

Your Funding Bank

People. Partnerships. Solutions.

AGRIBANK 2022 ANNUAL REPORT



Who We Are

AgriBank supports local Farm Credit lenders, and our cooperative network helps fulfill the Farm Credit mission to support rural communities and agriculture with reliable, consistent credit and financial services, today and tomorrow.





AgriBank is part of the customer-owned, nationwide Farm Credit System. Under Farm Credit's cooperative structure, AgriBank is primarily owned by local Farm Credit Associations, which provide financial products and services to rural communities and agriculture. AgriBank obtains funds and provides funding and financial solutions to those Associations. AgriBank and those Associations comprise the AgriBank District. The District covers a 15-state area stretching from Wyoming to Ohio and Minnesota to Arkansas. For more information, visit <u>www.AgriBank.com</u>.

Farm Credit

Farm Credit supports rural communities and agriculture with reliable, consistent credit and financial services, today and tomorrow. It has been fulfilling its mission of helping rural America grow and thrive for more than a century with the capital necessary to make businesses successful and by financing vital infrastructure and communication services. For more information, visit <u>www.FarmCredit.com</u>.

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Copies of AgriBank, FCB's annual and quarterly reports and the AgriBank District annual and quarterly unaudited financial information are available free of charge upon request to:

AgriBank, FCB | 30 E. 7th St., Suite 1600 | St. Paul, MN 55101-4914 | (651) 282-8800 | EinancialReporting@AgriBank.com

The reports are also available through AgriBank's website at www.AgriBank.com. The quarterly reports are available approximately 40 days following the end of each calendar quarter, and the annual reports are available approximately 75 days following the end of the calendar year.

Dear Shareholders

We are pleased to report that AgriBank recorded another successful year of funding rural America. Our success stems in large part from our unique structure, which ensures we focus on meeting the needs of our Farm Credit Association customers and owners.

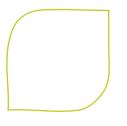
Under the cooperative model of the Farm Credit System, AgriBank and our primary customer/owners—the Farm Credit Association lenders in the 15-state AgriBank District—share a common mission yet have distinct roles. Together, we work toward fulfilling the Farm Credit mission to support rural communities and agriculture with reliable, consistent credit and financial services, today and tomorrow.

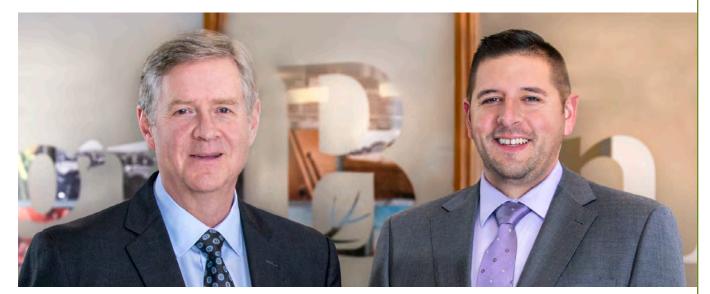
Our Funding Bank Model defines the relationship between AgriBank and District Associations. As a wholesale Funding Bank, AgriBank's purpose is to expertly and reliably obtain funds and prudently provide funding and financial solutions to the Associations. District Associations, in turn, provide loans and financial services to the farmers, ranchers and other rural customers who own them.

From farm fields and production facilities to executive offices and board rooms, people power our business—individuals with deep expertise in agriculture, finance and other specialties, and with an unwavering commitment to our mission-driven cooperative. In addition to their everyday areas of responsibility, these individuals prioritize advancing our mission by collaborating within Farm Credit and beyond to address key issues and needs from accounting and data to risk and technology. Our deliberative, grassroots approach yields effective solutions for today's farmers, ranchers and other borrowers we exist to serve.









Jeff Swanhorst, CEO, AgriBank

When the AgriBank Board of Directors and Executive Leadership Team chart the course of our organization, we are always mindful of our cooperative nature. We understand our role is to support District Associations and, ultimately, the people who feed the world. Every decision we make has the Associations' needs in mind. We know when District Associations thrive, AgriBank thrives. In short, we enthusiastically embrace the notion that we are *Your* Funding Bank.

Strong 2022 Financial Performance

AgriBank's strong 2022 financial results reflect the strength of our Funding Bank Model and the financial strength and operating performance of our Farm Credit Association customer/owners.

- Total loans were \$133.5 billion at December 31, 2022, up \$11.5 billion, or 9.4 percent, compared to December 31, 2021. This increase, mainly in AgriBank's wholesale portfolio, was primarily driven by a rise in agribusiness and real estate mortgage volume throughout the AgriBank District.
- AgriBank's credit quality, as always, reflects the overall financial strength of District Associations and their underlying portfolios of retail loans. AgriBank's portfolio included 99.6 percent of loans classified as acceptable as of December 31, 2022, compared to 98.3 percent at December 31, 2021.
- Total capital remained strong at \$7.2 billion as of December 31, 2022, up \$179.6 million compared to December 31, 2021. This increase was driven primarily by strong net income and net stock issuances, which positively impacted shareholders' equity. These increases were mostly offset by unrealized investment losses (primarily on U.S. Treasury securities and fixed-rate U.S. government guaranteed mortgage-backed securities) related to the rapid increase in interest rates in 2022. Additionally, patronage distributions declared offset the increases in equity. During 2022, a portion of the patronage was distributed as stock, representing what we retained to meet our capital target. AgriBank exceeded all regulatory capital minimum requirements, including additional regulatory buffers.
- Net interest income was \$854.4 million for the year, up \$74.7 million, or
 9.6 percent, compared to the prior year. Net interest income increased mainly due to the positive impact of non-interest bearing funding driven by the sharp rise in interest rates, loan growth in the retail portfolio, and increased spreads on investment securities.
- AgriBank shared this financial success by returning \$773.3 million in earnings to our customer/owners in the form of cash and stock patronage distributions
 \$25.3 million higher than in the previous year.





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Areas of Strategic Focus



Increased loan volume, improved credit quality, capital and liquidity well above regulatory requirements and company targets—all combined to drive strong profitability. This strong financial performance has enabled us to fulfill the financial tenets of our Funding Bank Model, to:

- **Charge what we need**—generate income that allows us to balance cost discipline with making strategic investments
- Keep what we must—maintain appropriate capital levels, consistent with our model, to ensure our safety and soundness over the long term, while meeting all regulatory minimums and buffers
- **Return the rest**—share financial success by paying dividends to preferred stockholders and then paying patronage to customer/owners

With our strong financial foundation, AgriBank is well positioned to support District Associations as they support their borrowers.

Association-centric Achievements

Most AgriBank initiatives don't begin and end in a calendar or fiscal year. Many are multi-year efforts that evolve to meet changing needs and incorporate new ideas. All are Association-centric—that is, they are designed to support District Associations.

In 2022, AgriBank formalized and began implementing the Stockholder Engagement Framework in earnest. The framework is a board-driven, management-supported effort to strengthen relationships between AgriBank and District Associations through organized calls, video conferences and timely personal visits. It also extends to our relationships with other Farm Credit System institutions.

During the past year, AgriBank directors and executives traveled to several District Associations for joint full board and small group meetings. These gatherings helped strengthen our relationships and address key issues facing the Bank, District and Farm Credit. More of these visits are scheduled for 2023. As we continue to build out the framework and process, we look forward to continually strengthening our relationships with District Associations.

Bank and District Association board chairs and vice chairs, along with AgriBank management, traveled together in November 2022 for a Farm Credit System tour from the New York City area to Washington, D.C. We met with leaders from the Federal Farm Credit Banks Funding Corporation, the Farm Credit Council and the Farm Credit Administration (FCA). Our informal discussions and informative meetings gave tour participants an opportunity to network with each other and other Farm Credit leaders, and to gain a deeper understanding of the functions and interconnectedness L

With our strong financial foundation, AgriBank is well positioned to support District Associations as they support their borrowers.





of System institutions. Everyone was very engaged in our agenda, and we returned home with even greater knowledge of how our respective organizations help fulfill the Farm Credit mission. We planted the seeds of stronger relationships that will serve us well over the long term.

