
AgCredit Agricultural Credit Association
SECOND QUARTER 2023

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CERTIFICATION

The undersigned certify that we have reviewed the June 30, 2023 quarterly report of AgCredit Agricultural Credit Association, that the report has been prepared under the oversight of the Audit Committee of the Board of Directors and in accordance with all applicable statutory or regulatory requirements, and that the information contained herein is true, accurate, and complete to the best of our knowledge and belief.

/s/ Brian J. Ricker
Chief Executive Officer

/s/ Logan W. Kreais
Chief Financial Officer

/s/ Dustin J. Sonnenberg
Chairman of the Board

August 8, 2023

AgCredit Agricultural Credit Association

Report on Internal Control Over Financial Reporting

The Association'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 Association's Consolidated 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 Association's principal executives and principal financial officers, or persons performing similar functions, and effected by its Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting information and the preparation of the Consolidated 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 Association,
- 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 are being made only in accordance with authorizations of management and directors of the Association, and
- 3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Association's assets that could have a material effect on its Consolidated Financial Statements.

The Association's management has completed an assessment of the effectiveness of internal control over financial reporting as of June 30, 2023. In making the assessment, management 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 Association's management concluded that as of June 30, 2023, the internal control over financial reporting was effective based upon the COSO criteria. Additionally, based on this assessment, the Association's management determined that there were no material changes to or weaknesses in the internal control over financial reporting as of June 30, 2023.

/s/ Brian J. Ricker
Chief Executive Officer

/s/ Logan W. Kreais
Chief Financial Officer

August 8, 2023

AgCredit Agricultural Credit Association

Management's Discussion and Analysis of Financial Condition and Results of Operations

The following commentary reviews the financial condition and results of operations of AgCredit Agricultural Credit Association (Association) for the six months ended June 30, 2023. These comments should be read in conjunction with the accompanying consolidated financial statements, notes to the consolidated financial statements, the Association's June 30, 2022 quarterly report, and the 2022 Annual Report of the Association. The accompanying consolidated financial statements (financial statements) were prepared under the oversight of the Audit Committee of the Board of Directors, which includes Gary L. Baldosser, David M. Stott, Ph.D., CPA, and Kevin P. Flanagan. The results for the six months of 2023 are not necessarily indicative of results to be expected for the year.

LOAN PORTFOLIO

The Association provides funds to farmers, rural homeowners, and farm-related businesses for financing of short and intermediate-term loans and long-term real estate mortgage loans through numerous product types. The Association's loan portfolio consists predominantly of grains (primarily soybeans, corn, and wheat), livestock, and landlords, which constitute 71 percent of the entire portfolio as of June 30, 2023. The Association recognizes the commodity concentration risk exceeds normally accepted industry standards. This risk, along with the risk associated with large loans, is reduced by members' off-farm income, utilization of crop insurance, and the use of FSA, USDA, Business and Industry, SBA, and Farmer Mac loan guarantees. As of June 30, 2023, the Association had \$886,270 of guaranteed loan volume, which is 30.14 percent of loans as compared to \$790,529 of guaranteed volume or 29.71 percent of the portfolio at June 30, 2022. Loan guarantees reduce the potential of loss in the Association's loan portfolio and help to leverage the Association's capital.

Gross loan volume of the Association as of June 30, 2023 was \$2,940,406 an increase of \$67,024 or 2.33 percent when compared to \$2,873,382 at December 31, 2022. The increase in loan volume primarily relates to increases in real estate mortgage, processing and marketing, communication, and other loan volume partially offset by a decrease in production and intermediate (PRIT).

From June 30, 2022 to June 30, 2023, volume increased by \$279,229 or 10.49 percent. The increase in loan volume primarily relates to increases in real estate mortgage, processing and marketing, PRIT, communication, and other loan volume.

Net loans outstanding at June 30, 2023 were \$2,933,384 as compared to \$2,866,377 at December 31, 2022. Net loans accounted for 96.25 percent of total assets at June 30, 2023 as compared to 96.37 percent at December 31, 2022.

There is an inherent risk in the extension of any type of credit, and accordingly, the Association maintains an allowance for loan losses consistent with the risk measured in the portfolio.

General portfolio credit quality improved slightly for the first six months of 2023 when compared to December 31, 2022, and remains at an acceptable level. Credit administration is satisfactory.

During the first six months of 2023 the Association recorded no charge-offs or recoveries and a reversal of allowance for loan losses (reversal) of \$377. The reversal is primarily due to the overall risk rating mix. For the same period of 2022, the Association recorded no charge-offs or recoveries and a reversal of \$543. The allowance for loan losses represented 0.24 percent of loans at June 30, 2023 and December 31, 2022.

RESULTS OF OPERATIONS

For the three months ending June 30, 2023

Net income for the three months ended June 30, 2023 (Q2 2023) was \$15,800, an increase of \$3,470 or 28.14 percent when compared to the net income of \$12,330 for the same period in 2022 (Q2 2022). Major changes in the components of net income when comparing Q2 2023 to Q2 2022 are identified as follows:

- Net interest income increased by \$2,875 or 20.69 percent primarily due to increased earnings on our own funds from higher interest rates and due to loan growth.
- Provision for loan losses decreased by \$61 due to a decrease in the allowance for loan losses in 2023 as compared to 2022 primarily related to the overall risk rating mix.
- Noninterest income increased by \$545 or 9.72 percent primarily for the following reasons:

Patronage refund from other Farm Credit institutions (patronage refunds) increased by \$167 primarily as a result of increases in general and participation sold patronage due to increased average daily balances (ADB).

Loan fees increased by \$218 due to an increase in participations purchased fees.

Gains (losses) on other transactions increased \$138 primarily due to gains in the NQ 401K Rabbi Trust in 2023 compared to losses during the same period in 2022.

- Noninterest expense increased by \$17 or 0.24 percent primarily due to:

Salary and benefits expense increased by \$256 or 5.90 percent primarily due to increased expenses from scheduled salary increases, increased annual incentives, health insurance, employment tax costs, and a decrease in deferred origination costs partially offset by decreases in pension costs.

Other operating expenses increased by \$154 or 20.05 percent due to increased travel, public member relations, advertising, training, and directors expense costs offset by a decrease in printing and office supplies.

Insurance fund premiums decreased by \$148 or 16.19 percent due to a decrease in the rate from 20 to 18 basis points partially offset by increased average volume.

Guarantee fees decreased by \$148 or 39.68 percent due to a decrease in new loan guarantees.

Data Processing decreased by \$70 or 24.14 percent primarily due to timing of purchases.

Purchased services decreased by \$31 or 15.27 due to timing of payments for services.

