board Appointment : 2015		Board Committees:	
		Chair; Government Relations Committee	
		Other Affiliations:	
		Major in the South Dakota Air National Guard; Director: AgriBank District Farm Credit Council; Hilltop Farms LLC. Owner: Vande Weerd Marketing, LLC; FATE, LLC.	
Matthew Walther	03/2023	Principal Occupation:	
Age : 51		Owner/Member of Matt Walther Farms, LLC, a crop and cow/calf herd and finished cattle operation in Centerville, Ind. Owner/Member of Buell Drainage, LLC, a tile drainage company in Centerville, Ind.	
Board Appointment : 2011		Board Committees:	
		Chair of Governance Committee	
		Other Affiliations:	
		Board Chair: Federal Farm Credit Banks Funding Corporation.	
Tony Wolfe	03/2025	Principal Occupation:	
Age : 73		Self-employed farmer at Wolfe Farms, a sole-proprietorship in Hazelton, Ind.	
Board Appointment : 2021		Board Committees:	
		Compensation Committee	
		Other Affiliations:	
		Director: Shiloh Cemetery Association; Member: Wolfe Family Land, LLC.	

In 2022, AgriBank, FCB board members received a standard annual retainer which is paid quarterly for attendance at meetings and other official activities which attendance was required or desirable. Additionally, a position retainer was paid for specified roles which involve an increased level of activity relative to the standard director duties. The roles designated to receive the position retainer are board chair, board vice chair and each committee chair. The AgriBank board in its sole discretion may designate different amounts to each position under the position retainer. In addition to the standard and position retainers, additional compensation may be provided for where such director has devoted extraordinary time and effort in the service of AgriBank and its shareholders. Director compensation ranged from \$19,252 to \$97,619 per director for 2022, plus expenses.

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
Duane R. Anderson	12/2024	Principal Occupation:
Age : 58		Operations Lead: J-Six Enterprises, L.L.C., a diversified farming, milling and consolidated cattle and hog operation, Seneca, KS; Former Chief Operating Officer: Sioux Steel Company, manufacturer of agricultural buildings and equipment, Sioux Falls, SD (September 2021 – December 2021); Former Officer: McBee Farms, L.C., Buckner, MO, and McBee Properties, L.C., Blue Springs, MO, asset holding companies, and their affiliated entities (April 2021 – June 2021); Former President and Chief Executive Officer: Ag Partners Cooperative, Inc., an agricultural cooperative, Seneca, KS (April 2020 – January 2021); Former Chief Executive Officer: The Great Bend Cooperative Association, an agricultural cooperative, Great Bend, KS (October 2018 – April 2020); Former Chief Financial Officer: Van Beek Natural Science, LLC, manufacturer of biotechnology and nutraceuticals, Orange City, IA (October 2017 – September 2018).
Board Appointment : 2021		Board Committees:
		Governance Committee
Matthew W. Beaton	12/2025	Principal Occupation:
Age : 55		Owner/Officer: Beaton's Inc., cranberry farming, Rochester, MA and Sure-Cran Services, Inc., custom agricultural services, Wareharm, MA.
Board Appointment : 2022		Board Committees:
		Governance Committee
		Other Affiliations:
		Director: Cape Cod Cranberry Growers Association; and Ocean Spray Cranberries Inc. Director/Owner: Eagle Holt Co., Inc. Owner: Sippican Mills LLC.
Robert M. Behr	12/2024	Principal Occupation:
Age : 68		Chief Executive Officer of Florida's Natural Growers, Inc., processing and marketing Florida's Natural brand citrus juices, Lake Wales, FL.
Board Appointment : 2013		Board Committees:
		Audit Committee
		Other Affiliations:
		Owner and Operator: several citrus groves; Director: CUPS Co-op, I, Inc.; CUPS Co-op II, Inc.; Farm Credit of Central Florida, ACA; and Winter Haven Citrus Growers Association. Board Chair: Florida's Natural Growers Foundation, Inc.; Board Vice Chair: Graduate Institute of Cooperative Leadership.
Michael S. Brown	12/2024	Principal Occupation:
Age : 64		Former Managing Director, Global Head of Multinational Coverage of JPMorgan Chase, N.A., a commercial bank, London, England (retired in June 2013).
Board Appointment : 2017		Board Committees:
		Audit Committee Chair
		Other Affiliations:
		Owner/Manager: Bayswater LLC.
Russell G. Brown	12/2024	Principal Occupation:
Age : 64		Former Market President, Northern Neck Region, of Atlantic Union Bank, a regional bank, Warsaw, VA (retired in March 2022).

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
Board Appointment : 2017		Board Committees:
		Audit Committee
		Other Affiliations:
		Owner: Cobham Hall Farm. Alternate Director: The Farm Credit Council. Board Vice Chair: Northern Neck Electric Cooperative. Board Chair: Richmond County Industrial Development Authority; and VA-MD-DE Association of Electric Cooperatives Educational Scholarship Foundation. Director: VA-MD-DE Association of Electric Cooperatives.
William M. Farrow, III	12/2026	Principal Occupation:
Age: 67		Former Founding Director, President and Chief Executive Officer of the Urban Partnership Bank, Chicago, IL (retired December 2017). Owner of Winston and Wolfe, LLC, a privately held technology development company, Chicago, IL.
Board Appointment : 2007		Board Committees:
		Governance Committee
		Other Affiliations:
		Advisor: Cedar Street Asset Management, LLC. Director: Cboe Global Markets, Inc.; Northshore Edward Elmhurst Health System; and WEC Energy Group.
David J. Kragnes	12/2024	Principal Occupation:
Age: 70		Former Owner/Operator of David Kragnes Farm, a corn and bean row crop farming operation, Felton, MN (retired in October 2022).
Board Appointment : 2009		Board Committees:
		Governance Committee Chair
		Other Affiliations:
		Director: The Farm Credit Council. Advisory Board Member: Quentin Burdick Center for Cooperatives.
Michael W. Marley	12/2023	Principal Occupation:
Age : 60		Owner of Corrales Dairy, LLC, a dairy farm and of Marley Farms, Ltd., an irrigated farming operation, Roswell, NM.
Board Appointment : 2020		Board Committees:
		Risk Committee
		Other Affiliations:
		Owner/Managing Member: Berken Energy, LLC. Owner: Corrales Farm, LLC; Marley Ranches, Ltd.; and SAP, LLC. Southwest Council Member: Dairy Farmers of America. Director: Dairy MAX; and Gandy Marley, Inc.
Jon E. Marthedal	12/2025	Principal Occupation:
Age : 66		Owner/Operator of Marthedal Farms, a grape, raisin, blueberry and almond farming operation, Fresno, CA. Owner/Officer of Marthedal Enterprises, Inc., a provider of farm management and customer agriculture services, Fresno, CA. Former Owner/Operator of Keystone Blue Farms, LLC, a blueberry farming operation (retired December 2020), Fresno, CA.
Board Appointment : 2013		Board Committees:
		Board First Vice Chair, Executive and Risk Committees
		Other Affiliations:
		Board Chair: The Farm Credit Council. President: California Blueberry Association. Director: California Blueberry Commission. Board Vice Chair: Raisin Administrative Committee.