Other notable achievements from the past year include:

- Increasing asset pool and loan participation purchases in support of District Associations. Asset pools are designed to assist Association business goals and effectively leverage existing District capital.
- Successfully executing treasury strategies in response to volatile market conditions. Demonstrating the value our asset/liability management adds to the District, AgriBank successfully managed through a period of unprecedented rises in interest rates and volatile capital markets, while producing strong financial results and working collaboratively with Associations to deliver competitively priced products.
- Serving as a System leader in developing a model, policies and disclosures to support the Current Expected Credit Losses (CECL) Accounting Standard implementation, arguably the most impactful accounting change in more than a decade. This included staff experts speaking on the topic at Farm Credit conferences and collaborating in System workgroups.
- Concluding our COVID-19 Business Continuity Plan event. We closed the books on temporary measures designed to keep our business operating without disruption and to keep employees, visitors and the community safe through the global pandemic.

Eye on Significant Headwinds

While we have enjoyed repeated strong financial performance and accomplished a great deal, we cannot rest on our laurels. The Bank, District and Farm Credit as well as rural communities and agriculture—face significant external challenges. In the past year, we saw highly volatile agriculture product prices, operating cost inflation, significantly increased interest rates, and a volatile global economic and political environment. While we have seen some moderating circumstances (such as slowing inflation, although it continues at a very high level), we expect continued uncertainty and volatility for the foreseeable future.





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Neither AgriBank nor our Farm Credit colleagues are sitting idly by in the face of challenges. Consider the topic of environmental, social and governance (ESG), three central factors used to assess an organization's impact on the environment and on people and how the organization is structured. ESG has been and continues to be of increasing interest to many of the Farm Credit System's external and internal stakeholders. Within the Farm Credit System, the Systemwide Risk Assessment conducted in 2019 identified ESG as a rising risk for the System. As a result, the Presidents Planning Committee and Business Practices Committee commissioned a Systemwide ESG Workgroup in August 2021, and since then AgriBank established our own ESG Workgroup.

Whether through formal workgroups or more informal discussions, AgriBank, the District and Farm Credit are contemplating and confronting headwinds on a variety of fronts. AgriBank is participating in these efforts and in some cases facilitating the dialogue. In February 2023, AgriBank adjusted our loan pricing and asset/liability strategy in response to District Association input about strong competition for fixedrate products in the current interest rate environment. After multiple discussions with Association leaders, AgriBank adjusted its funding risk profile to temporarily provide pricing relief on fully pre-payable term debt. In the area of technology and information security we continue to devote considerable resources to modernizing our systems and safeguarding our assets in coordination with and through our primary technology service provider, SunStream Business Services. In addition, we continue to support District Associations in their work to implement and expand their digital lending presence. And in the wake of the pandemic and changing demographics, we are conducting workforce planning to ensure we attract and retain the talent we need to fulfill our mission.

A Durable Business Model

The AgriBank board recently affirmed our Funding Bank Model, which has effectively positioned AgriBank to contribute to the success of District Associations. Based on Association feedback and our philosophy of continuous improvement, the Bank is now considering ways to enhance the existing model. Accordingly, the board also reaffirmed our four Areas of Strategic Focus: Culture & People, Client Service, Operational Strength and Funding Bank Model Optimization—adjusting the latter from Capital Optimization.

The process of optimizing the Funding Bank Model will be a cooperative effort with District Associations. We will continue to engage the boards and management of District Associations in a disciplined process to discuss ways to enhance AgriBank's capital structure and the Funding Bank Model relationship between the Bank and Associations. The input and feedback we are collecting will factor into specific proposed enhancements.



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In all that we do, we are committed to facilitating:

- Alignment—striving to move the Bank, District Associations and other Farm Credit partners in the same direction under common goals
- Collaboration—supporting and partnering with each other to fulfill our common mission
- Communication—exchanging information to create greater transparency in the District
- Listening—understanding each other's needs and ideas for how to better serve rural America while embracing new opportunities and tackling new challenges
- Relationships—getting to know each other better so we can build trust and develop stronger ways of working together successfully ... after all, our success is mutually dependent

Through this approach, we are confident the Bank, District and Farm Credit will continue to thrive, and help rural communities and agriculture do the same.

Congratulations to AgriBank District Associations on another successful year helping America's farmers, ranchers and others feed the world. We're proud to partner with you as Your Funding Bank on this important and noble mission.

We also want to express appreciation to our many other stakeholders, including AgriBank employees, who haven't skipped a beat through several years of pandemicdriven changes; bondholders and preferred stockholders, who have entrusted us with their investments; and the American public, who through Congress continue to recognize the need for a reliable and consistent source of credit for agricultural producers. We're Your Funding Bank, too.

Since 1916, Farm Credit has been a steady hand helping rural communities and agriculture overcome obstacles and become a reliable, consistent source of food and fiber for the world. At AgriBank, we're confident we have the people, partnerships and solutions in place to continue this journey for generations to come.

nicklaue & Vande Weerd Jeffrey R. Landort

Nicklaus J. Vande Weerd Jeffrey R. Swanhorst Chair, AgriBank, FCB

March 1, 2023

CEO, AgriBank, FCB





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Performance Highlights



STRONG NET INCOME GENERATES RECORD PATRONAGE REFUNDS

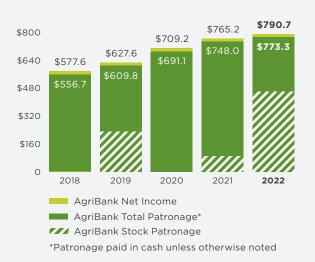
- AgriBank returned \$773.3 million in earnings to our owners in the form of cash and stock patronage distributions—sharing our financial success with our customer/owners after maintaining appropriate capital levels to ensure our safety and soundness, and meeting all regulatory minimums and buffers
- Net income of \$790.7 million was driven primarily by continued strong net interest income mainly due to the positive impact of non-interest bearing funding driven by the sharp rise in interest rates, loan growth in the retail portfolio, and increased spreads on investment securities
- Return on assets of 53 basis points, which exceeded our target of 50 basis points, resulted from continued strong AgriBank net income

AgriBank Net Income and Patronage

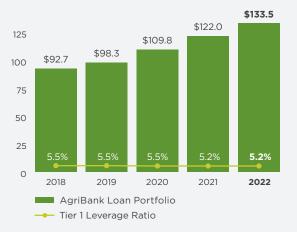
MILLIONS OF DOLLARS

DISTRICT ASSOCIATION LOAN GROWTH BOOSTS AGRIBANK LOAN PORTFOLIO

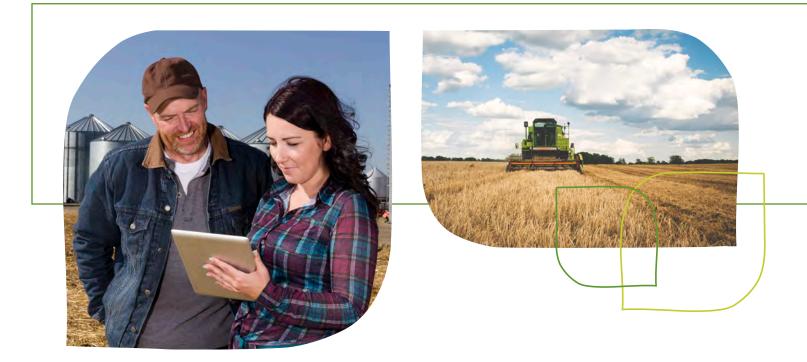
- The AgriBank loan portfolio increased 9.4 percent from the previous year to \$133.5 billion with nonadverse credit quality remaining strong at 99.8 percent, reflecting growth in wholesale loans to District Associations
- We optimize capital by first retaining what we need to meet our capital targets and distributing the remainder as cash patronage, resulting in a tier 1 leverage ratio of 5.2 percent, aligned with our capital plan target. Total regulatory capital far exceeded requirements, reflecting continued robust capital levels.
- Asset pool programs continued to expand, efficiently leveraging District capital, driven by the Bank and District Associations fulfilling the Farm Credit mission to provide reliable, consistent credit and financial services



AgriBank Loan Portfolio and Leverage Ratio BILLIONS OF DOLLARS OR %



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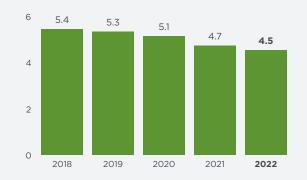


STRATEGIC INVESTMENTS POSITION AGRIBANK FOR LONG-TERM SUCCESS

- The AgriBank net operating rate decreased compared to the previous year
- We continued a balanced focus on disciplined management of operating expenses while maintaining operational strength and investing in people and technology