For the six months ending June 30, 2023

Net income for the six months ended June 30, 2023 (YTD 2023) was \$30,410 which is an increase of \$6,308 or 26.17 percent when compared to the net income of \$24,102 for the same period in 2022 (YTD 2022). Major changes in the components of net income when comparing YTD 2023 to YTD 2022 are identified as follows:

- Net interest income increased by \$5,979 or 21.70 percent. The increase is primarily due to increased earnings on our own funds from higher interest rates and due to loan growth.
- The risks identified in the portfolio at June 30, 2023 and June 30, 2022 resulted in an increase of the provision for loan loss of \$166. The increase was due to a reversal of allowance for loan losses for 2023 of \$377 compared to a reversal of allowance for loan losses of \$543 in 2022. The allowance factors are reviewed regularly and periodically adjusted based on loss experience, industry data, and management's estimates.
- Noninterest income increased by \$1,442 or 13.73 percent primarily due to a \$835 increase in patronage dividends, \$399 in loan fees, and \$184 increase in gains (losses) on other transactions.

- Noninterest expense increased by \$960 or 6.63 percent primarily due to a \$886 increase in expenses for salary and benefits and a \$277 increase in other operating expense partially offset by a \$33 decrease in occupancy and equipment, a \$24 decrease to data processing, and a \$164 decrease in guarantee fees.

The following table shows the key results of operations ratios for the six months ended June 30, 2023 and June 30, 2022, respectively.

	6/30/2023	6/30/2022
Return on average assets	2.08%	1.82%
Return on average equity	12.61%	10.83%
Net interest margin	2.36%	2.13%
Members' equity to assets	16.48%	16.87%
Debt to members' equity (:1)	5.07	4.93

CAPITAL RESOURCES

Total members' equity was \$502,188 at June 30, 2023 as compared to \$474,089 at December 31, 2022 for an increase of \$28,099 or 5.93 percent. The increase is due primarily to 2023 year-to-date earnings.

The Association's capital ratios as of June 30, along with FCA minimum requirements are included in the following regulatory matters section.

Regulatory Capital Ratios

The Association's regulatory ratios are shown in the following table:

	Regulatory Minimum, Including Buffer	6/30/2023	12/31/2022	6/30/2022
Permanent Capital Ratio	7.00%	20.13%	20.56%	20.47%
Common Equity Tier 1 (CET1) Capital Ratio	7.00%	19.75%	20.10%	19.91%
Tier 1 Capital Ratio	8.50%	19.75%	20.10%	19.91%
Total Capital Ratio	10.50%	20.09%	20.46%	20.23%
Tier 1 Leverage Ratio	5.00%	15.13%	15.27%	15.59%
Unallocated Retained Earnings (URE) and URE Equivalents Leverage Ratio	1.50%	14.86%	14.99%	15.29%

The FCA sets minimum regulatory capital adequacy requirements for System banks and associations. The requirements are based on regulatory ratios as defined by the FCA and include common equity tier 1 (CET1), tier 1, total capital, permanent capital, tier 1 leverage, and unallocated retained earnings (URE) and URE equivalents leverage ratios.

The permanent capital, CET1, tier 1, and total capital ratios are calculated by dividing the three-month average daily balance of the capital numerator, as defined by the FCA, by a risk-adjusted asset base. Unlike these ratios, the tier 1 leverage and URE and URE equivalents leverage ratios do not incorporate any risk-adjusted weighting of assets. Risk-adjusted assets refer to the total dollar amount of the institution's assets adjusted by an appropriate credit conversion factor as defined by regulation. Generally, higher credit conversion factors are applied to assets with more inherent risk. The tier 1 leverage and URE and URE equivalents leverage ratios are calculated by dividing the three-month average daily balance of the capital numerator, as defined by the FCA, by the three-month average daily balance of total assets adjusted for regulatory deductions.

For all periods presented, AgCredit exceeded minimum regulatory standards for all of the ratios. The Association's capital ratios continued to be strong as of June 30, 2023 compared to December 31, 2022 and June 30, 2022. See Regulatory Matters section below for further discussion of capital ratios.

LIBOR Transition

US dollar LIBOR settings (including respect to overnight, one, three, six, and twelve month tenors of US dollar LIBOR) were discontinued or declared non-representative immediately after June 30, 2023.

The Association implemented LIBOR transition plans in accordance with FCA's guidance to address the risks associated with the discontinuation of LIBOR. See the Association's 2022 Annual Report for further discussion on the LIBOR transition plans.

The Association had exposure to LIBOR arising from loans made to customers. To the extent necessary, substantially all financial instruments that reference LIBOR have been amended to incorporate adequate fallbacks, including, where appropriate, the Secured Overnight Finance Rate (SOFR)-based fallbacks recommended by the Alternative Reference Rates Committee (ARRC).

To the extent that any Association contracts do not have or were not amended to include adequate fallback provisions to replace LIBOR, such contracts were amended by operation of law under the federal Adjustable Interest Rate (LIBOR) Act and rules thereunder to include a statutorily fallback to LIBOR. Under the Federal Reserve Board's rule implementing certain provisions of the LIBOR Act (Regulation ZZ), on the LIBOR replacement date (the first London banking day after June 30, 2023), the Federal Reserve Board-selected benchmark replacement, based on the SOFR and including any tenor spread adjustment as provided by Regulation ZZ, automatically replaced references to overnight, one, three, six, and twelve month LIBOR in all remaining contracts that did not mature before the LIBOR replacement date and did not contain adequate fallback language.

The following is a summary of outstanding variable-rate financial instruments tied to LIBOR at June 30, 2023:

<i>(dollars in millions)</i>	Due Before June 30, 2023	Due After June 30, 2023	Total
Loans	\$ —	\$ 2,495	\$ 2,495
Total assets	\$ —	\$ 2,495	\$ 2,495
Note payable to AgFirst Farm Credit Bank	\$ —	\$ 2,127	\$ 2,127
Total liabilities	\$ —	\$ 2,127	\$ 2,127

REGULATORY MATTERS

On April 14, 2022, the FCA approved a final rule that amends certain regulations to address changes in accounting principles generally accepted in the United States. Such changes reflect the Current Expected Credit Losses (CECL) methodology that replaced the incurred loss methodology upon adoption. Credit loss allowances related to loans, lessor's net investments in leases, and held-to-maturity debt securities are included in a System institution's Tier 2 capital up to 1.25 percent of the System institution's total risk weighted assets. Credit loss allowances for available-for-sale debt securities and purchased credit impaired assets are not eligible for inclusion in a System institution's Tier 2 capital. The regulation did 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. In addition, the regulation did not include an exclusion for the CECL day 1 cumulative effective adjustment from the "safe harbor" deemed prior approval provision. The final rule became effective on January 1, 2023.

On August 26, 2021, the FCA issued a proposed rule to revise its regulatory capital requirements to define and establish risk-weightings for High Volatility Commercial Real Estate (HVCRE) by assigning a 150 percent risk-weighting to such exposures, instead of the current 100 percent. The proposed rule would ensure that the FCA's rule remains comparable with the capital rule of other federal banking regulatory agencies and recognizes the increased risk posed by HVCRE exposures. The public comment period ended on January 24, 2022.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

Please refer to Note 1, *Organization, Significant Accounting Policies, and Recently Issued Accounting Pronouncements*, in the Notes to the Financial Statements, and the 2022 Annual Report to Shareholders for recently adopted accounting pronouncements.