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations	
Robert N. McLennan	12/2025	Principal Occupation:	
Age : 52		President and CEO of Minnkota Power Cooperative, Inc., an electric generation and transmission cooperative, Grand Forks, ND. General Manager of Square Butte Electric Cooperative, an electric generation cooperative, Grand Forks, ND.	
Board Appointment : 2022		Board Committees:	
		Risk Committee	
		Other Affiliations:	
		Director: BNI Energy/BNI Coal; Energy and Environmental Research Development Foundation; Grand Forks Economic Development Corporation; Lignite Energy Council; National Rural Electric Cooperative Association, National Resolutions Committee; North Dakota State University, Quentin Burdick Center for Cooperatives; University of Jamestown; and US Bank, Community Board.	
Gary A. Miller	12/2023	Principal Occupation:	
Age : 62		President and CEO of GreyStone Power Corporation, an electric distribution cooperative, Douglasville, GA.	
Board Appointment : 2020		Board Committees:	
Also Served : 2006-2017		Audit Committee	
		Other Affiliations:	
		Director: Development Authority of Douglas County; Hospital Authority of Douglas County; and WellStar Foundation. Board Chair: Elevate Douglas; and GRESCO Utility Supply, Inc. Alternate Director: Georgia Electric Membership Corporation. Advisory Boards: Georgia Transmission Corporation; and Oglethorpe Power Corporation.	
Catherine Moyer	12/2026	Principal Occupation:	
Age: 47		Chief Executive Officer and General Manager of The Pioneer Telephone Association, Inc. (d/b/a Pioneer Communications), a telecommunications provider, Ulysses, KS. Chief Executive Officer of High Plains Telecommunications, Inc., a telecommunications provider, Ulysses, KS. Managing Director of PGB Fiber LLC, a telecommunications provider, Ulysses, KS.	
Board Appointment : 2010		Board Committees:	
		Compensation and Human Resources Committee Chair	
		Other Affiliations:	
		Director: The Farm Credit Council; Rural Trust Insurance Company. Board Chair: Kansas Lottery Commission; and Telcom Insurance Group.	
David S. Phippen	12/2022	Principal Occupation:	
Age : 72		Owner of multiple entities performing almond farming, processing and sales operations in Manteca and Ripon, CA.	
Board Appointment : 2019		Board Committees:	
Also Served : 2012-2015		Compensation and Human Resources Committee	
		Other Affiliations:	
		Director: San Joaquin County Farm Bureau.	
Scheherazade S. Rehman	12/2026	Principal Occupation:	
Age : 59		Professor: The George Washington University, an educational institution, Washington, D.C.	
Board Appointment : 2019		Board Committees:	
		Risk Committee	

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations	
		Other Affiliations:	
		President and Managing Partner: International Consultants Group. Director: International Trade and Finance Association. Chair: The George Washington University School of Business Deans Council.	
Kevin A. Still	12/2026	Principal Occupation:	
Age : 65		President and Chief Executive Officer of Co-Alliance Cooperative, Inc., a cooperative supplying energy, agronomy and animal nutrition, producing swine, and marketing grain, Avon, IN. Former Chief Executive Officer and Treasurer of Excel Co-op, Inc.; Frontier Co-op Inc.; IMPACT Co-op, Inc.; LaPorte County Farm Bureau Cooperative Association; and Midland Co-op, Inc., agricultural retail cooperatives, Avon, IN (entities consolidated into Co-Alliance Cooperative, Inc. as of February 2021).	
Board Appointment : 2002		Board Committees:	
		Board Chair, Executive Committee Chair and Compensation and Human Resources Committee	
		Other Affiliations:	
		Officer: Alliance Feed, LLC. Board Vice Chair: Endeavor Ag and Energy LLP. President: Northwind Pork, LLC. Owner/President: Still Farms, LLC. President and Chief Executive Officer: United Energy, LLC. Board President: Agensan. Director: Wholestone Farms II, LLC.	
Edgar A. Terry	12/2023	Principal Occupation:	
Age : 63		Owner and President of Terry Farms, Inc., a vegetable and strawberry farming operation, Ventura, CA. Owner and Limited Partner of Ag Center LTD, a real estate company and Central AP, LLP, farmland real estate, Ventura, CA. Owner and Officer of Amigos Fuerza, Inc., a provider of farm labor contracting, Ventura, CA. Owner and Partner of JJE, LLC, farmland real estate, Ventura, CA. Owner and Officer of Moonridge Management, Inc., a provider of back office and HR consulting, Ventura, CA. Owner and Vice President of Rancho Adobe, Inc., farmland real estate, Ventura, CA. Owner and President of Willal, Inc., a sales and marketing company, Ventura, CA. Senior adjunct professor at California Lutheran University, an educational institution, Thousand Oaks, CA.	
Board Appointment : 2016		Board Committees:	
		Risk Committee Chair	
		Other Affiliations:	
		Advisory Board Chair: Center for Economic Research and Forecasting. Director: Farm Credit System Audit Committee; Federal Farm Credit Banks Funding Corporation; Limoneira Company; and Ventura Chamber of Commerce. Board Chair: Ventura County Fairgrounds Foundation.	
Brandon J. Wittman	12/2026	Principal Occupation:	
Age : 52		Chief Executive Officer and General Manager of Yellowstone Valley Electric Cooperative, Inc., an electric distribution cooperative, Huntley, MT.	
Board Appointment : 2018		Board Committees:	
		Board Second Vice Chair, and Compensation and Human Resources Committee	
		Other Affiliations:	
		Director: The Farm Credit Council. Customer Advisory Committee Member: Border States Electric. Manager's Advisory Committee Member: Central Montana Electric Power Cooperative. Director: Highlands College of Montana Tech Advisory Committee Lineman Program; Montana Electric Cooperatives Association; and Montana Land Information Advisory Council.	

In 2022, each member of CoBank, ACB's Board of Directors was compensated for attendance at board meetings and other official activities. Director compensation ranged from \$120,000 to \$160,000, plus expenses.