STRONG EARNINGS REFLECT CONTINUED DISTRICT FINANCIAL STRENGTH

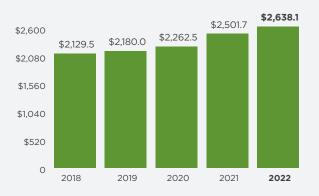
- Net income for the District was \$2.6 billion, attributable to strong net interest income due to growth in loan volume across the District
- Agriculture fared well in 2022, despite economic headwinds, resulting in reversals of provision for credit losses positively impacting net income



AgriBank Net Operating Rate BASIS POINTS

District Net Income BILLIONS OF DOLLARS





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CUSTOMER/OWNERS BENEFIT FROM PRUDENT LEVERAGING OF DISTRICT CAPITAL

- The District loan portfolio increased 8.3 percent from the previous year to \$152.1 billion, driven by District Associations fulfilling the Farm Credit mission to support customers with reliable, consistent credit
- District Associations returned \$1.0 billion of patronage to customers
- District shareholders' equity as a percentage of total assets was 15.7 percent, reflecting continued robust capital levels and significant loan growth

DISTRICT CREDIT QUALITY CONTINUES TO IMPROVE

- The District portfolio had 98.4 percent nonadverse loans, the fourth-consecutive year of improvement and the strongest credit quality since 2015
- District credit quality reflects disciplined underwriting, advantageous commodity prices for certain sectors, and the favorable economic environment for agriculture



District Loan Portfolio and Equity Position BILLIONS OF DOLLARS OR %

District Credit Quality





Board of Directors



Standing from left to right: Mark Pierce, Laura Braun, Tim Rowe, Matthew Walther, Tony Wolfe, John Schmitt, Donald Blankenship, Stan Claussen (Vice Chair), Nick Vande Weerd (Chair), Ivar Chhina*, Randy Peters, Chris Roberts, Steven Cunningham*, Jeff Austman, George Stebbins

Seated from left to right: Rollin Tonneson, Dale Crawford, Robert Bruxvoort

*Appointed directors; all others elected



Executive Leadership Team



Jeff Swanhorst Chief Executive Officer



Jim Jones Chief Credit Officer



Jeff Moore Chief Financial Officer



Jeremy Renger Chief Risk and Information Officer



Barbara Stille Chief Administrative Officer and General Counsel

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District Associations

Farm Credit Associations in the AgriBank District provide farmers, ranchers and other rural borrowers in their local communities with the capital they need to make their businesses successful.

AgriBank supports the following Farm Credit Associations that serve rural communities and agriculture in the 15 states of the AgriBank District. Under our cooperative structure, the farmers, ranchers and agribusinesses Farm Credit serves own these District Associations, which in turn are the primary customers and owners of AgriBank.



(701) 282-9494 www.agcountry.com



AgHeritage Farm Credit Services, ACA 119 E. Third St., Suite 200 Little Rock, AR 72201 (800) 299-2290 www.agheritagefcs.com



Compeer Financial, ACA 2600 Jenny Wren Trail Sun Prairie, WI 53590 (844) 426-6733 www.compeer.com



FCS FINANCIAL FCS Financial, ACA 1934 E. Miller St. Jefferson City, MO 65101 (573) 635-7956

www.myfcsfinancial.com



Farm Credit Illinois, ACA 1100 Farm Credit Drive Mahomet, IL 61853 (217) 590-2200 www.farmcreditil.com



Farm Credit Mid-America, ACA 12501 Lakefront Place Louisville, KY 40299 (502) 420-3700 www.e-farmcredit.com



Farm Credit Midsouth, ACA 3000 Prosperity Drive Jonesboro, AR 72404 (870) 932-2288 www.farmcreditmidsouth.com

Farm Credit Services of America, ACA 5015 S. 118th St. Omaha. NE 68137 (402) 348-3333 www.fcsamerica.com

Farm Credit Services of Mandan, ACA 1600 Old Red Trail Mandan, ND 58554 (701) 663-6487 www.farmcreditmandan.com

Farm Credit Services of Western Arkansas, ACA 3115 W. 2nd Court Russellville, AR 72801 (479) 968-1434 www.myaglender.com

Farm Credit Southeast Missouri, ACA 1116 N. Main St. Sikeston, MO 63801 (573) 471-0342 www.farmcreditsemo.com

GreenStone Farm Credit Services, ACA 3515 West Road East Lansing, MI 48823 (800) 968-0061 www.greenstonefcs.com

Farm Credit Services of America

















Five-Year Summary of Selected Financial Data

AgriBank, FCB

(in thousands)					
As of December 31,	2022	2021	2020	2019	2018
Statement of Condition Data					
Loans	\$133,470,781	\$121,994,112	\$109,785,695	\$98,298,023	\$92,716,701
Allowance for loan losses	31,739	37,558	39,850	32,089	25,571
Net loans	133,439,042	121,956,554	109,745,845	98,265,934	92,691,130
Investment securities	20,093,923	18,392,628	18,585,329	14,368,158	13,997,742
Other assets	2,929,803	2,067,414	1,976,960	2,597,978	3,082,812
Total assets	\$156,462,768	\$142,416,596	\$130,308,134	\$115,232,070	\$109,771,684
Obligations with maturities of one year or less	\$43,567,311	\$40,197,641	\$38,774,768	\$35,027,231	\$33,345,735
Other obligations with maturities greater than one year	105,709,901	95,213,040	84,953,849	74,022,446	70,538,184
Total liabilities	149,277,212	135,410,681	123,728,617	109,049,677	103,883,919
Perpetual preferred stock	250,000	250,000	250,000	250,000	250,000
Capital stock and participation certificates	4,664,821	3,826,290	3,301,599	2,871,767	2,551,085
Allocated retained earnings	-	1,377	1,550	227	191
Unallocated retained earnings	3,139,365	3,139,203	3,139,203	3,138,311	3,136,359
Accumulated other comprehensive loss	(868,630)	(210,955)	(112,835)	(77,912)	(49,870)
Total shareholders' equity	7,185,556	7,005,915	6,579,517	6,182,393	5,887,765
Total liabilities and shareholders' equity	\$156,462,768	\$142,416,596	\$130,308,134	\$115,232,070	\$109,771,684
For the year ended December 31,	2022	2021	2020	2019	2018
Statement of Income Data					
Net interest income	\$854,444	\$779,788	\$714,361	\$681,545	\$590,726
Provision for credit losses	(6,000)	1,000	11,000	11,500	5,500
Other expense (income), net	69,747	13,577	(5,818)	42,452	7,587
Net income	\$790,697	\$765,211	\$709,179	\$627,593	\$577,639
Key Financial Ratios					
For the Year					
Return on average assets	0.53 %	0.57 %	0.58 %	0.56 %	0.55 %
	0.53 % 11.36 %	0.57 % 11.13 %	0.58 % 10.97 %	0.56 % 10.36 %	
Return on average assets					9.94 %
Return on average assets Return on average shareholders' equity	11.36 %	11.13 %	10.97 %	10.36 %	9.94 % 0.56 %
Return on average assets Return on average shareholders' equity Net interest income as a percentage of average earning assets	11.36 % 0.58 %	11.13 % 0.59 %	10.97 % 0.59 %	10.36 % 0.62 %	9.94 % 0.56 %
Return on average assets Return on average shareholders' equity Net interest income as a percentage of average earning assets Net charge-offs as a percentage of average loans	11.36 % 0.58 %	11.13 % 0.59 %	10.97 % 0.59 %	10.36 % 0.62 %	9.94 % 0.56 % 0.01 %
Return on average assets Return on average shareholders' equity Net interest income as a percentage of average earning assets Net charge-offs as a percentage of average loans At Year End	11.36 % 0.58 % 0.00 %	11.13 % 0.59 % 0.00 %	10.97 % 0.59 % 0.00 %	10.36 % 0.62 % 0.01 %	9.94 % 0.56 % 0.01 % 5.36 %
Return on average assets Return on average shareholders' equity Net interest income as a percentage of average earning assets Net charge-offs as a percentage of average loans At Year End Shareholders' equity as a percentage of total assets	11.36 % 0.58 % 0.00 % 4.59 %	11.13 % 0.59 % 0.00 % 4.92 %	10.97 % 0.59 % 0.00 % 5.05 %	10.36 % 0.62 % 0.01 % 5.37 %	9.94 % 0.56 % 0.01 % 5.36 %
Return on average assets Return on average shareholders' equity Net interest income as a percentage of average earning assets Net charge-offs as a percentage of average loans At Year End Shareholders' equity as a percentage of total assets Allowance for loan losses as a percentage of loans Debt to shareholders' equity (:1) Common equity tier 1 capital ratio	11.36 % 0.58 % 0.00 % 4.59 % 0.02 % 20.6 16.3 %	11.13 % 0.59 % 0.00 % 4.92 % 0.03 % 19.2 16.8 %	10.97 % 0.59 % 0.00 % 5.05 % 0.04 % 18.7 16.6 %	10.36 % 0.62 % 0.01 % 5.37 % 0.03 % 17.5 17.1 %	9.94 % 0.56 % 0.01 % 5.36 % 0.03 % 17.5 17.7 %
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Management's Discussion and Analysis

AgriBank, FCB

The following commentary is a review of the financial condition and results of operations of AgriBank, FCB (AgriBank, the Bank, we, us, our) and provides additional specific information. The accompanying Financial Statements and Notes to the Financial Statements also contain important information about our financial condition and results of operations.