There were no ASUs issued by the Financial Accounting Standards Board (FASB) during the quarter that impacted the Association's Financial Statements.

Note: The Association obtains funding from AgFirst Farm Credit Bank (the Bank). The Association is materially affected and shareholder investment could be materially affected by the financial condition and results of operations of the Bank. Copies of the Bank's Annual and Quarterly Reports are on the AgFirst website, www.agfirst.com or may be obtained at no charge by calling 1-800-845-1745, extension 2764, or writing Matthew Miller, AgFirst Farm Credit Bank, P.O. Box 1499, Columbia, SC 29202.

Copies of the Association's Quarterly and Annual Reports are available on the Association's website, www.agcredit.net, or may be obtained upon request free of charge by calling 1-800-837-3678, extension 1048, or writing Logan Kreais, Chief Financial Officer, AgCredit, ACA, 610 W Lytle Street, Fostoria, OH 44830. The Association prepares an electronic version of the Quarterly Report within 40 days after the end of each fiscal quarter, except that no report need be prepared for the fiscal quarter that coincides with the end of the fiscal year of the Association.

AgCredit Agricultural Credit Association

Consolidated Balance Sheets

<i>(dollars in thousands)</i>	June 30, 2023 <i>(unaudited)</i>	December 31, 2022 <i>(audited)</i>
Assets		
Cash	\$ 170	\$ 67
Investments in debt securities:		
Held to maturity (fair value of \$13,106 and \$5,347, respectively)	13,454	5,784
Loans	2,940,406	2,873,382
Allowance for loan losses	(7,022)	(7,005)
Net loans	2,933,384	2,866,377
Other investments	4,055	3,384
Accrued interest receivable	40,397	33,163
Equity investments in other Farm Credit institutions	34,949	34,950
Premises and equipment, net	7,313	7,560
Accounts receivable	11,152	20,873
Other assets	2,697	2,263
Total assets	\$ 3,047,571	\$ 2,974,421
Liabilities		
Notes payable to AgFirst Farm Credit Bank	\$ 2,520,233	\$ 2,456,560
Accrued interest payable	7,371	6,338
Patronage refunds payable	142	24,449
Accounts payable	2,227	3,222
Advanced conditional payments	4,424	960
Other liabilities	10,986	8,803
Total liabilities	2,545,383	2,500,332
Commitments and contingencies (Note 7)		
Members' Equity		
Capital stock and participation certificates	15,074	16,108
Retained earnings		
Allocated	339,692	340,538
Unallocated	147,422	117,443
Total members' equity	502,188	474,089
Total liabilities and members' equity	\$ 3,047,571	\$ 2,974,421

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

AgCredit Agricultural Credit Association

Consolidated Statements of Comprehensive Income

(unaudited)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2023	2022	2023	2022
<i>(dollars in thousands)</i>				
Interest Income				
Loans	\$ 37,878	\$ 26,730	\$ 73,308	\$ 51,515
Investments	170	79	244	170
Total interest income	38,048	26,809	73,552	51,685
Interest Expense				
Notes payable to AgFirst Farm Credit Bank	21,277	12,913	40,016	24,128
Net interest income	16,771	13,896	33,536	27,557
Provision for (reversal of) allowance for credit losses	(109)	(48)	(377)	(543)
Net interest income after provision for (reversal of) allowance for credit losses	16,880	13,944	33,913	28,100
Noninterest Income				
Loan fees	348	130	629	230
Fees for financially related services	53	25	83	60
Patronage refunds from other Farm Credit institutions	5,609	5,442	11,036	10,201
Gains (losses) on sales of premises and equipment, net	(6)	—	(6)	—
Gains (losses) on other transactions	71	(67)	56	(128)
Other noninterest income	75	75	148	141
Total noninterest income	6,150	5,605	11,946	10,504
Noninterest Expense				
Salaries and employee benefits	4,593	4,337	9,774	8,888
Occupancy and equipment	323	319	637	670
Insurance Fund premiums	766	914	1,507	1,491
Guarantee fees	225	373	618	782
Purchased services	172	203	340	338
Data processing	220	290	383	407
Other operating expenses	922	768	2,173	1,896
Total noninterest expense	7,221	7,204	15,432	14,472
Income before income taxes	15,809	12,345	30,427	24,132
Provision for income taxes	9	15	17	30
Net income	\$ 15,800	\$ 12,330	\$ 30,410	\$ 24,102
Other comprehensive income	—	—	—	—
Comprehensive income	\$ 15,800	\$ 12,330	\$ 30,410	\$ 24,102

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

AgCredit Agricultural Credit Association

Consolidated Statements of Changes in Members' Equity

(unaudited)

<i>(dollars in thousands)</i>	Capital Stock and Participation Certificates	Retained Earnings		Total Members' Equity
		Allocated	Unallocated	
Balance at December 31, 2021	\$ 17,498	\$ 308,056	\$ 110,542	\$ 436,096
Comprehensive income			24,102	24,102
Capital stock/participation certificates issued/(retired), net	951			951
Dividends declared/paid			(25)	(25)
Patronage distribution adjustment		1,103	(776)	327
Balance at June 30, 2022	\$ 18,449	\$ 309,159	\$ 133,843	\$ 461,451
Balance at December 31, 2022	\$ 16,108	\$ 340,538	\$ 117,443	\$ 474,089
Cumulative effect of change in accounting principle			(940)	(940)
Comprehensive income			30,410	30,410
Capital stock/participation certificates issued/(retired), net	(1,034)			(1,034)
Dividends declared/paid			(95)	(95)
Patronage distribution adjustment		(846)	604	(242)
Balance at June 30, 2023	\$ 15,074	\$ 339,692	\$ 147,422	\$ 502,188

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

AgCredit Agricultural Credit Association

Notes to the Consolidated Financial Statements

(dollars in thousands, except as noted)

(unaudited)

Note 1 — Organization, Significant Accounting Policies, and Recently Issued Accounting Pronouncements

Organization

The accompanying financial statements include the accounts of AgCredit Agricultural Credit Association and its Production Credit Association (PCA) and Federal Land Credit Association (FLCA) subsidiaries (collectively, the Association). Descriptions of the organization and operations, the significant accounting policies followed, and the financial condition and results of operations for the Association as of and for the year ended December 31, 2022, are contained in the 2022 Annual Report to Shareholders. These unaudited interim consolidated financial statements should be read in conjunction with the latest Annual Report to Shareholders.

Basis of Presentation

In the opinion of management, the accompanying consolidated financial statements contain all adjustments necessary for a fair statement of results for the periods presented. These adjustments are of a normal recurring nature, unless otherwise disclosed.