Farm Credit Bank of Texas

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations	
Larry Boleman	12/2023	Principal Occupation:	
Age : 77		Operates Boleman Cattle Company, a registered breeding cow-calf herd business. Superintendent of the Houston Livestock Show and Rodeo 4-H and FFA Livestock Judging Contest.	
Board Appointment : 2021		Board Committees:	
		Audit (Vice Chairman) and Compensation Committees	
		Other Affiliations:	
		Former board member: Capital Farm Credit; Member: Tenth District Farm Credit Council.	
Ralph W. "Buddy" Cortese	12/2022	Principal Occupation:	
Age : 76		President of Cortese Farm and Ranch, Inc., a farming and ranching operation.	
Board Appointment : 1995		Board Committees:	
		Audit and Compensation Committees	
		Other Affiliations:	
		Member: Tenth District Farm Credit Council; Texas Agricultural Cooperative Council. Board member: Federal Farm Credit Banks Funding Corporation; Past chairman of PCA of Eastern New Mexico.	
John L. "Jack" Dailey	12/2024	Principal Occupation:	
Age : 67		Owner/operator of Boeuf Prairie Farm. Manager and vice president of Franklin Farmers Alliance LLC, a farmer-owned agricultural retail store.	
Board Appointment : 2019		Board Committees:	
		Audit and Compensation (Chairman) Committees	
		Other Affiliations:	
		Member: Tenth District Farm Credit Council. Chairman: Louisiana Boll Weevil Eradication Commission and Franklin Parish Fire Protection District 2. Treasurer: Franklin Parish Farm Bureau. Executive committee: Louisiana Cotton and Grain Association. Louisiana Department of Natural Resources water management task force; Former vice chairman of Louisiana Land Bank.	
James F. "Jimmy" Dodson	12/2023	Principal Occupation:	
Age : 69		President of Dodson Farms, Inc. and Dodson Ag, Inc. Partner in Dodson Family Farms. Manager of Weber Station LLC. Founding member of Cotton Leads, a responsible cotton production initiative of U.S. and Australian Cotton Producer organizations.	
Board Appointment : 2003		Board Committees:	
		Chairman of the Board, Audit (designated financial expert) and Compensation Committees	
		Other Affiliations:	
		Chairman: Tenth District Farm Credit Council. Board member: Gulf Coast Cooperative; Texas Agricultural Cooperative Council. Currently, member and previously chairman of the National Farm Credit Council; former director of FCC Services; past chairman of Texas AgFinance, FCS; past member Texas District's Stockholders Advisory Committee.	

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
Linda C. Floerke	12/2025	Principal Occupation:
Age : 61		Managing partner of Buena Vista Ranch, FLP, which is a hay and cattle operation. Co-owner & manager of Agro-Tech Services Inc. Co-owner of Casa Floerke, a rental property business.
Board Appointment : 2017		Board Committees:
		Vice Chairman of the Board, Compensation and Audit Committees
		Other Affiliations:
		Vice chairman: Tenth District Farm Credit Council. Board member: Texas A&M AgriLife Extension Leadership Advisory Board; Texas Agricultural Cooperative Council; Former board member: Lone Star Ag Credit.
M. Philip Guthrie	12/2023	Principal Occupation:
Age : 77		CEO of Denham Partners LLC, a private investment firm. Appointed member on the board. General partner of Ke'e Associates, a private investment company.
Board Appointment : 2015		Board Committees:
		Audit (chairman and designated financial expert) and Compensation Committees
		Other Affiliations:
		Chair: Africa Specialty Risks; Member: Tenth District Farm Credit Council. Audit Committee-qualified under the guidelines of the SEC, the NYSE and Nasdaq. Stockholder of family-managed 125-year-old livestock and crop operation.
Dorothy Nichols	12/2024	Principal Occupation:
Age : 71		Appointed member on the board.
Board Appointment : 2019		Board Committees:
		Audit (designated financial expert) and Compensation (vice chairman) Committees
		Other Affiliations:
		Member: Tenth District Farm Credit Council. Previously: COO and in-house general counsel of the Farm Credit System Insurance Corporation; first COO of the FCA.

In 2022, each member of the board was compensated for attendance at meetings and other official activities. Director compensation ranged from \$115,000 to \$175,000, plus expenses.

Federal Farm Credit Banks Funding Corporation

The following sets forth the board of directors as of December 31, 2022.

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations	
Maureen Corcoran	03/2026	Principal Occupation:	
Age : 65		Retired Executive Vice President of the State Street Corporation	
Board Appointment : 2014		Board Committees:	
		Chair of the Audit Committee and designated financial expert; Vice Chair of the System Audit Committee	
Ralph W. "Buddy" Cortese	03/2024	Principal Occupation:	
Age : 76		President of Cortese Farm and Ranch, Inc., a farming and ranching operation	
Board Appointment : 2012		Board Committees:	
		Chairman of the Governance Committee	

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations		
		Other Affiliations:		
		Member: Farm Credit Bank of Texas board of directors; Tenth District Farm Credit Council; Texas Agricultural Cooperative Council; Past chairman of PCA of Eastern New Mexico		
Thomas Halverson	03/2024	Principal Occupation:		
Age : 58		President and CEO of CoBank, ACB		
Board Appointment : 2017		Board Committees:		
		Compensation Committee		
		Other Affiliations:		
		Member: Executive Council and Chairman of the National Council of Farmer Cooperatives; Chairman of the Finance Committee and member of the Executive and Business Practices Committees of the Farm Credit System Presidents Planning Committee; Advisor to the Board of the Innovation Center for U.S. Dairy		
Robert S. Marjan	03/2024	Principal Occupation:		
Age : 68		Retired from JPMorgan as Managing Director and Executive in its Investment Bank and Capital Markets business		
Board Appointment : 2015		Board Committees:		
		Vice Chairman; Chairman of the Compensation Committee and System Audit Committee member		
		Other Affiliations:		
		Board member: Community Investment Corporation; Bankers Club of Chicago; Guild Board of Lyric Opera		
Theresa E. McCabe	Upon separation	Principal Occupation:		
Age : 61	of service	President and CEO of the Federal Farm Credit Banks Funding Corporation		
Board Appointment : 2012		Board Committees:		
		Non-voting member of the board		
		Other Affiliations:		
		Member of the Executive Council, Finance, Business Practices and Risk Management Committees of the Presidents Planning Committee of the Farm Credit System		
Amie Pala	03/2025	Principal Occupation:		
Age : 65		CEO of Farm Credit Bank of Texas		
Board Appointment : 2022		Board Committees:		
		Audit Committee		
		Other Affiliations:		
		Member: Finance and Business Practices Committees of the Presidents Planning Committee of the Farm Credit System; Member: board of governors for the Farm Credit System Captive Insurance Corporation; President: Tenth District Farm Credit Council; Member: Farm Credit System Capital Workgroup; Member: AgFirst/FCBT Plan Fiduciary Committee		
Jeffrey R. Swanhorst	03/2023	Principal Occupation:		
Age : 61		CEO of AgriBank, FCB		
Board Appointment : 2018		Board Committees:		
		Governance Committee		