Farm Credit System

The Farm Credit System (the System) provides loans, leases and financial services to farmers, ranchers, farmer-owned cooperatives, other agribusinesses and rural homebuyers across all 50 U.S. states and Puerto Rico. This focus on rural communities and agriculture is the reason Farm Credit was established over 100 years ago, and the System has been delivering on that mission ever since.

While the System has a national footprint, lenders are local—as of January 1, 2023, 61 independently owned and operated Farm Credit Associations provide services in local communities. Each Farm Credit Association is a cooperative that is owned by its members and has employees and a board of directors who have a deep understanding of agriculture in their area. This expertise enables them to understand the industry sectors they finance and provide an unparalleled level of knowledge and service to customer/owners.

Combined, Farm Credit organizations provide over \$362 billion in loans and leases. Farm Credit provides more than 44 percent of the credit used by U.S. agriculture. This capital helps over 605 thousand customer/owners buy or lease land and equipment, build facilities, purchase inventory, export products, operate farms and businesses, and much more. Farm Credit also offers cash management services, crop insurance, credit life insurance and other financial services. Farm Credit finances agricultural cooperatives and communications, electric, power and water providers that deliver essential infrastructure services to maintain vibrant rural communities.

Farm Credit Associations receive funding through one of four System Banks, including AgriBank. System entities have specific lending authorities within their chartered territories. We, and the other System Banks, raise funds primarily by issuing debt securities with broad ranges of maturities and structures through the System's agent, the Federal Farm Credit Banks Funding Corporation (the Funding Corporation). These bonds are insured by the Farm Credit System Insurance Corporation (FCSIC or the Insurance Corporation). System Banks and Associations are subject to examination and regulation by an independent federal agency, the Farm Credit Administration (FCA).

The Farm Credit System 2022 Annual Information Statement, issued by the Funding Corporation, includes additional information about the System, its funding activities and its combined financial results. You can obtain a copy of that report by contacting the Funding Corporation or visiting <u>www.farmcreditfunding.com.</u>

AgriBank

AgriBank is part of the customer-owned, nationwide Farm Credit System. Under Farm Credit's cooperative structure, AgriBank is primarily owned by local Farm Credit Associations, which provide financial products and services to rural communities and agriculture. AgriBank obtains funds and provides funding and financial solutions to those Associations. AgriBank and those Associations comprise the AgriBank District. The District covers a 15-state area stretching from Wyoming to Ohio and Minnesota to Arkansas.

Our primary purpose, established by the board and management, is to expertly and reliably obtain funds and prudently provide funding and financial solutions to District Associations. Prudent lending standards and unwavering attention to risk management have resulted in a strong balance sheet. This balance sheet facilitates ongoing access to the financial markets, offering funding in the form of loan products with a wide variety of maturities, repricing and repayment options to District Associations. District Associations share in the positive benefits of a strong Funding Bank through consistent access to capital, a broad array of financial products they use to serve their customer/owners, and an appropriate return on their investment through patronage distributions.

Risk Management

Risk is inherent in our business, necessitating that sound risk management practices be a fundamental component of our operations. Some of the major types of risk in our business are:

- <u>Credit risk</u> is the risk of loss arising from a borrower or counterparty failing to perform on an obligation.
- Interest rate risk is the risk that changes in interest rates may adversely affect operating results and financial condition.
- <u>Liquidity risk</u> is the risk of loss arising from the inability to timely meet operating and funding needs without incurring excessive costs.
- <u>Operational risk</u> is the risk of loss resulting from inadequate or failed internal processes or systems, errors by employees or external events.
- <u>Reputational risk</u> is the risk of loss resulting from events, real or perceived, that shape the image of the Farm Credit System or any of its entities.

These and other risks, and the methods we use to manage them, are discussed throughout this Annual Report.

Our prudent and disciplined approach to risk management includes an enterprise risk management structure established to identify emerging and existing risks and evaluate risk implications of the decisions and actions of AgriBank and others. Enterprise risk management enables us to:

- Effectively assess, prioritize, monitor and report key organizational risks, enhancing our ability to achieve our business objectives
- Embed a risk-aware culture and risk appetite throughout AgriBank
- Identify and implement strategies to mitigate risk where appropriate
- Ensure we are adequately compensated for the risks that we take

Our board oversees risk management by adopting policies to guide the organization's risk governance framework and by monitoring performance against established risk limits. Management's first line roles establish controls to guide the day-to-day risk management activities of the organization within the risk limits and framework approved by our board. The various risk, controls and compliance oversight functions established by management are the second line roles. We maintain an independent internal audit function as the third line to monitor risk management and policy compliance to assure that management control functions are operating within the board-approved policies. The Vice President of Internal Audit reports to the board through the Audit Committee. Our board, through various committees, monitors this risk framework. This structure and board oversight promotes effective risk management of major types of risk and fosters the establishment and maintenance of an effective risk culture throughout the Bank. To enhance financial reporting governance and internal controls, we have voluntarily adopted an integrated audit with respect to internal controls over financial reporting. We mirror the material provisions of the Sarbanes-Oxley Act of 2002, including section 404, *Management Assessment of Internal Control over Financial Reporting* (ICFR). This also supports the Farm Credit System-level attestation, as well as a strong control environment through awareness, documentation and testing of key controls for all significant processes supporting ICFR. In addition, our independent auditor provides an opinion on the effectiveness of our ICFR program.

Forward-Looking Information

This Annual Report includes, and our representations may from time to time make, projections regarding financial information and statements concerning future economic performance and events, plans and objectives relating to management, operations, products and services and assumptions underlying these projections and statements. These projections and statements represent only our belief regarding future events, many of which, by their nature, are inherently uncertain and outside our control. These projections and statements may address, among other things, business strategy, competitive strengths, goals, market and industry developments and the growth of our businesses and operations. The words "anticipate," "believe," "estimate," "expect," "intend," "outlook" and similar expressions, as they relate to AgriBank or its management, are intended to identify forward-looking statements. Such statements reflect the current views of AgriBank with respect to future events and are subject to certain risks, uncertainties and assumptions, including the risk factors described in this Annual Report. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results or our outlook may vary materially from those described herein as anticipated, believed, estimated, expected or intended.

Such forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual results may differ from those in the forward-looking statements as a result of various factors. The information contained in this Annual Report, including without limitation, the information under "Management's Discussion and Analysis" identifies important factors that could cause such differences, including, but not limited to, a change in the U.S. agricultural economy, overall economic conditions, changes

in interest rates, and the effect of new legislation or government regulations or directives. The information in this report is based on current knowledge and are subject to many risks and uncertainties including, but not limited to:

- Political (including trade policies, environmental policies, and civil unrest), legal, regulatory, financial markets and economic or other conditions and developments in the United States and abroad
- Length and severity of an epidemic or pandemic
- Economic fluctuations in the agricultural, international, rural and farm-related business sectors
- Weather-related, disease and other adverse climatic or biological conditions that periodically occur and can impact agricultural productivity and income
- Changes in U.S. government support of the agricultural industry (including government support payments) and the System as a government-sponsored enterprise, as well as investor and rating agency reactions to events involving the U.S. government, other government-sponsored enterprises and other financial institutions
- Actions taken by the Federal Reserve System in implementing monetary policy
- Cybersecurity risks, including a failure or breach of our operational or security systems or infrastructure, or those of our third-party vendors or other service providers
- Credit, interest rate and liquidity risk inherent in our lending activities
- Disruptive technologies impacting the banking and financial services industries or implemented by our competitors which negatively impact our ability to compete in the marketplace
- Changes in our assumptions for determining the allowance for credit losses and fair value measurements
- Industry outlooks for agricultural conditions
- Price, supply and demand within the gas and oil industry
- Changes in interest rate indices utilized in our lending, derivative and funding contracts

Refer to additional discussion in the Risk Factors section at the end of this report.