Certain amounts in the prior period's consolidated financial statements have been reclassified to conform to the current period presentation. Such reclassifications had no effect on the prior period net income or total capital as previously reported.

The results of any interim period are not necessarily indicative of those to be expected for a full year.

Significant Accounting Policies

The Association's accounting and reporting policies conform with U.S. generally accepted accounting principles (GAAP) and practices in the financial services industry. To prepare the financial statements in conformity with GAAP, management must make estimates based on assumptions about future economic and market conditions (for example, unemployment, market liquidity, real estate prices, etc.) that affect the reported amounts of assets and liabilities at the date of the financial statements, income and expenses during the reporting period, and the related disclosures. Although these estimates contemplate current conditions and expectations of change in the future, it is reasonably possible that actual conditions may be different than anticipated, which could materially affect results of operations and financial condition.

Management has made significant estimates in several areas, including loans and allowance for credit losses (Note 2, *Loans and Allowance for Credit Losses*) and financial instruments (Note 5, *Fair Value Measurement*). Actual results could differ from those estimates.

For further details of significant accounting policies, see Note 2, *Summary of Significant Accounting Policies*, from the latest Annual Report.

Accounting Standards Effective During the Period

The Association 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. This guidance replaced the current incurred loss impairment methodology with a single allowance framework for financial assets that estimates the current expected credit losses (CECL) over the remaining contractual life for all financial assets measured at amortized cost and certain off-balance sheet credit exposures. This guidance is applied on a modified retrospective basis. This framework 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 consider macroeconomic conditions. In addition, the guidance amends existing impairment guidance for held-to-maturity and available-for-sale investments to incorporate an allowance for credit losses related to these securities, 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." This guidance requires the creditor 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 eliminated the accounting guidance for troubled debt restructurings by creditors. The update also requires disclosure of current period gross write-offs by year of origination for financing receivables and net investments in leases on a prospective basis.

The following table presents the impact to the allowance for credit losses and retained earnings upon adoption of this guidance on January 1, 2023:

	December 31, 2022	CECL Adoption Impact	January 1, 2023
Assets:			
Allowance for loan losses	\$ 7,005	\$ 410	\$ 7,415
Liabilities:			
Allowance for credit losses on unfunded commitments	\$ —	\$ 530	\$ 530
Retained earnings:			
Unallocated retained earnings	\$ 117,443	\$ (940)	\$ 116,503

As more fully described in the 2022 Annual Report, the Association may hold additional investments in accordance with other investment programs approved by the Farm Credit Administration (FCA). These programs allow the institution to make investments that further the mission to support rural America. Upon adoption of CECL guidance, the investments held-to-maturity are presented net of an allowance for credit losses on investments. As part of the Association's implementation of the standard, it was determined that there would not be a material impact to the Association's investment portfolio and as a result, there was no ACL on investments recorded.

Loans and Allowance for Credit Losses

Loans are recorded at amortized cost basis, which is the principal amount outstanding adjusted for charge-offs, deferred loan fees or costs, and valuation adjustments relating to hedging activities, if any. Loan origination fees and direct loan origination costs are netted and capitalized 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.

Nonaccrual Loans

Nonaccrual loans are loans for which there is reasonable doubt that all principal and interest will be collected according to the original contractual terms and are generally considered substandard or doubtful, which is in accordance with the loan rating model, as described below. 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 modified 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.

Consistent with prior practice, 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. At the time 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 ACL (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 collectability 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 repayment 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 on-time 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.

Accrued Interest Receivable

The Association adopted the practical expedient to classify accrued interest on loans and investment securities in accrued interest receivable and not as part of loans or investments on the Consolidated Balance Sheets. The Association also elected to not estimate an

allowance on interest receivable balances because the nonaccrual policies in place provide for the accrual of interest to cease on a timely basis when all contractual amounts are not expected.

Loan Modifications to Borrowers Experiencing Financial Difficulty

Loan modifications may be granted to borrowers experiencing financial difficulty. Modifications can be in the form of one or a combination of principal forgiveness, interest rate reduction, other-than-insignificant payment delay or a term extension. Covenant waivers and modifications of contingent acceleration clauses are not considered term extensions.

Collateral Dependent Loans

Collateral dependent loans are loans secured by collateral, including but not limited to agricultural real estate, crop inventory, equipment, and livestock. CECL requires an entity to measure the expected credit losses based on fair value of the collateral at the reporting date when the entity determines that foreclosure is probable. Additionally, the Association adopted the fair value practical expedient as a measurement approach for loans when the repayment is expected to be provided substantially through the operation or sale of the collateral when the borrower is experiencing financial difficulties. Under the practical expedient measurement approach, the expected credit loss is based on the difference between the fair value of the collateral less estimated costs to sell and the amortized cost basis of the loan.

Allowance for Credit Losses

Beginning January 1, 2023, the ACL represents the estimated current expected credit losses over the remaining contractual life of financial assets measured at amortized cost and certain off-balance sheet credit exposures. The ACL takes into consideration relevant information about past events, current conditions, and reasonable and supportable macroeconomic forecasts of future conditions. The contractual term excludes expected extensions, renewals, and modifications unless the extension or renewal options are not unconditionally cancellable. The ACL comprises:

- the allowance for loan losses
- the allowance for unfunded commitments, which is presented on the Consolidated Balance Sheets in Other Liabilities, and
- the allowance for credit losses on investment securities, which covers held-to-maturity and available-for-sale securities and is recognized within each investment securities classification on the Consolidated Balance Sheets.

Determining the appropriateness of the allowance is complex and requires judgment by management about the effect of matters that are inherently uncertain. Subsequent evaluations of the loan portfolio, considering macroeconomic conditions, forecasts, and other factors prevailing at the time, may result in significant changes in the ACL in those future periods.

Methodology for Allowance for Credit Losses on Loans

The allowance for loan losses represents management's estimate of credit losses over the remaining expected life of loans. Loans are evaluated on the amortized cost basis, including premiums, discounts, and fair value hedge accounting adjustments.

The Association employs a disciplined process and methodology to establish its allowance for loan losses that has two basic components: first, an asset-specific component involving individual loans that do not share risk characteristics with other loans and the measurement of expected credit losses for such individual loans; and second, a pooled component for estimated expected credit losses for pools of loans that share similar risk characteristics.

Asset-specific loans are generally collateral-dependent loans (including those loans for which foreclosure is probable) and nonaccrual loans. For an asset-specific loan, expected credit losses are measured as the difference between the amortized cost basis in the loan and the present value of expected future cash flows discounted at the loan's effective interest rate except that, for collateral-dependent loans, credit loss is measured as the difference between the amortized cost basis in the loan and the fair value of the underlying collateral. The fair value of the collateral is adjusted for the estimated cost to sell if repayment or satisfaction of a loan is dependent on the sale (rather than only on the operation) of the collateral. In accordance with the Association's appraisal policy, the fair value of collateral-dependent loans is based upon independent third-party appraisals or on collateral valuations prepared by in-house appraisers. When an updated appraisal or collateral valuation is received, management reassesses the need for adjustments to the loan's expected credit loss measurements and, where appropriate, records an adjustment. If the calculated expected credit loss is determined to be permanent, fixed, or non-recoverable, the credit loss portion of the loan will be charged-off against the ACL.