Name	Current Term Expires	Principal Occupation, Board Committees and Other Affiliations
		Other Affiliations:
		Chair of Presidents Planning Committee of the Farm Credit System and member of the Executive and Business Practices Committees; Chair: SunStream Business Services Board; CEO and President: AgriBank District Farm Credit Council; Member: Executive Council of the National Council of Farmer Cooperatives
Ellis W. Taylor	03/2025	Principal Occupation:
Age : 53		Owner/operator of Mush Island Farms, LLC, a row crop operation. Part owner of Roanoke Cotton Company, LLC, which operates cotton gins and a warehouse.
Board Appointment : 2017		Board Committees:
		Governance Committee
		Other Affiliations:
		Board member: AgFirst Farm Credit Bank; AgCarolina Farm Credit, ACA and Chair of Audit Committee; Northampton County Farm Bureau; Northampton County Voluntary Ag District
Edgar A. Terry	03/2026	Principal Occupation:
Age : 63		Owner and President of Terry Farms, Inc., a vegetable and strawberry farming operation; Owner and Limited Partner of Ag Center LTD, a real estate company and Central AP, LLP, farmland real estate; Owner and Officer of Amigos Fuerza, Inc., a provider of farm labor contracting; Owner and Partner of JJE, LLC, farmland real estate; Owner and Officer of Moonridge Management, Inc., a provider of back office and HR consulting; Owner and Vice President of Rancho Adobe, Inc., farmland real estate; Owner and President of Willal, Inc., a sales and marketing company; Senior adjunct professor at California Lutheran University, an educational institution
Board Appointment : 2022		Committee Position:
		Audit Committee
		Other Affiliations:
		Director: CoBank, ACB and Risk Committee Chair; Member: System Audit Committee; Advisory board chair: Center for Economic Research and Forecasting; Director: Limoneira Company and Ventura Chamber of Commerce; Board Chair: Ventura County Fairgrounds Foundation
Matthew Walther	03/2023	Principal Occupation:
Age : 51		Owner/member of Matt Walther Farms, LLC, a crop and cow/calf herd and finished cattle operation; Owner/member of Buell Drainage, LLC, a tile drainage company
Board Appointment : 2017		Board Committees:
		Chairman; Compensation Committee
		Other Affiliations:
		Member: AgriBank, FCB board of directors

Funding Corporation Bank director members and appointed members are compensated for their time served and for travel and related expenses, while Bank CEOs or presidents are only compensated for travel and related expenses. In 2022, the directors eligible for compensation were paid between \$80,000 and \$100,000 for the year, plus expenses.

Certain Relationships and Related Transactions

The System is a cooperatively owned network of agricultural lending institutions. Agricultural producers typically become members of an Association when they establish a borrowing/financing relationship with the Association. In CoBank's case, its Associations, together with other borrowers of the Bank, own CoBank, as well as

borrow from the Bank. Accordingly, most Bank directors are agricultural producers who are member/borrowers of an Association and, in the case of CoBank, its other member/borrowers.

As discussed in Note 18 to the accompanying combined financial statements, Banks and Associations may, in the ordinary course of business, enter into loan transactions with their officers and directors and other organizations with which officers and directors are associated. These loans are subject to special approval requirements contained in the Farm Credit Administration regulations.

The following is a list of aggregate loan balances outstanding at December 31, 2022 to the directors of each Bank and its affiliated Associations and other organizations with which the directors are associated:

	(in r	millions)
AgFirst Farm Credit Bank	\$	453
AgriBank, FCB		412
Farm Credit Bank of Texas		361
CoBank, ACB		2.463

Senior Officers

The chief executive officer and all other senior officers of each Bank and the Funding Corporation, together with their age and length of service at their present position as of December 31, 2022, as well as prior positions held if in the current position less than five years, are as follows:

Name and Age	Title	Time in Position	Prior Experience
AgFirst Farm Credit Bank:			
Leon T. Amerson, 60	President and Chief Executive Officer	10.5 years	
William E. Brown, 62	Executive Vice President and Chief Credit Officer	5.5 years	
James A. Bumgarner, 50	Executive Vice President and Chief Administrative Officer	1.25 years	Chief Stakeholder Relationship Officer May 2021 to October 2021, Director of Association Relationships July 2016 to May 2021
Stephen F. Ciambrone, 67	Executive Vice President and Chief Information Officer	3.25 years	Director of Information Technology June 2019 to September 2019, Managing Director at CitiGroup 2008 to 2018
Stephen Gilbert, 54	Executive Vice President and Chief Financial Officer	5.75 years	
Frances S. Griggs, 55	Executive Vice President and General Counsel	5.75 years	
Darrick T. Paul, 54	Executive Vice President and Chief Human Resources Officer	0.25 years	Healthcare HR and Talent Consultant 2021 to 2022, Chief People Officer at Medical University of South Carolina Health 2016 to 2021
Juan Silvera, 57	Executive Vice President and Chief Marketing Officer	1.25 years	Executive Director, Marketing, Brand and Product Management 2020 to October 2021, Chief Marketing Officer at Rabobank N.A. from 2016 to 2020
Chad E. Toney, 51	Executive Vice President and Chief Information Security Officer	1.5 years	Vice President, Infrastructure and Operations July 2017 to June 2021, Vice President and Chief Information Security Officer 2013 to 2017
Daniel E. LaFreniere, 59	Executive Vice President and Chief Audit Executive	9.5 years	

Name and Age	Title	Time in Position	Prior Experience		
AgriBank, FCB:					
Jeffrey R. Swanhorst, 61	Chief Executive Officer	4.67 years	Executive Vice President and Chief Credit Officer beginning in August 2011		
Jeffrey L. Moore, 62	Chief Financial Officer	5.3 years			
Jeremy J. Renger, 51	Chief Risk and Information Officer	0.3 years	Director of risk analytics and ERM for John Deere Financial in Johnston, Iowa beginning in September 2008.		
Barbara Kay Stille ¹ , 57	Chief Administrative Officer and General Counsel	5.3 years			
James B. Jones, 57	Chief Credit Officer	4.3 years	Chief Risk Officer for AgriBank beginning in August 2015		

¹ Mr. John Grace, Chief Risk and Information Officer, left the organization effective February 18, 2022. At that time, Ms. Stille was named Interim Chief Information Officer, and she served in that capacity until Mr. Jeremy Renger became the Bank's Chief Risk and Information Officer on September 12, 2022.

CoBank, ACB:			
Thomas E. Halverson, 58	President and Chief Executive Officer	6 years	
Timothy M. Curran, 56	Chief Risk Officer	5.6 years	
David P. Burlage, 59	Chief Financial Officer	13.1 years	
Andrew D. Jacob, 62	Chief Operating Officer	3.3 years	Chief Regulatory, Legislative, and Compliance Officer since 2017; Chief Regulatory, Legislative, and Compliance Officer and Interim Chief Risk Officer since September 2016; Chief Regulatory, Legislative, and Compliance Officer 2015 — 2016
Deboleena Bose, 51	Chief Human Resources Officer	2.4 years	Vice President, Human Resources, Whirlpool Corporation since 2018; Senior Human Resources Executive, General Electric Company 2012 — 2018
Steve Wittbecker, 49	Chief Sustainability Officer	0.8 years	Chief Audit Officer 2011 – 2022
M. Mashenka Lundberg, 55	Chief Legal Officer and General Counsel	6 years	
Eric Itambo, 52	Chief Banking Officer	4.5 years	Managing Director and US Head — Commercial Lending Management, Citigroup — Global Commercial Banking Group 2014 — 2018
Michael L. Short, 61	Chief Credit Officer	4.4 years	Senior Vice President, Credit Approval since 2017; Sector Manager, Capital Markets 2014 — 2017
Brenda Frank, 51	Executive Vice President Farm Credit Banking	1.6 years	President & CEO, Yankee Farm Credit 2016 — 2021; Sr. Director Strategy and Enterprise Risk Management, Sr. Director Agribusiness Lending, Farm Credit Canada 2007 — 2016
Farm Credit Bank of Texas:			
Amie Pala, 65	Chief Executive Officer	2 years	Senior Vice President, Chief Financial Officer
Isaac Bennett, 62	Executive Vice President, Chief Credit Officer	1.5 years	Vice President and Unit Manager - Capital Markets Group
Nanci Tucker, 57	Executive Vice President, Chief Administrative Officer and General Counsel	2 years	Senior Vice President and General Counsel