Financial Overview

AgriBank's financial strength is evidenced by our financial performance in 2022. This strength translates into lasting value for our customer/owners and reflects our commitment to the Farm Credit mission to support rural communities and agriculture. Our financial results reflect our focus on the Funding Bank Model, which optimizes Bank profitability and capital and maintains a District view of success rooted in cooperative principles.

We continue to follow our financial framework, which focuses on operational strength and disciplined cost management combined with appropriate levels of net income and capital consistent with our inherent risk. Under this framework, our 2022 return on average assets ratio was 53 basis points, in excess of our 50 basis point target.

Net income was \$790.7 million, an increase of 3.3 percent from the prior year, primarily driven by the positive impact of the sharp rise in interest rates on the benefit on non-interest bearing funding, loan growth in the retail portfolio, and increased spreads on investment securities.

Refer to the Results of Operations section for further discussion.

Total loans were \$133.5 billion at December 31, 2022, a 9.4 percent increase from the prior year, primarily attributable to wholesale loan growth and, to a lesser extent, increases in retail loans.

Our loan portfolio credit quality was strong at 99.6 percent acceptable under the FCA's Uniform Classification System at December 31, 2022, compared to 98.3 percent at December 31, 2021. This strong credit quality reflects the overall strength of District Associations and their underlying portfolios of retail loans, which they pledge as collateral on their wholesale lines of credit with us. The credit quality of our retail loan portfolio (accounting for approximately 11 percent of our total loan portfolio) increased to 95.8 percent acceptable at December 31, 2022, compared to 95.4 percent acceptable at December 31, 2021. The improvement in acceptable percentage was primarily the result of continued strong net farm income and commodity prices in certain sectors in 2022. Refer to the Loan Portfolio section for additional discussion about how other factors may impact our loan portfolio performance.

Strong capital levels ensure we are well-positioned to manage the cyclical characteristic of the agricultural market, as well as the challenges and uncertainty of the overall economic environment. Total capital remained strong at \$7.2 billion as of December 31, 2022, an increase of \$179.6 million compared to December 31, 2021. This increase was driven primarily by strong net income and net stock issuances, which positively impacted shareholders' equity. These increases were mostly offset by unrealized investment losses (primarily on U.S. Treasury securities and fixed-rate U.S. government guaranteed mortgage-backed securities) related to the

rapid increase in interest rates in 2022. Additionally, patronage declared reduced shareholders' equity. During 2022, a portion of the patronage was distributed as stock, representing what we retained to meet our capital target. Our capital reflects strong risk-based regulatory capital measures while meeting the non-risk-based regulatory capital measure to maintain a targeted tier 1 leverage ratio. Refer to the Shareholders' Equity section for further discussion.

Economic Conditions

Interest Rate Environment

Economic activity is facing headwinds due to tightening of financial conditions, COVID-19 lockdowns in China, and the Russian invasion of Ukraine. U.S. gross domestic product is forecasted to grow by approximately 0.5 percent in 2023. The unemployment rate has declined below 4.0 percent and is expected to remain low with the current high number of job openings. Consumer price inflation has been elevated due to imbalances between supply and demand. The monthly inflation rate in October through December 2022 showed signs of improvement, but inflation is still running well above the Federal Reserve's 2.0 percent target on an annualized basis.

Due to the high price inflation rate in 2022, the Federal Open Market Committee (FOMC) has tightened monetary policy and further raised the federal funds rate to a target range of 4.50 to 4.75 percent at its February 2023 meeting. The FOMC began to reduce the size of its balance sheet in June 2022, and its projection for interest rates suggests that it will raise the fed funds target rate to over 5.00 percent by the end of 2023. As of the end of January 2023, the fed funds futures market suggested the FOMC will increase the fed funds rate to about 5.25 percent by the middle of 2023 and then begin to slowly lower the fed funds rate.

With the high rate of price inflation and monetary tightening by the FOMC, U.S. Treasury yields moved higher in 2022. Short term bond yields moved higher than longer term bond yields causing the yield curve to invert. Economists expect the U.S. Treasury bond yield curve to remain inverted as the FOMC maintains the fed funds target rate above longer term U.S. Treasury yields.

We manage interest rate risk consistent with policies established by the board of directors and limits established by AgriBank's Asset/Liability Committee (ALCO). While many factors can impact our net interest income, management expects that financial performance will remain relatively consistent under most interest rate environments over the next 12 months (refer to the Interest Rate Risk Management section).

Agricultural Conditions

On February 7, 2023, the U.S. Department of Agriculture's Economic Research Service (USDA-ERS) released its initial forecast of the U.S. aggregate farm income and financial conditions for 2023 and updated its 2022 forecast. The revised 2022 net farm income (NFI) forecast of \$162.7 billion represented a \$21.8 billion nominal increase from 2021, up 15.5 percent, with income increasing for the third consecutive year. When adjusting for inflation, the 2022 NFI forecast would be at the highest level since 1973. The initial 2023 NFI projection of \$136.9 billion would represent a nominal decline of \$25.8 billion, or 15.9 percent, from the revised 2022 NFI forecast. While the initial NFI projection for 2023 is down substantially from 2022, if realized, that income level would still surpass the 20-year average estimated real net farm income level by \$28.7 billion or 26.6 percent and would mark the fifth highest level since the 1970s in real terms.

The declining 2023 NFI forecast is largely driven by an expected \$23.5 billion nominal decline, or 4.3 percent, in cash receipts, a \$5.4 billion drop, or 34.6 percent, in direct government payments combined with an \$18.2 billion increase, or 4.1 percent, in production expenses compared to 2022. Those factors are expected to be partially offset by an \$18.7 billion downward adjustment to inventories and a \$3.2 billion increase in cash farm-related income. USDA-ERS forecasts a slight deterioration in the farm sector balance sheet as total sector debt increases at a slightly higher pace than the increase in assets, resulting in a small increase in the debt-to-asset ratio for the first time since 2020. At 13.2 percent, the 2023 farm sector debt-to-asset ratio would be slightly above the estimated 20-year average, but well below the all-time highs of over 20 percent in the mid-1980s.

Crop prices remain high in early 2023. Drought-reduced U.S. production in 2022, combined with small carryover stocks from the year prior, South American production issues in recent years and the Russian invasion of Ukraine have all provided underlying supply-side price support for crops. Demand prospects for U.S. crops have faced headwinds due to the high crop price environment, a firm U.S. dollar, and the expectation for a strong recovery in Brazilian crop production in 2023. USDA forecasts that U.S. corn and soybean exports will be down 22.1 percent and 7.8 percent, respectively, during the 2022/23 marketing year as Chinese corn imports decline, while a record large 2023 Brazilian soybean crop and limited U.S. supplies are expected to cause a rebound in Brazilian crop exports. High input costs remain a top concern for producers in 2023, but fertilizer prices are down from the highs of mid-2022. Given crop price futures and input costs as of early 2023, crop producers could have opportunities for another year of favorable returns.

High crop prices remain a challenge for livestock, dairy and poultry industries as feed is the highest variable expense for those operations. Restrained production levels, including contracting beef cow and swine herds and disease-reduced egg layer and turkey flocks, have supported high animal protein prices, which has lessened the impact of historically high feed costs. Solid growth in chicken production the second half of 2022 has been negative for broiler prices, but the prevalence of contract growers in the broiler sector limits the impact of the lower prices on those producers. Falling international dairy product prices and record high hay prices have been negative for the U.S. dairy market. Early 2023 milk price and corn futures indicate that spot dairy margins will be negative for many producers early in the year before improving in the second half of 2023.

Despite the high input cost environment for crop producers and high feed costs for the animal protein sector, the U.S. agriculture sector is positioned well in 2023. The farm sector balance sheet remains strong and while sector working capital is expected to deteriorate in 2023, many producers' working capital positions should remain favorable. Many factors, including weather, trade, government and monetary policy, global agricultural production levels, and pathogenic outbreaks in livestock and poultry, may keep agriculture market volatility elevated for the next few years. Implementation of cost-saving technologies, marketing methods and risk management strategies will continue to cause a wide range of results among the respective agricultural producers.