In estimating the component of the allowance for loan losses that relates to loans that share common risk characteristics, loans are evaluated collectively and segregated into loan pools considering the risk associated with the specific pool. Relevant risk characteristics include loan type, commodity, credit quality rating, delinquency category or business segment or a combination of these classes. The allowance is determined based on a quantitative calculation of the expected life-of-loan loss percentage for each loan category by considering the probability of default, based on the migration of loans from performing to loss by credit quality rating or delinquency buckets using historical life-of-loan analysis periods for loan types, and the severity of loss, based on the aggregate net lifetime losses incurred per loan pool.

The component of the allowance for loan losses also considers factors for each loan pool to adjust for differences between the historical period used to calculate historical default and loss severity rates and expected conditions over the remaining lives of the loans in the portfolio related to:

- lending policies and procedures;
- national, regional, and local economic business conditions and developments that affect the collectability of the portfolio, including the condition of various markets;
- the nature of the loan portfolio, including the terms of the loans;
- the experience, ability, and depth of the lending management and other relevant staff;
- the volume and severity of past due and adversely classified or graded loans and the volume of nonaccrual loans;
- the quality of the loan review and process;
- the value of underlying collateral for collateral-dependent loans;
- the existence and effect of any concentrations of credit and changes in the level of such concentrations; and
- the effect of external factors such as competition and legal and regulatory requirements on the level of estimated credit losses in the existing portfolio.

The Association's macroeconomic forecast includes a weighted selection of the Moody's baseline, upside 10th percent and downside 90th percent over reasonable and supportable forecast periods of three years. Subsequent to the forecast period, the Association reverts to long run historical loss experience beyond two years gradually after the determined forecast horizon using a transition function to inform the estimate of losses for the remaining contractual life of the loan portfolio.

The economic forecasts incorporate macroeconomic variables, including unemployment rates, Dow Jones Total Stock Market Index, and corporate bond spreads. Also considered are loan and borrower characteristics, such as internal risk ratings, delinquency status, collateral type, and the remaining term of the loan, adjusted for expected prepayments.

In addition to the quantitative calculation, the Association considers the imprecision inherent in the process and methodology, emerging risk assessments and other subjective factors, which may lead to a management adjustment to the modeled allowance for loan loss results. Expected credit loss estimates also include consideration of expected cash recoveries on loans previously charged-off or expected recoveries on collateral dependent loans where recovery is expected through sale of the collateral. The economic forecasts are updated on a quarterly basis.

Prior to January 1, 2023, the allowance for loan losses was maintained at a level considered adequate to provide for probable losses existing in and inherent in the loan portfolio. The allowance was based on a periodic evaluation of the loan portfolio in which numerous factors were considered, including economic conditions, collateral values, borrowers' financial conditions, loan portfolio composition, and prior loan loss experience. The allowance for loan losses encompassed various judgments, evaluations, and appraisals with respect to the 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 would cause these various judgments, evaluations, and appraisals to change over time. Management considered a number of factors in determining and supporting the levels of the allowance for loan losses, which included, but were not limited to, the concentration of lending in agriculture, combined with uncertainties associated with farmland values, commodity prices, exports, government assistance programs, regional economic effects, and weather-related influences.

Allowance for Credit Losses on Unfunded Commitments

The Association evaluates the need for an allowance for credit losses on unfunded commitments under CECL and, if required, an amount is recognized and included in Other Liabilities on the Consolidated Balance Sheets. The amount of expected losses is determined by calculating a commitment usage factor over the contractual period for exposures that are not unconditionally cancellable by the Association and applying the loss factors used in the allowance for loan losses methodology to the results of the usage calculation. No allowance for credit losses is recorded for commitments that are unconditionally cancellable.

Note 2 — Loans and Allowance for Credit Losses

A summary of loans outstanding at period end follows:

	June 30, 2023	December 31, 2022
Real estate mortgage	\$ 1,744,990	\$ 1,707,687
Production and intermediate-term	563,837	626,462
Agribusiness:		
Loans to cooperatives	1,621	6,482
Processing and marketing	176,099	138,379
Farm-related business	43,444	47,538
Rural infrastructure:		
Communication	34,095	20,797
Power and water/waste disposal	1,924	402
Rural residential real estate	133,429	131,783
Other:		
International	304	1,706
Lease receivables	1,404	1,341
Other (including Mission Related)	239,259	190,805
Total loans	\$ 2,940,406	\$ 2,873,382

A substantial portion of the Association's lending activities is collateralized, and exposure to credit loss associated with lending activities is reduced accordingly.

The Association may purchase or sell participation interests with other parties in order to diversify risk, manage loan volume, and comply with FCA regulations. The following tables present the principal balance of participation loans at periods ended:

June 30, 2023

	Within AgFirst District		Within Farm Credit System		Outside Farm Credit System		Total	
	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold
Real estate mortgage	\$ 29,622	\$ 207,650	\$ —	\$ 22,251	\$ 137,368	\$ —	\$ 166,990	\$ 229,901
Production and intermediate-term	34,569	130,891	—	6,168	30,254	—	64,823	137,059
Agribusiness	147,948	64,759	—	5,535	165	—	148,113	70,294
Rural infrastructure	22,727	—	13,500	—	—	—	36,227	—
Other	308	—	757	—	222,989	—	224,054	—
Total	\$ 235,174	\$ 403,300	\$ 14,257	\$ 33,954	\$ 390,776	\$ —	\$ 640,207	\$ 437,254

December 31, 2022

	Within AgFirst District		Within Farm Credit System		Outside Farm Credit System		Total	
	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold
Real estate mortgage	\$ 28,696	\$ 213,988	\$ —	\$ 22,466	\$ 117,637	\$ —	\$ 146,333	\$ 236,454
Production and intermediate-term	33,175	156,464	—	6,525	6,009	—	39,184	162,989
Agribusiness	113,552	63,978	—	—	783	—	114,335	63,978
Rural infrastructure	21,270	—	—	—	—	—	21,270	—
Other	1,711	—	600	—	176,673	—	178,984	—
Total	\$ 198,404	\$ 434,430	\$ 600	\$ 28,991	\$ 301,102	\$ —	\$ 500,106	\$ 463,421

The following table shows loans, classified under the FCA Uniform Loan Classification System, as a percentage of total loans by loan type as of:

	June 30, 2023	December 31, 2022*
Real estate mortgage:		
Acceptable	97.84%	97.14%
OAEM	0.60	1.05
Substandard/doubtful/loss	1.56	1.81
	100.00%	100.00%
Production and intermediate-term:		
Acceptable	95.22%	96.48%
OAEM	2.76	1.85
Substandard/doubtful/loss	2.02	1.67
	100.00%	100.00%
Agribusiness:		
Acceptable	95.34%	94.76%
OAEM	0.12	0.09
Substandard/doubtful/loss	4.54	5.15
	100.00%	100.00%
Rural infrastructure:		
Acceptable	100.00%	100.00%
OAEM	—	—
Substandard/doubtful/loss	—	—
	100.00%	100.00%
Rural residential real estate:		
Acceptable	97.37%	97.59%
OAEM	1.84	1.58
Substandard/doubtful/loss	0.79	0.83
	100.00%	100.00%
Other:		
Acceptable	100.00%	100.00%
OAEM	—	—
Substandard/doubtful/loss	—	—
	100.00%	100.00%
Total loans:		
Acceptable	97.33%	97.07%
OAEM	0.98	1.11
Substandard/doubtful/loss	1.69	1.82
	100.00%	100.00%

*Prior to adoption of CECL on January 1, 2023, loans were presented with accrued interest receivable.

Accrued interest receivable on loans of \$39,875 and \$32,820 at June 30, 2023 and December 31, 2022, respectively, has been excluded from the amortized cost of loans and reported separately in the Consolidated Balance Sheets.

The following table provides an aging analysis of past due loans as of:

	June 30, 2023					
	30 Through 89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or Less Than 30 Days Past Due	Total Loans	90 Days or More Past Due and Accruing
Real estate mortgage	\$ 10,364	\$ 399	\$ 10,763	\$ 1,734,228	\$ 1,744,991	\$ —
Production and intermediate-term	1,059	145	1,204	562,633	563,837	31
Agribusiness	17	—	17	221,147	221,164	—
Rural infrastructure	—	—	—	36,019	36,019	—
Rural residential real estate	219	207	426	133,003	133,429	—
Other	7,978	9,073	17,051	223,915	240,966	9,073
Total	\$ 19,637	\$ 9,824	\$ 29,461	\$ 2,910,945	\$ 2,940,406	\$ 9,104

Prior to the adoption of CECL, the aging analysis of past due loans reported included accrued interest as follows:

	December 31, 2022					
	30 Through 89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or Less Than 30 Days Past Due	Total Loans	90 Days or More Past Due and Accruing
Real estate mortgage	\$ 12,295	\$ 1,607	\$ 13,902	\$ 1,715,566	\$ 1,729,468	\$ 1,144
Production and intermediate-term	3,796	54	3,850	631,577	635,427	–
Agribusiness	–	–	–	193,218	193,218	–
Rural infrastructure	–	–	–	21,230	21,230	–
Rural residential real estate	257	125	382	131,736	132,118	–
Other	9,184	–	9,184	185,557	194,741	–
Total	\$ 25,532	\$ 1,786	\$ 27,318	\$ 2,878,884	\$ 2,906,202	\$ 1,144

The following tables reflect nonperforming assets and related credit quality statistics as of:

	June 30, 2023
Nonaccrual loans:	
Real estate mortgage	\$ 853
Production and intermediate-term	3,572
Agribusiness	1,212
Rural residential real estate	270
Total	<u>\$ 5,907</u>
Accruing loans 90 days or more past due:	
Production and intermediate-term	31
Other	9,073
Total	<u>\$ 9,104</u>
Total nonperforming loans	\$ 15,011
Other property owned	–
Total nonperforming assets	<u>\$ 15,011</u>
Nonaccrual loans as a percentage of total loans	0.20%
Nonperforming assets as a percentage of total loans and other property owned	0.51%
Nonperforming assets as a percentage of capital	<u>2.99%</u>

	December 31, 2022*
Nonaccrual loans:	
Real estate mortgage	\$ 1,109
Production and intermediate-term	83
Agribusiness	1,063
Rural residential real estate	265
Total	<u>\$ 2,520</u>
Accruing restructured loans:	
Production and intermediate-term	\$ 529
Total	<u>\$ 529</u>
Accruing loans 90 days or more past due:	
Real estate mortgage	\$ 1,144
Total	<u>\$ 1,144</u>
Total nonperforming loans	\$ 4,193
Other property owned	–
Total nonperforming assets	<u>\$ 4,193</u>
Nonaccrual loans as a percentage of total loans	0.09%
Nonperforming assets as a percentage of total loans and other property owned	0.15%
Nonperforming assets as a percentage of capital	<u>0.88%</u>

*Prior to adoption of CECL, nonperforming assets included accruing restructured loans and loans were presented including accrued interest receivable.

The following table provides the amortized cost for nonaccrual loans, with and without a related allowance for loan losses, and interest income recognized on nonaccrual loans during the period:

	June 30, 2023			Interest Income Recognized on Nonaccrual Loans	
	Amortized Cost with Allowance	Amortized Cost without Allowance	Total	Three Months Ended June 30, 2023	Six Months Ended June 30, 2023
Nonaccrual loans:					
Real estate mortgage	\$ —	\$ 853	\$ 853	\$ 10	\$ 17
Production and intermediate-term	2,772	801	3,573	41	72
Agribusiness	671	541	1,212	14	24
Rural residential real estate	—	270	270	3	5
Total	\$ 3,443	\$ 2,465	\$ 5,908	\$ 68	\$ 118

Effective January 1, 2023, the Association adopted the CECL accounting guidance as described in Note 1. A summary of changes in the allowance for credit losses by portfolio segment is as follows:

	Real Estate Mortgage	Production and Intermediate-term	Agribusiness	Rural Infrastructure	Rural Residential Real Estate	Other	Total
Allowance for Loan Losses:							
Balance at March 31, 2023	\$ 2,319	\$ 2,884	\$ 1,627	\$ 19	\$ 331	\$ 8	\$ 7,188
Charge-offs	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	—
Provision for loan losses	(47)	(185)	35	21	3	7	(166)
Balance at June 30, 2023	\$ 2,272	\$ 2,699	\$ 1,662	\$ 40	\$ 334	\$ 15	\$ 7,022
Allowance for unfunded commitments:							
Balance at March 31, 2023	\$ 52	\$ 236	\$ 180	\$ 3	\$ 16	\$ 2	\$ 489
Provision for unfunded commitments	(4)	33	7	—	21	—	57
Balance at June 30, 2023	\$ 48	\$ 269	\$ 187	\$ 3	\$ 37	\$ 2	\$ 546
Total allowance for credit losses	\$ 2,320	\$ 2,968	\$ 1,849	\$ 43	\$ 371	\$ 17	\$ 7,568
Allowance for Loan Losses:							
Balance at December 31, 2022	\$ 2,048	\$ 3,078	\$ 1,569	\$ 43	\$ 259	\$ 8	\$ 7,005
Cumulative effect of a change in accounting principle	1,542	(1,337)	148	(34)	89	2	410
Balance at January 1, 2023	\$ 3,590	\$ 1,741	\$ 1,717	\$ 9	\$ 348	\$ 10	\$ 7,415
Charge-offs	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	—
Provision for loan losses	(1,317)	958	(56)	31	(14)	5	(393)
Balance at June 30, 2023	\$ 2,273	\$ 2,699	\$ 1,661	\$ 40	\$ 334	\$ 15	\$ 7,022
Allowance for Unfunded Commitments:							
Balance at December 31, 2022	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Cumulative effect of a change in accounting principle	74	275	157	4	18	2	530
Balance at January 1, 2023	\$ 74	\$ 275	\$ 157	\$ 4	\$ 18	\$ 2	\$ 530
Provision for unfunded commitments	(26)	(6)	30	(1)	19	—	16
Balance at June 30, 2023	\$ 48	\$ 269	\$ 187	\$ 3	\$ 37	\$ 2	\$ 546
Total allowance for credit losses	\$ 2,321	\$ 2,968	\$ 1,848	\$ 43	\$ 371	\$ 17	\$ 7,568
Allowance for Loan Losses*:							
Balance at March 31, 2022	\$ 3,115	\$ 2,822	\$ 599	\$ 14	\$ 253	\$ 7	\$ 6,810
Charge-offs	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	—
Provision for loan losses	59	(305)	194	—	3	1	(48)
Balance at June 30, 2022	\$ 3,174	\$ 2,517	\$ 793	\$ 14	\$ 256	\$ 8	\$ 6,762
Balance at December 31, 2021	\$ 3,131	\$ 3,343	\$ 545	\$ 13	\$ 272	\$ 1	\$ 7,305
Charge-offs	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	—
Provision for loan losses	43	(826)	248	1	(16)	7	(543)
Balance at June 30, 2022	\$ 3,174	\$ 2,517	\$ 793	\$ 14	\$ 256	\$ 8	\$ 6,762

*For periods prior to January 1, 2023, the allowance for loan losses was based on probable and estimable losses inherent in the loan portfolio.

Loan modifications may be granted to borrowers experiencing financial difficulty. Qualifying disclosable modifications are one, or a combination of, principal forgiveness, interest rate reduction, or a term or payment extension. Covenant waivers and modifications of contingent acceleration clauses are not considered term extensions. Modified loans to borrowers experiencing financial difficulty and activity on these loans were not material during the three and six months ended June 30, 2023. There were no material commitments to lend to borrowers experiencing financial difficulty whose loans have been modified at June 30, 2023.

The Association had no loans held for sale at June 30, 2023 and December 31, 2022.

Troubled Debt Restructurings

Prior to the adoption of updated FASB guidance on loan modifications on January 1, 2023, a restructuring of a loan constituted a troubled debt restructuring (TDR) if the creditor for economic or legal reasons related to the borrower's financial difficulties granted a concession to the borrower that it would not otherwise consider. Concessions varied by program, were borrower-specific, and could include interest rate reductions, term extensions, payment deferrals or the acceptance of additional collateral in lieu of payments. In limited circumstances, principal may have been forgiven. When a restructured loan constituted a TDR, these loans were included within impaired loans under nonaccrual or accruing restructured loans. There were no new TDRs that occurred during the three and six months ended June 30, 2022.

Interest concessions may include interest forgiveness and interest deferment. Principal concessions may include principal forgiveness, principal deferment, and maturity extension. Other concessions may include additional compensation received which might be in the form of cash or other assets.

There were no TDRs that occurred during the previous twelve months and for which there was a subsequent payment default during the three and six months ended June 30, 2022. Payment default is defined as a payment that was thirty days or more past due.

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

	December 31, 2022*	
	Total TDRs	Nonaccrual TDRs
Production and intermediate-term	\$ 529	\$ —
Total loans	\$ 529	\$ —
Additional commitments to lend	\$ —	

*Prior to adoption of CECL on January 1, 2023, loans were presented with accrued interest receivable.

Note 3 — Investments

Investments in Debt Securities

The Association's investments consist of asset-backed securities (ABSs). These ABSs are issued through the Small Business Administration and are guaranteed by the full faith and credit of the United States government. They are held for managing risk. These securities meet the applicable FCA regulatory guidelines related to government agency guaranteed investments.

The Association's investments also consist of Rural America Bonds (RABs), which are private placement securities purchased under the Mission Related Investment (MRI) program approved by the FCA. In its Conditions of Approval for the program, the FCA generally considers a RAB ineligible if its investment rating, based on the internal 14-point probability of default scale used to also grade loans, falls below 9. The FCA requires System institutions to provide notification to FCA when a security becomes ineligible. Any other bonds purchased under the MRI program, approved on a case-by-case basis by FCA, may have different eligibility requirements. At June 30, 2023, the Association held no RABs whose credit quality had deteriorated beyond the program limits.

A summary of the amortized cost and fair value of investment securities held-to-maturity follows:

	June 30, 2023				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
RABs	\$ 5,654	\$ 152	\$ (349)	\$ 5,457	7.99%
ABSs	7,800	—	(151)	7,649	10.58
Total	\$ 13,454	\$ 152	\$ (500)	\$ 13,106	9.49%

December 31, 2022					
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
RABs	\$ 5,691	\$ –	\$ (435)	\$ 5,256	7.97%
ABSs	93	–	(2)	91	3.83
Total	\$ 5,784	\$ –	\$ (437)	\$ 5,347	7.91%

A summary of the contractual maturity, amortized cost and estimated fair value of investment securities held-to-maturity follows:

June 30, 2023			
	Amortized Cost	Fair Value	Weighted Average Yield
In one year or less	\$ –	\$ –	–%
After one year through five years	2,665	2,723	10.27
After five years through ten years	7,800	7,649	10.58
After ten years	2,989	2,734	5.95
Total	\$ 13,454	\$13,106	9.49%

A portion of these investments has contractual maturities in excess of ten years. However, expected maturities for these types of securities can differ from contractual maturities because borrowers may have the right to prepay obligations with or without prepayment penalties.

An investment is considered impaired if its fair value is less than its cost. The following table shows the fair value and gross unrealized losses for investments that were in a continuous unrealized loss position aggregated by investment category. A continuous unrealized loss position for an investment is measured from the date the impairment was first identified. Following the adoption of CECL on January 1, 2023, this table is no longer required for held-to-maturity securities. Therefore, there is no table presented for the current period.