Name and Age	Title	Time in Position	Prior Experience
Brandon Blaut, 46	Executive Vice President, Chief Financial Officer	2 years	Vice President of Finance and Loan Operations, May 2019 - December 2020; Vice President of Loan Operations, September 2015 - May 2019
Nisha Rocap, 44	Executive Vice President, Chief Audit Executive	5 years	
Scott L. Erlichman, 57	Executive Vice President, Chief Information Officer	1.5 years	Chief Technology Officer - Hancock Whitney Bank
Federal Farm Credit Banks Funding Corporation:			
Theresa E. McCabe, 61	President and Chief Executive Officer	11 years	
Karen R. Brenner, 58	Managing Director — Financial Management Division	9.8 years	
Peter Connor, 46	Senior Vice President — Risk & Research	5.2 years	
Glenn R. Doran, 60	Managing Director — Finance	15.5 years	
Allison M. Finnegan, 51	Managing Director — Human Resources, General Counsel and Corporate Secretary	13.6 years	
Regina Gill, 61	Managing Director — Investor Relations	1 year	Senior Vice President - Investor Relations, April 2018 - December 2021
Nish Kumar, 41	Senior Vice President — Investor Relations	0.6 years	Managing Director - Kroll Bond Rating Agency, April 2018 - April 2022
Scott Pearson, 60	Senior Vice President & Director — Technology & Operations	7.0 years	
Andrea Selvaraja, 47	Senior Vice President — Financial Management Division & Controller	1 year	Vice President- Financial Management Division 2020-2021, Audit Executive LATAM Zurich Global 2017-2019

Membership, Farm Credit System Audit Committee

The Farm Credit System Audit Committee is comprised of six members, all of whom are appointed by the board of directors of the Funding Corporation. The Funding Corporation Board has determined that each member of the System Audit Committee is financially literate and has designated at least one member to be the financial expert as defined by the Farm Credit Administration regulations. All members of the Committee are independent of management of the Funding Corporation or any System Bank or Association.

The membership of the Farm Credit System Audit Committee at December 31, 2022 is as follows:

Name	Current Term Expires	Principal Occupation, Committees Position and Other Affiliations
Timothy Clayton	2023	Principal Occupation:
Age : 68		Principal of Emerging Capital, LLC, a management consulting and business advisory firm
Board Appointment : 2013		Committee Position:
		Chairman, outside member and designated financial expert
		Other Affiliations:
		Director: Twang, Inc.; Advisory Board member: BioStar Renewables I, LLC
Maureen Corcoran	2023	Principal Occupation:
Age : 65		Retired Executive Vice President of the State Street Corporation
Board Appointment : 2014		Committee Position
		Vice Chair and Funding Corporation Board Outside Director Member
		Other Affiliations:
		Funding Corporation Board Audit Committee Chair
Sureena S. Bains Thiara	2026	Principal Occupation:
Age : 54		Partner in Far Horizon Insurance Partnership, insurance; Partner in Manseena Orchards, owns and leases agricultural land; Member of Four Leafs Farms LLC, farming walnuts and almonds
Board Appointment : 2022		Committee Position:
		Bank/Association Director Member
		Other Affiliations:
		Director: Farm Credit West, ACA; National Association of Corporate Directors Governance Fellow
Robert S. Marjan	2023	Principal Occupation:
Age : 68		Retired from JPMorgan as Managing Director and Executive in its Investment Bank and Capital Markets business
Board Appointment : 2015		Committee Position:
		Funding Corporation Board Outside Director Member
		Other Affiliations:
		Vice Chairman Funding Corporation Board and Compensation Committee Chairman; Community Investment Corporation; Bankers Club of Chicago; Guild Board of Lyric Opera
William T. Robinson	2025	Principal Occupation:
Age : 55		Owner/operator of Robinson Family Farm, which consists of corn, cattle and timber; Owner/operator of MMR Consultants, LLC, a business consulting firm specializing in utility and industrial market segments; Former Executive Director for the SEFA Group; Retired from the Department of Treasury and Corporate Financial Planning at Santee Cooper
Board Appointment : 2021		Committee Position:
		Bank/Association Director Member

Name	Current Term Expires	Principal Occupation, Committees Position and Other Affiliations
		Other Affiliations:
		AgFirst FCB Vice Chairman; AgSouth Farm Credit, ACA; Tri- County Electric Cooperative
Edgar A. Terry	2023	Principal Occupation:
Age : 63		Owner and President of Terry Farms, Inc., a vegetable and strawberry farming operation; Owner and Limited Partner of Ag Center LTD, a real estate company and Central AP, LLP, farmland real estate; Owner and Officer of Amigos Fuerza, Inc., a provider of farm labor contracting; Owner and Partner of JJE, LLC, farmland real estate; Owner and Officer of Moonridge Management, Inc., a provider of back office and HR consulting; Owner and Vice President of Rancho Adobe, Inc., farmland real estate; Owner and President of Willal, Inc., a sales and marketing company; Senior adjunct professor at California Lutheran University, an educational institution
Board Appointment : 2014		Committee Position:
		Bank/Association Director Member
		Other Affiliations:
		Director: CoBank, ACB and Risk Committee Chair; Advisory board chair: Center for Economic Research and Forecasting; Director: Limoneira Company and Ventura Chamber of Commerce; Board Chair: Ventura County Fairgrounds Foundation

The Committee held nine meetings during 2022 and all members were in attendance for each of the meetings, except as noted below.

Each System Audit Committee member was compensated for attendance at meetings and other official activities as follows:

Timothy Clayton, Chairman \$	125,000
Maureen Corcoran, Vice Chair	80,000
Sureena S. Bains Thiara (1)	26,667
Robert S. Marjan	80,000
William T. Robinson	80,000
Edgar A. Terry (2)	80,000

⁽¹⁾ Ms. Bains Thiara attended each meeting subsequent to her appointment.

No member of the System Audit Committee received non-monetary compensation for the year ended December 31, 2022.

⁽²⁾ Mr. Terry was in attendance for eight of the nine meetings.

COMPENSATION OF CHIEF EXECUTIVE OFFICERS

Compensation Discussion and Analysis

Overview

The philosophy of System institutions with respect to compensating each institution's senior officers is to attract, develop and retain senior officers who are highly qualified and proficient at executing each institution's strategic objectives and operational activities, and deliver performance results that optimize the return to the shareholders. In the case of the Banks, each Bank emphasizes:

- Establishing a clear link between the financial performance (e.g., earnings, capital, asset quality, liquidity, sensitivity to changes in interest rates, and customer satisfaction) of the Bank and each senior officer's total compensation package, including rewarding appropriate risk-taking with the Bank's capital to generate returns for the shareholders, while avoiding unnecessary risks, and
- Providing a total compensation package to each senior officer that is competitive within the financial
 services industry and their local market. The total compensation philosophy of System institutions seeks to
 achieve the appropriate balance between market-based base salary and benefits, and variable incentive
 compensation that is designed to incent and reward both the current and long-term achievement of System
 institutions' strategic business objectives and business plans. System institutions believe that this
 philosophy fosters a performance-oriented, results-based culture wherein compensation varies on the basis
 of results achieved.