Industry Conditions

We assess the outlook for commodities with the largest concentrations in our Districtwide portfolio. These outlooks are for the industry in general, and individual producers may perform better or worse than the industry as a whole.

<u>Corn</u>

The February 2023 USDA World Agricultural Supply and Demand Estimates (WASDE) report projects the 2022 U.S. corn crop at 13.7 billion bushels, an 8.9 percent decrease from the 2021 crop estimate. The lower production paired with limited 2021/22 carryover stocks are estimated to bring total 2022/23 marketing year U.S. corn supplies to the lowest level in nine years. USDA estimates the 2022/23 average corn price to be \$6.70 per bushel, up \$0.70 per bushel from the prior marketing year and the second highest level on record. High U.S. prices and contracting livestock herds are providing demand headwinds for the U.S. corn market. Corn export sales and shipments have lagged expectations into early 2023 resulting in downward revisions to USDA corn export projections. Feed and residual use is projected to contract 7.7 percent during the 2022/23 marketing year, while corn used for ethanol is projected to decline 1.4 percent. Although reduced demand is negative for prices, Argentine and Ukraine production concerns and the lower 2022 U.S. production provide underlying support for the U.S. corn market. Elevated production expenses and higher interest rates are expected to make the 2023 corn crop expensive to produce; however, based on early 2023 price and cost expectations, producers are generally expected to be profitable over the next year.

Soybeans

The February 2023 WASDE projects a 2022 soybean crop of 4.3 billion bushels, a decrease of 4.2 percent from the estimated record large 2021 crop, resulting in a 3.6 percent annual decline in total U.S. soybean supplies for the 2022/23 marketing year. USDA projects domestic soybean demand to rise 1.9 percent during the 2022/23 marketing year as crush increases. Soybean exports are forecast to decline 7.8 percent as low river levels during the fall of 2022, high prices and expectations of a record large Brazilian soybean crop have limited U.S. soybean export prospects. Total demand for U.S. soybeans is projected to decline 2.8 percent. The decline in U.S. production is expected to more than offset the reduced demand resulting in a decline in ending stocks. The 2022/23 U.S. soybean ending stocks-to-use ratio is projected to fall to the lowest level in seven years. USDA projects a \$14.30 per bushel average price for the 2022/23 marketing year, up \$1.00 per bushel from the prior marketing year and second highest level on record. Based on early 2023 price and cost expectations, soybean growers should again be profitable over the next year.

<u>Wheat</u>

The February 2023 WASDE projects a 2022/23 total wheat crop of 1.65 billion bushels, nearly flat with 2021 production levels, while beginning stocks are estimated to decline for the fifth consecutive year. The flat production and the smaller beginning stocks are projected to result in the smallest total U.S. wheat supply in 20 years. Wheat demand is forecast to be up 0.6 percent for the 2022/2023 marketing year as declining exports are more than offset by higher domestic use. The tighter supply along with strength in the corn and soybean markets provide underlying support for the wheat market. USDA projects the 2022/23 average wheat price to be \$9.00 per bushel, up \$1.37 per bushel and a new record high level. Winter wheat plantings in the fall of 2022 are estimated to be at the highest level in eight years. High futures prices along with elevated crop insurance guarantee prices encouraged the acreage expansion despite the continuation of severe drought in key wheat producing areas of the Southern Plains.

Cow-Calf

Annual feedlot placements for 2022 were 1.5 percent below 2021 levels as the beef cow herd contracted for three consecutive years. USDA estimates that the U.S. beef cow herd was down 3.6 percent annually at the start of 2023, declining to the lowest level since 1962. High feed costs and drought conditions in key cattle and hay regions have been negative for feeder cattle prices and cow-calf operator returns in recent years. USDA estimates that December 1, 2022 U.S. on-farm hay stocks declined 9.0 percent from

the year prior and were at the lowest level since 1954 resulting in record high prices for hay in 2022. High feed costs and drought continue to be a concern for the cattle market in 2023, but as the supply of cattle continues to tighten and processing capacity expands, pricing leverage should continue to shift from packers to feedlots and cow-calf operators to ensure consumer demand is met. The USDA January 2023 Livestock, Dairy, and Poultry Outlook estimates that the Oklahoma feeder steer price will average \$203.00/cwt. in 2023, up from the estimated \$165.94/cwt. in 2022 and \$146.95/cwt. in 2021.

Cattle Feedlots

The February 2023 WASDE projects 2022 beef production of 28.4 billion pounds, an increase of 1.2 percent compared to 2021 production. Beef production for 2023 is forecast to decline 6.3 percent to the lowest level since 2017. USDA estimates the 2022 average steer price to be \$144.40/cwt., and projects a 2023 price of \$159.00/cwt. The 2022 calf crop was estimated to be 34.5 million head, which is down 2.0 percent from the 2021 crop, while feeder cattle supplies outside of feedlots were estimated to be down 3.3 percent annually as of October 1, 2022. Declines of both metrics imply a smaller supply of cattle available to be placed in feedlots in the near term. Based on tighter supplies and continued strength in beef prices, USDA expects fed cattle prices to remain firm in 2023.

Dairy

The February 2023 WASDE projects a 0.8 percent increase in 2023 U.S. milk production following the low 0.1 percent estimated growth during 2022. The U.S. dairy herd expanded slightly the first half of 2022 as milk prices and margins were well above the historical average. USDA expects a small contraction in the dairy herd during 2023 based on lower milk prices and steady to higher feed cost expectations. The February 2023 WASDE projects the Class III milk price to average \$17.90/cwt. in 2023, down from the \$21.94/cwt. 2022 average. The Class IV milk price is projected to decline \$6.22/cwt. to \$18.25/cwt., resulting in a \$4.86/cwt. decline in the all milk price to \$20.70/cwt. The anticipated decline in milk prices and elevated labor, fertilizer, feed, forage, and energy prices are expected to cause negative spot dairy margins for many producers the first half of 2023 before improvement occurs the second half of the year.

<u>Pork</u>

The February 2023 WASDE projects 2023 pork production of 27.5 billion pounds, an increase of 1.6 percent compared to 2022 production, but down nearly a percent from 2021 production levels. Declining export prospects with the recovery of Chinese pork production, persistent domestic swine disease outbreaks, uncertainty over the Supreme Court ruling on California's Proposition 12 (animal welfare requirements), and high construction costs have all impacted pork production over the past few years. The December 2022 USDA Quarterly Hog and Pigs report did indicate a small year-over-year increase in the breeding herd and pigs per litter which is expected to be supportive for growth in 2023 pork production. USDA estimates the 2022 average national hog price to be \$71.21/cwt. and projects a 2023 price of \$66.50/cwt. High cost of production will remain a negative factor for producers in 2023 as labor and feed prices, especially corn and soybean meal, have escalated materially and driven up the cost of production. Early 2023 cash prices and the futures price curve indicate that hog producer margins will be mixed in 2023 with poor margins early in the year before recovery occurs over the summer.

<u>Timber</u>

The U.S. Census Bureau reported December 2022 seasonally adjusted annualized housing starts of 1.38 million, which is down 21.8 percent from December 2021. New seasonally adjusted privately-owned housing unit permits were down an even sharper 29.9 percent in December 2022. Rising mortgage rates and the increase in home prices and construction costs over the past two years have reduced home affordability and demand. The slowdown in construction has resulted in reduced lumber demand and falling lumber prices during the latter half of 2022. Falling prices have curtailed mill production levels, which should provide a floor for lumber prices. Profitability for mills and timberland owners is expected to moderate in the coming year as the higher mortgage rates and lower construction demand is partially offset by production curtailments.

Poultry

The poultry industry consists of broilers, turkeys and eggs, with the broiler industry comprising the largest share of District poultry volume. The poultry industry was significantly disrupted by Highly Pathogenic Avian Influenza (HPAI) in 2022. Infections were especially prevalent in egg laying and turkey operations, which limited production and supported high prices. The broiler industry experienced minimal impacts from HPAI and USDA estimates that broiler production increased 2.9 percent in 2022 on a ready-to-cook basis. The February 2023 WASDE projects a 2023 broiler (whole bird) average price decrease of 10.0 percent from 2022 to 126.5 cents per pound as production continues to expand and as lower prices in late 2022 carryover into 2023. USDA estimates turkey production declined 6.0 percent in 2022, while the national average hen price increased 25.8 percent to a new record high. USDA projects another annual average price increase for 2023 while turkey production begins to rebuild.