December 31, 2022				
	Less Than 12 Months		12 Months Or Greater	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
RABs	\$ 5,179	\$ (418)	\$ 77	\$ (17)
ABSs	91	(2)	–	–
Total	\$ 5,270	\$ (420)	\$ 77	\$ (17)

The Association evaluates investment securities with unrealized losses for impairment on a quarterly basis. As part of this assessment, it was concluded that the Association does not intend to sell the security, or it is not more likely than not that the Association would be required to sell the security prior to recovery of the amortized cost basis. The Association also evaluates whether credit impairment exists by comparing the present value of expected cash flows to the amortized cost basis of the security. Credit impairment, if any, is recorded as an ACL for debt securities. At June 30, 2023, the Association does not consider any credit-related unrealized losses to be material and an allowance for credit losses is not necessary.

Equity Investments in Other Farm Credit System Institutions

Equity investments in other Farm Credit System institutions are generally nonmarketable investments consisting of stock and participation certificates, allocated surplus, and reciprocal investments in other institutions regulated by the FCA. These investments are carried at cost and evaluated for impairment based on the ultimate recoverability of the par value rather than by recognizing temporary declines in value.

Associations are required to maintain ownership in AgFirst (AgFirst or the Bank) in the form of Class B or Class C stock as determined by the Bank. The Bank may require additional capital contributions to maintain its capital requirements. The Association owned 8.99 percent of the issued stock and allocated retained earnings of the Bank as of June 30, 2023 net of any reciprocal investment. As of that date, the Bank's assets totaled \$43.0 billion and shareholders' equity totaled \$1.6 billion. The Bank's earnings were \$135 million for the first six months of 2023. In addition, the Association held investments of \$583 related to other Farm Credit institutions.

Note 4 — Debt

Notes Payable to AgFirst Farm Credit Bank

The Association's indebtedness to the Bank represents borrowings by the Association to fund its earning assets. This indebtedness is collateralized by a pledge of substantially all of the Association's assets. The contractual terms of the revolving line of credit are contained in the General Financing Agreement (GFA). The GFA also defines Association performance criteria for borrowing from the Bank, which includes borrowing base margin, earnings and capital covenants, among others.

Note 5 — Fair Value Measurement

Fair value is defined 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.

Accounting guidance establishes a hierarchy for disclosure of fair value measurements to maximize the use of observable inputs, that is, inputs that reflect the assumptions market participants would use in pricing an asset or liability based on market data obtained from sources independent of the reporting entity. The hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. A financial instrument's categorization within the hierarchy tiers is based upon the lowest level of input that is significant to the fair value measurement.

The classifications within the fair value hierarchy are as follows:

Level 1 inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2 inputs include quoted prices for similar assets and liabilities in active markets; quoted prices in markets that are not active; and inputs that are observable, or can be corroborated, for substantially the full term of the asset or liability.

Level 3 inputs are unobservable and supported by little or no market activity. Valuation is determined using pricing models, discounted cash flow methodologies, or similar techniques, and could include significant management judgment or estimation. Level 3 assets and liabilities also could include instruments whose price has been adjusted based on dealer quoted pricing that is different than the third-party valuation or internal model pricing.

For a complete discussion of the inputs and other assumptions considered in assigning various assets and liabilities to the fair value hierarchy levels, see the latest Annual Report to Shareholders.

There were no Level 3 assets or liabilities measured at fair value on a recurring basis for the periods presented. The Association had no transfers of assets or liabilities into or out of Level 1 or Level 2 during the periods presented.

Fair values are estimated at each period end date for assets and liabilities measured at fair value on a recurring basis. The following tables summarize assets measured at fair value at period end.

	June 30, 2023					
	Fair Value Measurement Using					Total Fair Value
	Level 1	Level 2	Level 3			
Recurring assets						
Assets held in trust funds	\$ 1,591	\$ —	\$ —	\$ —	\$ —	\$ 1,591
Nonrecurring assets						
Nonaccrual loans	\$ —	\$ —	\$ 2,209	\$ —	\$ —	\$ 2,209
Other property owned	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Other investments	\$ —	\$ —	\$ 4,055	\$ —	\$ —	\$ 4,055

		December 31, 2022			
		Fair Value Measurement Using			Total Fair Value
		Level 1	Level 2	Level 3	
Recurring assets					
Assets held in trust funds	\$	1,124	\$ —	\$ —	\$ 1,124
Nonrecurring assets					
Impaired loans*	\$	—	\$ —	\$ 659	\$ 659
Other property owned	\$	—	\$ —	\$ —	\$ —
Other investments	\$	—	\$ —	\$ 3,384	\$ 3,384

*Prior to the adoption of CECL on January 1, 2023, the fair value of impaired loans included accruing restructured loans and loans past due 90 days and accruing.

Valuation Techniques

Assets held in trust funds

Assets held in trust funds, related to deferred compensation plans, are classified as Level 1. The trust funds include investments in securities that are actively traded and have quoted net asset value prices that are directly observable in the marketplace.

Nonaccrual loans

Fair values of nonaccrual loans are estimated to be the carrying amount of the loan less specific reserves. Certain loans evaluated for impairment under FASB guidance have fair values based upon the underlying collateral, as the loans were collateral-dependent. Specific reserves were established for these loans when the value of the collateral, less estimated cost to sell, was less than the principal balance of the loan. 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.

Other property owned

For other property owned, the fair value is generally determined using formal appraisals of each individual property. These assets are held for sale. Costs to sell represent transaction costs and are not included as a component of the fair value of other property owned. If the process uses observable market-based information, the assets are classified as Level 2. If the process requires significant input based upon management's knowledge of and judgment about current market conditions, specific issues relating to the property and other matters, the assets are classified as Level 3.

Other investments

There are no observable market values for the Association's RBIC investments. These investments are measured at cost, adjusted for any observable sales and impairment.

Note 6 — Employee Benefit Plans

The following is a table of retirement and other postretirement benefit expenses for the Association:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Pension	\$ 212	\$ 250	\$ 401	\$ 457
401(k)	282	268	529	516
Other postretirement benefits	70	80	141	131
Total	\$ 564	\$ 598	\$ 1,071	\$ 1,104

Expenses in the above table are computed using allocated estimates of funding for multi-employer plans in which the Association participates. These amounts may change when a total funding amount and allocation is determined by the respective Plan's Sponsor Committee. Also, market conditions could impact discount rates and return on plan assets which could change contributions necessary before the next plan measurement date of December 31, 2023.

Further details regarding employee benefit plans are contained in the 2022 Annual Report to Shareholders.

Note 7 — Commitments and Contingent Liabilities

From time to time, legal actions are pending against the Association in which claims for money damages are asserted. On at least a quarterly basis, the Association assesses its liabilities and contingencies in connection with outstanding legal proceedings utilizing the latest information available. While the outcome of legal proceedings is inherently uncertain, on the basis of information presently available, management, after consultation with legal counsel, is of the opinion that the ultimate liability, if any, from these actions, would not be material in relation to the financial position of the Association. Because it is remote that the Association will incur a loss or the loss is not estimable, no liability has been recorded for any claims that may be pending.

Note 8 — Subsequent Events

The Association evaluated subsequent events and determined there were none requiring disclosure through August 8, 2023, which was the date the financial statements were issued.