All System institutions are cooperatives with no publicly traded stock. Therefore, no stock options or other equity- or stock-based compensation programs have been, or can be, granted to senior officers of System institutions. However, it is a general practice across the System to reward the performance of an institution's senior officers with some form of non-equity incentive compensation.

The operations of the Funding Corporation are different than the Banks' operations. While the Banks generate income through loans, investments, and related operations, the primary functions of the Funding Corporation are to raise funds as an agent for the Banks in the debt markets and to issue the combined financial statements of the System. The performance of the Funding Corporation in these two areas is used to gauge the performance of each Funding Corporation senior officer for purposes of determining his or her total compensation package. All operating expenses of the Funding Corporation are reimbursed by the Banks through the assessment of fees.

In addition to compensation, System institutions provide a comprehensive and market-based package of employee benefits for health and welfare and for retirement purposes. Some retirement benefits are restored or enhanced for certain senior officers through one or more non-qualified retirement plans. In other words, while the benefits may be limited as the result of Internal Revenue Code limitations, the benefits that would have been accrued had the Internal Revenue Code limits not been in place are made up for certain senior officers through certain non-qualified retirement plans. In addition, certain institutions have provided for enhanced retirement benefits for named executives.

CEO Compensation Policy

The following discussion regarding compensation policy, summary compensation tables, and related disclosures focuses on the CEOs of the Banks and the Funding Corporation since they are the CEOs of the System entities responsible for the Systemwide disclosures.

The Bank and Funding Corporation CEOs generally have three primary forms of compensation: base pay in the form of a salary, non-equity incentive compensation, and retirement benefits.

Base Pay in the Form of a Salary

The base salary component of each Bank's and the Funding Corporation's CEO recognizes the individual's particular experience, skills, responsibilities, and knowledge. Each Bank's and the Funding Corporation's board compensation committee reviews the appropriate level of base salary and benefits generally on an annual basis. Each committee takes into consideration industry factors and the local market place. Each committee may also use

independent consultants or other means to obtain external comparative data for the CEOs of similar financial institutions, based upon asset size and other factors.

Non-Equity Incentive Compensation

Each Bank and the Funding Corporation has some form of non-equity incentive compensation for its CEO. The overall objective of the incentive compensation is to align each CEO's performance objectives with the interests of the shareholders. The receipt of incentive compensation by each Bank CEO is based upon the performance of the Bank in achieving certain strategic and financial goals. In some cases, the Banks may have both short-term incentive compensation, which focuses on the current performance of the Bank, such as profitability, credit quality, capital adequacy and operating efficiency, and long-term incentive compensation, which focuses on the long-term success of the Bank, such as profitability, credit quality and capital adequacy. In the case of the Funding Corporation, the receipt of incentive compensation is based upon the performance of its specific functions noted previously. In addition, a portion of the incentive compensation may be based upon individual goals and performance. Also, in certain instances, the CEOs may be able to defer payment of a portion of the incentive compensation by directing the deferred amounts be invested in accordance with available options selected by retirement trust committees of the Banks or the Funding Corporation. For each Bank's and the Funding Corporation's CEO, a significant portion of their total compensation is "at-risk" in the form of incentive compensation.

Retirement Benefits

Each Bank and the Funding Corporation CEO participates in a defined contribution plan. The AgFirst CEO is also a participant in a defined benefit retirement plan. All of the defined benefit retirement plans are closed to new participants. In addition, some of the Banks provide supplemental executive retirement plans or pension restoration plans for their CEOs. These plans provide for a portion of the CEO's benefit that cannot be paid from the retirement plan due to the pay and benefit limitations set by the Internal Revenue Code or provide enhanced retirement benefits to the CEO. Additional discussions of the retirement benefits for each Bank's and the Funding Corporation's CEO are set forth below.

Additional discussion of each Bank's compensation policies can be obtained by reference to the discussions provided in the Bank's annual report.

Summary Compensation Table

Name	Year	Salary	In	Non-Equity centive Plan ompensation	Change in Pension Value*	All Other	Total
AgFirst Farm Credit Bank							
Leon T. Amerson, President							
and CEO(1)	2022	\$ 932,350	\$	867,055	\$ (1,650,482)	\$ 69,269	\$ 218,192
	2021	896,506		892,054	41,659	69,947	1,900,166
	2020	862,033		984,714	1,197,297	63,837	3,107,881
AgriBank, FCB							
Jeffrey R. Swanhorst, CEO(2)	2022	738,085		1,103,810		174,572	2,016,467
	2021	713,687		1,117,692		151,533	1,982,912
	2020	691,817		1,133,468		99,647	1,924,932
CoBank, ACB							
Thomas E. Halverson, President and CEO(3)	2022	880,000		5,252,175		287,573	6,419,748
	2021	880,000		4,235,435		289,543	5,404,978
	2020	875,833		3,462,807		237,226	4,575,866
Farm Credit Bank of Texas							
Amie Pala, CEO(4)	2022	1,000,000		1,258,808		123,642	2,382,450
	2021	943,027		1,210,608		48,389	2,202,024
Larry R. Doyle, CEO(5)	2020	1,375,053		1,700,000	257,136	17,585	3,349,774
Federal Farm Credit Banks Funding Corporation							
Theresa E. McCabe, President and CEO(6)	2022	1.379.000		1.500.000		742.880	3.621.880
.,						-	
				, ,			
Amie Pala, CEO(4) Larry R. Doyle, CEO(5) Federal Farm Credit Banks Funding Corporation Theresa E. McCabe, President	2020 2022 2021	875,833 1,000,000 943,027		3,462,807 1,258,808 1,210,608	257,136	237,226 123,642 48,389	4,575,866 2,382,450 2,202,024

^{*} While preferential earnings on nonqualified deferred compensation are required to be reported with the change in pension value, the CEOs did not receive any preferential earnings in 2022, 2021 and 2020.

⁽¹⁾ The Compensation Committee of the Board of Directors reviews Mr. Amerson's performance annually, and the Board of Directors annually approves his compensation level, including base salary and incentive compensation. Included in All Other Compensation are company contributions to 401(k) plan, group life insurance premiums and bank-provided automobile.

⁽²⁾ The Compensation Committee of the AgriBank Board of Directors reviews Mr. Swanhorst's performance annually, and the AgriBank Board of Directors annually approves his compensation level, including base salary and incentive compensation. Included in All Other Compensation are company contributions to the AgriBank District Retirement Savings Plan and the non-qualified Deferred Compensation Plan as well as compensation associated with group term life and long-term disability insurance premiums. There is currently no employment agreement for Mr. Swanhorst. Mr. Swanhorst is not eligible to participate in the AgriBank pension plans; however, he does participate in AgriBank's defined contribution retirement plan.