The February 2023 WASDE estimates a record-high average shell egg price of 282.4 cents/dozen in 2022. HPAI outbreaks caused a cumulative loss of 43.3 million table-egg layers in 2022, driving egg prices higher as the U.S. table laying flock has averaged four to six percent below the year prior since March 2022. The outbreak began in February 2022, subsided over the summer, before

returning in the fall as wild birds began to migrate south. Egg producers have worked to rebuild the U.S. egg-laying flock, but the flock still trailed prior year levels by 5.8 percent in December 2022. USDA expects egg prices will remain historically high in 2023, but will average below 2022 levels as production recovers. The February 2023 WASDE projects a 2023 average shell egg price of 207 cents/dozen, down 26.7 percent from the high 2022 average. If realized, the 2023 egg price forecast would be the second highest average on record. The egg market is likely to remain volatile given HPAI infections. Those producers that are able to avoid disease outbreaks should continue to experience stronger than usual returns.

Land Values

The AgriBank District continues to monitor agricultural land values. We conduct an annual Benchmark Survey, completed by licensed real estate appraisers, on representative benchmark farms in 34 regions of the District. The District's most recent real estate market value survey, based on the 12-month period ending June 30, 2022, indicated that District real estate value changes in the regions ranged from a 5.8 percent to 40.8 percent annual increase. There continues to be ample demand from farmers and ranchers, as well as interest from investors, providing support for land prices. Land values in the District may experience additional, albeit more modest, increases over the next year due to strong net farm income, real estate demand outpacing land available for sale, and stock market volatility. However, higher interest rates may dampen demand for land purchases, which could negatively impact farmland values.

The Federal Reserve Banks of Chicago, Kansas City and Minneapolis reported on the change in farmland values from the end of the third quarter 2021 to the end of the third quarter 2022 in their respective districts. The Federal Reserve district reports indicated annual regional increases in non-irrigated farmland values ranging from 20 to 23 percent.

The USDA land value survey, which is conducted annually using June values and published in August of each year, is based on a survey of agricultural producers across the United States. Results of the 2022 survey showed increases of 13.0 percent for overall farm real estate values and 14.2 percent for cropland values specific to the AgriBank District.

AgriBank District credit risk policies focus on loan repayment capacity in addition to conservative loan-to-value levels on the collateral that secures loans. Although Farm Credit Administration (FCA) regulations allow real estate mortgage loans of up to 85 percent of appraised value, most District Associations generally limit lending to 65 percent or less at origination. While underwriting exceptions on loan-to-appraised-value are sometimes granted, in such cases loans are typically structured with shorter amortization schedules and/or additional principal payments in the early years to reduce risk. With increased land values across the District, Associations continue to incorporate credit underwriting factors such as sustainable repayment capacity and lending caps per acre based on land's long-term income-producing capacity. These proactive lending practices reduce the impact on District loan portfolios if land values materially decline.

Loan Portfolio

(in thousands)			
As of December 31,	2022	2021	2020
Accrual loans:			
Wholesale loans	\$118,660,270	\$108,166,365	\$97,777,508
Retail loans:			
Real estate mortgage	4,696,993	4,357,270	4,335,274
Production and intermediate-term	7,866,773	7,644,823	6,361,563
Loans to other financing institutions (OFIs)	749,969	703,471	610,952
Other	1,454,782	1,070,843	631,929
Total retail loans	\$14,768,517	\$13,776,407	\$11,939,718
Nonaccrual loans	41,994	51,340	68,469
Total loans	\$133,470,781	\$121,994,112	\$109,785,695

Components of Loans

The Other category was primarily composed of agribusiness and rural residential real estate loans.

Our lending to District Associations accounts for 88.9 percent of our loan portfolio at December 31, 2022. Wholesale loans reflect the retail marketplace activities at District Associations, which are funded through their wholesale lines of credit with AgriBank. Wholesale loans grew substantially when compared to prior year primarily due to loan growth at District Associations. This growth was due to strong demand in the capital markets segment from increases in grain prices, related margin calls, and increased input costs resulting in higher draws on operating lines for processing and marketing customers early in 2022. Real estate loans also increased at District Associations when compared to the prior year, mainly related to the demand for lower fixed rates early in 2022; however, growth slowed in the second half of the year as interest rates sharply increased throughout 2022. Also contributing to the overall increase in wholesale loans were draws on production and intermediate-term loans. Inflationary pressures created an environment which takes more cash to operate resulting in increased operating loans at year end.

Wholesale loans exhibit some seasonality, reflecting the patterns of input and operating financing by District Association borrowers. Operating loans are normally at their lowest levels following harvesting and selling of crops in the fourth quarter and increase in the spring and throughout the growing season as producers fund operating needs. The degree of seasonality exhibited by the wholesale loan portfolio is diminished as District Associations' retail portfolios experienced growth in real estate mortgage, agribusiness and part-time farmer loans. Additionally, we typically experience temporary increases in our wholesale loans toward the end of the year driven by District Associations' borrowers drawing on their operating lines to purchase the next year's production inputs, primarily for tax-planning strategies.

From time to time, during the normal course of business, we purchase up to 90 percent participation in groups of certain Association retail loans. Collectively referred to as pool programs, these participation arrangements are designed to assist Association business goals and effectively leverage existing District capital. These pool programs primarily include real estate loans and consumer mortgage loans. The risk of loss in these loans is generally low due to the quality of the collateral. Real estate and consumer mortgage loans may be purchased as new or seasoned loans. Additionally, beginning in 2021, we purchased participation interests across most of one District Association's loan portfolio. This program, for which we may purchase up to 15 percent of a District Association's portfolio, is available to all District Associations and, therefore, may expand in future years. We had a total of \$5.4 billion, \$4.9 billion and \$4.2 billion of these pool program participation interests outstanding at December 31, 2022, 2021 and 2020, respectively.

We also purchase 100 percent participation interests in new agricultural equipment financing and crop input financing loan pools. At December 31, 2022, various District Associations and Farm Credit institutions across the System participated in these pool programs. We had \$7.2 billion, \$7.0 billion and \$6.0 billion of these participation interests outstanding at December 31, 2022, 2021 and 2020, respectively.

Pool programs require the purchase of AgriBank stock and are capitalized at a rate mutually agreed upon in the pool agreements. Refer to the Shareholders' Equity - AgriBank Patronage Programs and Dividend Distributions section for discussion related to patronage programs.

Our retail portfolio also includes \$1.4 billion at December 31, 2022, and \$1.2 billion at both December 31, 2021 and 2020, of loan participations primarily purchased from District Associations in support of their portfolio management, generally related to District Associations' borrower concentration limits.

Portfolio Diversification

District Associations use the wholesale loans to fund their retail loan portfolios. Each District Association has unique commodity and geographic credit portfolio concentrations. The table below illustrates commodity and geographic distribution of the District's \$152.1 billion loan portfolio as of December 31, 2022.

District Portfolio

Commodity Distribution		G	Geographic Distribution
Crops	41 %	lowa	10 %
Investor and Rural residential real estate	9 %	Illinois	10 %
Cattle	8 %	Minnesota	8 %
Food products	8 %	Nebraska	7 %
Dairy	6 %	Indiana	6 %
Other	28 %	Michigan	6 %
		Wisconsin	5 %
		Ohio	5 %
		Other	43 %
Total	100 %	Total	100 %

Other commodities consist primarily of loans in the pork, timber, rural utilities, poultry, farm supply and grain marketing sectors, none of which represented more than 5 percent of the District loan portfolio. Other states consist primarily of loans in South Dakota, Missouri, Tennessee, Arkansas, North Dakota, Kentucky, and Wyoming, none of which represented more than 5 percent of the District loan portfolio. The commodity and geographic concentrations have not changed materially from prior years.

While these concentrations represent a proportionate maximum potential credit risk, as it relates to the wholesale loans, a substantial portion of the underlying District Associations' lending activities are collateralized. Generally, collateral levels are significantly higher than the book value of the loan, and many District Associations' direct exposure (and, therefore, AgriBank's indirect exposure) to credit loss associated with lending is reduced accordingly. Refer to the Credit Risk Management section for additional information.