⁽³⁾ The Compensation and Human Resources Committee of the Board of Directors reviews Mr. Halverson's performance semi-annually, and the Board of Directors annually approves his compensation level, comprised of salary and supplemental compensation, including short-term and long-term incentive compensation. Included in All Other Compensation are company contributions to a qualified retirement savings plan and nonqualified deferred compensation plan, as well as payment of tax return preparation and financial planning expenses, certain travel-related costs, wellness benefits, life insurance benefits, long-term disability benefits and associated income tax impact. Mr. Halverson is not employed pursuant to the terms of an employment agreement and is not eligible to participate in CoBank's defined benefit pension plan; however, he does participate in CoBank's retirement savings plan.

⁽⁴⁾ An employment agreement with an effective date of January 1, 2021 was executed in late 2020 between the bank and the CEO. The term of the agreement covers a three year period with a base salary for the CEO of \$943,000. The Compensation Committee approved a salary of \$1,000,000 effective January 1, 2022. Bonus payments, if any, were at the sole discretion of the Compensation Committee. The employment relationship between the bank and CEO remained at-will, meaning the bank could have terminated the CEO's employment at any time, and the CEO could have chosen to leave at any time. Included in All Other Compensation are company contributions to 401(k) plans, premiums for life insurance, automobile benefits and annual leave payout in excess of 240 hours.

- (5) The Compensation Committee of the Board of Directors reviewed Mr. Doyle's performance annually, and the Board of Directors annually approved his compensation level, including base salary and incentive compensation. Included in All Other Compensation are company contributions to 401(k) plan and premiums for life insurance.
 - In December 2019, a memorandum of understanding between the Bank and the CEO was executed with an effective date of January 1, 2020, which superseded the previous memorandum of understanding effective January 1, 2017. The memorandum of understanding was effective for a term of approximately one year. The base salary for the CEO was \$1,375,000. Bonus payments, if any, were at the sole discretion of the Compensation Committee. The employment relationship between the bank and CEO remained at-will, meaning the bank could have terminated the CEO's employment at any time, and the CEO could have chosen to leave at any time.
- (6) The Compensation Committee of the Board of Directors reviews Ms. McCabe's performance annually and the Board of Directors annually approves the compensation level, including base salary and incentive compensation. Ms. McCabe is a participant in a defined contribution retirement plan. Included in All Other Compensation are company contributions to 401(k) plan and nonqualified deferred compensation plan, as well as wellness benefits. While being employed at will, with no specified term of employment, the agreement provides that if Ms. McCabe is terminated for any reason other than "for cause", she will receive a severance benefit of not more than six months severance pay equal to her base salary.

Pensions Benefits for the Year Ended December 31, 2022

Additional information on each Bank's pension benefits can be obtained by reference to the discussions provided in the Bank's annual report.

Name	Plan Name	Number of Years Credited Service	Present Value of Accumulated Benefit
AgFirst Farm Credit Bank			
Leon T. Amerson, President and CEO(1)	AgFirst Farm Credit Retirement Plan	36.75	\$ 3,029,019
	AgFirst Farm Credit Bank Supplemental Retirement Plan	36.75	5,878,690

⁽¹⁾ Mr. Amerson participates in a defined benefit retirement plan. He is eligible to retire and begin drawing unreduced pension benefits at age 65 or when years of credited service plus age equal "85." Upon retirement, annual payout is equal to 2% times years of credited service times the high three-year average compensation, subject to the Internal Revenue Code limitation of \$430,000 for 2022. For purposes of determining the payout, "average compensation" is defined as regular salary (i.e., does not include bonuses or non-equity incentive plan compensation). Benefits under the plan are payable as a five-year certain and life annuity. Benefits under the plan are not subject to an offset for Social Security. Benefits that would have accrued in the absence of Internal Revenue Code limits are made up through a non-qualified supplemental executive retirement plan. Mr. Amerson also participates in a 401(k) defined contribution plan which has an employer matching contribution, and in a nonqualified deferred compensation plan that allows Mr. Amerson to defer compensation and which restores the benefits limited in the 401(k) plan as a result of restrictions in the Internal Revenue Code.

AUDIT COMMITTEE REPORT

The Farm Credit Administration regulations with respect to disclosure to investors in Systemwide Debt Securities require the board of directors of the Funding Corporation to establish and maintain a System Audit Committee. These regulations specify that the System Audit Committee may not consist of less than three members and at least one member must be a financial expert. A financial expert must be the chairman of the System Audit Committee. Every member must be free from any relationship that, in the opinion of the board of directors of the Funding Corporation, would interfere with the exercise of independent judgment as a System Audit Committee member. The System Audit Committee reports to the board of directors of the Funding Corporation. The charter can be found on the Funding Corporation's website at farmcreditfunding.com. The responsibilities of the System Audit Committee include:

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

The System Audit Committee has reviewed and discussed the System's 2022 combined financial statements and the System's report on internal control over financial reporting, which were prepared under the oversight of the System Audit Committee, with senior management of the Funding Corporation and the independent registered public accounting firm. In addition, the System Audit Committee discussed with the independent registered public accounting firm the matters required to be discussed by PCAOB Auditing Standard No. 16, Communications with Audit Committees.

The System Audit Committee has also received written disclosures and has discussed with the independent registered public accounting firm their independence.

Based on the review and discussions referred to above, the System Audit Committee recommended that the audited combined financial statements be included in the System's 2022 Annual Information Statement.

Timothy Clayton (Chairman) Maureen Corcoran (Vice Chair) Sureena S. Bains Thiara Robert S. Marjan William T. Robinson Edgar A. Terry

AUDIT AND OTHER FEES

Audit Fees

The following table sets forth the aggregate fees billed for professional services rendered for the System by its independent registered public accounting firm, PricewaterhouseCoopers LLP, in the years ended December 31, 2022 and 2021:

	2022	2021
	(in tho	usands)
Audit	\$21,689	\$19,293
Audit-related	2,788	1,119
Tax	585	584
All Other	916	775
Total	\$25,978	\$21,771

The *Audit* fees were for professional services rendered for the audits of System entities and the audit of the System's and the Banks' internal control over financial reporting.

The *Audit-related* fees were for issuances of comfort letters for preferred stock offerings, employee benefit plan audits and procedures associated with recently issued accounting standards.

Tax fees were for services related to tax compliance, including the preparation of tax returns and claims for refunds, and tax planning and tax advice.

All Other fees were for services rendered for service organization attest reports, other advisory and assistance services, which were approved by the appropriate audit committee.

Other Fees

As required by the Farm Credit Administration regulations, any monetary and non-monetary resources used by the System Audit Committee in fulfilling their duties are to be reported on an annual basis. Administrative expenses for the System Audit Committee totaled \$29,000 for 2022 and \$7,000 for 2021. No resources, other than administrative expenses and fees paid to the registered public accounting firm as described above, were used during 2022 and 2021.

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

As of December 31, 2022, 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 this annual information statement. This evaluation is based on testing of the design and effectiveness of key internal controls, certifications and other information furnished by the principal executive officer and principal financial officer of each System institution, as well as incremental procedures performed by the Funding Corporation over the combining process. Based upon and as of the date of the Funding Corporation's evaluation, the President and CEO and the Managing Director — Financial Management Division concluded that the disclosure controls and procedures are effective in alerting them on a timely basis of any material information relating to the System that is required to be disclosed by the System in the annual and quarterly information statements it files or submits to the Farm Credit Administration. There have been no significant changes in the System's internal control over financial reporting⁽²⁾ that occurred during the quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, the System's internal control over financial reporting.

For purposes of this discussion, "disclosure controls and procedures" are defined as controls and procedures of the System that are designed to ensure that the financial information required to be disclosed by the System in this annual information statement is recorded, processed, summarized and reported, within the time periods specified under the rules and regulations of the Farm Credit Administration.

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

CERTIFICATION

I, Theresa E. McCabe, certify that:

- 1. I have reviewed the 2022 Annual Information Statement of the Farm Credit System.
- 2. Based on my knowledge, this annual information statement does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual information statement.
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual information statement, fairly present in all material respects the financial condition, results of operations and cash flows of the System as of, and for, the periods presented in this annual information statement.
- 4. The System's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures⁽¹⁾ and internal control over financial reporting⁽²⁾ for the System and have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the System, including its combined entities, is made known to us by others within those entities, particularly during the period in which this annual information statement is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the System's disclosure controls and procedures and presented in this annual information statement our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual information statement based on such evaluation; and
 - (d) disclosed in this annual information statement any change in the System's internal control over financial reporting that occurred during the System's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the System's internal control over financial reporting.
- 5. The System's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the System's 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.

Theresa E. McCabe President and CEO

Shoresa E. Melale

Date: March 1, 2023

⁽¹⁾ See footnote 1 on page S-28.

⁽²⁾ See footnote 2 on page S-28.

CERTIFICATION

I, Karen R. Brenner, certify that:

- 1. I have reviewed the 2022 Annual Information Statement of the Farm Credit System.
- 2. Based on my knowledge, this annual information statement does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual information statement.
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual information statement, fairly present in all material respects the financial condition, results of operations and cash flows of the System as of, and for, the periods presented in this annual information statement.
- 4. The System's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures⁽¹⁾ and internal control over financial reporting⁽²⁾ for the System and have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the System, including its combined entities, is made known to us by others within those entities, particularly during the period in which this annual information statement is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the System's disclosure controls and procedures and presented in this annual information statement our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual information statement based on such evaluation; and
 - (d) disclosed in this annual information statement any change in the System's internal control over financial reporting that occurred during the System's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the System's internal control over financial reporting.
- 5. The System's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the System's 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. Brenner

Managing Director — Financial

Karen R. Brenner

Management Division

Date: March 1, 2023

⁽¹⁾ See footnote 1 on page S-28.

⁽²⁾ See footnote 2 on page S-28.

INDEX TO ANNUAL INFORMATION STATEMENT

<u>Category</u>	Location(1)
Description of Business	Pages 5-16, 25-43, 50-58, 60-62, 65-91, Notes 1, 2, 4, 7, 9, 10, 11, 12, 16, 18, 19, 21 and Pages S-32–S-34
Federal Regulation and Insurance	Pages 5, 17-24, 75-91 and Notes 1, 7, 8, 9, 10, 11 and 12
Description of Legal Proceedings and Enforcement Actions	Pages 36 and Note 19
Description of Debt Securities	Pages 5-6, 17, 21-24, 50-51, 69, 75-79, 83-85 and Notes 8, 9 and 10
Description of Liabilities	Pages 5-6, 17, 21-24, 50-51, 69, 72, 75-79, 83-85 and Notes 6, 8, 9, 10, 13 and 14
Description of Capital	Pages 10, 18, 22, 50-51, 85-90, Notes 2 and 12 and Pages F-65 and F-75
Selected Financial Data	Pages 3 and 4
Management's Discussion and Analysis of Financial Condition and Results of	
Operations	Pages 37-91
Directors and Management	Pages S-2–S-21
Compensation of Directors and Senior Officers	Pages S-5–S-25
Related Party Transactions	Page 36, Note 18 and Page S-16-S-17
Relationship with Independent Registered Public Accounting Firm	Pages 14, 36 and S-27
Financial Statements	Pages F-1-F-67
Supplemental Combining Information	Pages F-68–F-75
Supplemental Financial Information	Pages F-76–F-81
Young, Beginning and Small Farmers and Ranchers	Pages F-80 and F-81
System Audit Committee	Pages 13-14, 37, S-20-S-21 and S-26-S-27

⁽¹⁾ As used herein, the references to "Notes" mean the Notes to Combined Financial Statements found on pages F-12 through F-67 of this annual information statement.

FARM CREDIT SYSTEM ENTITIES (As of January 1, 2023)

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 1665 Utica Avenue South, Suite 400 Minneapolis, MN 55416 (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

AgCarolina Farm Credit, ACA 636 Rock Spring Road Greenville, NC 27834

AgCredit, ACA 610 W. Lytle Street Fostoria, OH 44830-3422

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

Carolina Farm Credit, ACA 146 Victory Lane Statesville, NC 28625

Central Kentucky, ACA 2429 Members Way Lexington, KY 40504

Colonial Farm Credit, ACA 7104 Mechanicsville Turnpike Mechanicsville, VA 23111

Farm Credit of Central Florida, ACA 204 E. Orange Street, Suite 200 Lakeland, FL 33801

Farm Credit of Florida, ACA 11903 Southern Blvd. Suite 200 West 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

Horizon Farm Credit, ACA 300 Winding Creek Blvd Mechanicsburg, PA 17050

Puerto Rico Farm Credit, ACA 213 Domenech Avenue

River Valley AgCredit, ACA 2731 Olivet Church Road Paducah, KY 42001

San Juan, PR 00918

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

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 12501 Lakefront Place Louisville, KY 40299 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 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

AgWest Farm Credit, ACA 2001 South Flint Road Spokane, WA 99224

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 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

2970 Davison Court Colusa, CA 95932

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

3013 Ceres Avenue Chico, CA 95973

High Plains Farm Credit, ACA

605 Main

Larned, KS 67550

Idaho AgCredit, ACA 188 West Judicial Street Blackfoot, ID 83221

Oklahoma AgCredit, ACA 3033 Progressive Drive

Edmond, OK 73034

Premier Farm Credit, ACA

202 Poplar Street Sterling, CO 80751

Western AgCredit, ACA

10980 South Jordan Gateway South Jordan, UT 84095

South Jordan, O 1 84093

Yosemite Farm Credit, ACA

810 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

5004 N. Loop 289 Lubbock, TX 79416

Alabama Ag Credit, ACA

7480 Halcyon Pointe Drive, Suite 201

Montgomery, AL 36117

Alabama Farm Credit, ACA

300 2nd Avenue SW

Cullman, AL 35055

Capital Farm Credit, ACA 3000 Briarcrest Drive, Suite 601

3000 Briarcrest Drive, Suite 60

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

1616 S. Kentucky Street, Suite C-250

Amarillo, TX 79102

Southern AgCredit, ACA

402 West Parkway Place

Ridgeland, MS 39157

Texas Farm Credit Services

545 South Highway 77

Robstown, TX 78380