While the District has concentrations in crops, these crops primarily represent staple commodities of agriculture—corn, soybeans and wheat. To some extent, there is further concentration in crops related to the investor real estate sector, as these loans are typically made for the purchase of land that is rented for crop production. However, crop production is geographically diversified across the District. While the commodity distribution represents the primary commodity of the borrower, many of the crop producers may also have livestock operations or other forms of diversification, including off-farm income.

Certain District Associations have diversified the concentration in agricultural production loans through rural residential real estate and part-time farmer loans, as well as agribusiness loans. Rural residential real estate, investor real estate and part-time farmer borrowers generally have significant off-farm sources of income, and, therefore, are less subject to cycles in agriculture. These borrowers, as well as agribusiness borrowers, are typically more susceptible to changes in the general economy, and the condition of the general economy will influence the credit quality of these segments of the portfolio. Credit quality in these sectors has remained strong over the past three-year period.

Grain and livestock producers are somewhat subject to a counter-cyclical diversification effect. High grain prices are generally favorable to crop producers; however, livestock producers are adversely affected through higher feed costs. Conversely, low grain prices are generally negative to crop producers, but tend to improve the profitability for those livestock producers who purchase most or all of their feed. Severe fluctuations in commodity prices can negatively impact all District borrowers; however, elevated grain prices in 2022 have contributed to increased net farm income in 2022 for many crop producers.

The table below illustrates commodity and geographic diversification of our \$14.8 billion retail portfolio as of December 31, 2022.

AgriBank Retail Portfolio			
Commodity Distribution		Ge	ographic Distribution
Crops	54 %	Minnesota	10 %
Cattle	12 %	Illinois	10 %
Investor and Rural residential real estate	8 %	Ohio	8 %
Dairy	5 %	Indiana	8 %
Loans to OFIs	5 %	Tennessee	7 %
Other	16 %	Nebraska	7 %
		Iowa	6 %
		Wisconsin	5 %
		Other	39 %
Total	100 %	Total	100 %

Other commodities consist primarily of loans in the food products, pork, timber and poultry sectors, none of which represented more than 5 percent of AgriBank's retail loan portfolio. Other states consist primarily of loans in California, Kentucky, South Dakota, Missouri, Michigan and Arkansas, none of which represented more than 5 percent of AgriBank's retail loan portfolio. The commodity concentrations have not changed materially from prior years. Geographic concentrations have changed compared to years prior to 2021, specifically with increases in Ohio, Tennessee and Indiana, primarily due to the addition of loans through pool program loan participation purchases during 2021 and 2022.

Portfolio Maturities

As of December 31, 2022, all wholesale loan agreements mature in 36 months or less. Pricing terms of the wholesale loans are generally matched to District Associations' retail portfolios. Except in limited circumstances related to mergers or final regulatory-approved dissolution, where we would fund through the liquidation, we anticipate all wholesale loans will be renewed.

Contractual Maturities of Loans

(in thousands)	One Year	Over One through Five	Over Five through Fifteen	Over Fifteen	
As of December 31, 2022	or Less	Years	Years	Years	Total
Wholesale loans	\$—	\$118,660,270	\$—	\$—	\$118,660,270
Retail loans:					
Real estate mortgage	402,279	1,330,367	1,955,215	1,022,185	4,710,046
Production and intermediate-term	3,664,450	4,072,374	140,281	16,963	7,894,068
Loans to OFIs	260,091	404,219	85,659	-	749,969
Other	718,763	296,745	294,500	146,420	1,456,428
Total retail loans	5,045,583	6,103,705	2,475,655	1,185,568	14,810,511
Total loans	\$5,045,583	\$124,763,975	\$2,475,655	\$1,185,568	\$133,470,781
Total of loans due after one year with:					
Fixed interest rates					\$7,686,289
Variable and adjustable interest rates					\$120,738,909

Credit Risk Management

We are authorized to make loans to District Associations and OFIs, and to buy participation interests in eligible loans as specified under the Farm Credit Act. As a result, our loan portfolio is concentrated in rural communities and the agricultural industry. Earnings, loan growth and credit quality of our loan portfolio can be affected significantly by the general state of the economy, primarily as it affects agriculture and users of agricultural products. We actively manage our credit risk through various policies and standards, including our Loan Committee reviewing significant loan transactions. Our underwriting standards include analysis of five credit factors: repayment capacity, capital position, collateral, management ability and loan terms. These standards vary by agricultural industry and are updated to reflect current market conditions.

The credit quality of our loan portfolio has been consistently strong over the past three-year period, with 99.6 percent of our portfolio in the acceptable category at December 31, 2022, compared to 98.3 and 99.3 percent at December 31, 2021 and 2020, respectively. Acceptable loans represent the highest quality and are expected to be fully collectible. Overall credit quality remains strong, supported by commodity prices. As a majority of our loans are wholesale loans, we expect our credit quality will remain very strong, even if District Associations experience declines in their retail credit quality in the future. While wholesale loans are individually large credits, each loan is secured by all assets of the District Association, including the diverse portfolio of individual loans held by the Association. Additionally, each District Association has allowances for loan losses, earnings and capital that absorb their credit losses before they would impact our wholesale loans.

The credit quality of our retail portfolio remains strong with acceptable and other assets especially mentioned (special mention) at 97.9, 97.7 and 96.8 percent as of December 31, 2022, 2021 and 2020, respectively. Substandard and doubtful loans, collectively called adverse loans, are loans identified as showing some credit weakness according to our credit standards. Credit quality of the retail portfolio was positively impacted by commodity prices in certain sectors during 2022 resulting in strong net farm income. While credit quality is currently strong, negative economic trends could impact borrowers and may result in changes to credit quality in our loan portfolio. While the credit classification reflects the likelihood that these loans will experience stress or other credit weakness, the potential loss is significantly mitigated as many of these loans are well collateralized or include significant credit enhancements including guarantees with third parties that generally have strong financial positions. Refer to the Risk Assets and Retail Credit Risk Management sections for further discussion.

As of December 31,	2022	2021	2020
Cattle	1.9 %	2.8 %	4.3 %
Crops	1.7 %	2.8 %	4.5 %
Dairy	1.6 %	2.8 %	4.5 %
Other	1.8 %	1.9 %	2.4 %
Total	1.6 %	2.3 %	3.5 %

Percentage of Adverse Loans by Commodity in the District Retail Portfolio

Percentage of Adverse Loans by Commodity in the AgriBank Retail Portfolio

As of December 31,	2022 2021 20		2020
Crops	2.4 %	2.6 %	3.7 %
Dairy	1.3 %	2.0 %	2.4 %
Cattle	0.8 %	1.3 %	2.4 %
Other	1.9 %	2.2 %	2.5 %
Total	2.1 %	2.3 %	3.2 %

Overall, we expect District credit quality to remain at acceptable levels in 2023. Adverse credit quality declined in 2022 across the District due to disciplined loan underwriting standards and strong commodity prices in specific sectors. However, many factors and unknowns could impact borrowers in the future.

A substantial portion of the loan portfolio is collateralized, which reduces the District's exposure to credit losses. Collateral held varies, but may include real estate, equipment, inventory, livestock and income-producing properties and, in the case of wholesale loans, substantially all assets of District Associations. An estimate of credit risk exposure is considered in the allowance for loan losses. Additionally, credit policies reduce credit risk, with emphasis placed on repayment capacity rather than exclusively on the underlying collateral. The District has an internally maintained database that uses market data to estimate market values of collateral for a significant portion of the District's real estate mortgage portfolio. Although FCA regulations allow real estate mortgage loans of up to 85 percent of appraised value, the underwriting standards at District Associations generally limit lending to 65 percent at origination. While underwriting exceptions on loan-to-appraised-value are sometimes granted, in such cases loans are typically structured with shorter amortization schedules and/or additional principal payments in the early years to reduce risk. In

addition to sound underwriting standards, the District also has hold restrictions to limit the District's credit exposure of any one borrower.

Wholesale Credit Risk Management

Wholesale loans to District Associations represent the majority of our loan portfolio. The financial strength of District Associations directly impacts the credit quality of our portfolio. Substantially all assets of the District Associations are pledged as collateral for their respective wholesale loans. The earnings, capital and loan loss reserves of the Associations provide a buffer against losses in their retail portfolios. Currently, collection of the full wholesale loan amount due from each District Association is expected in accordance with the contractual terms of the debt arrangements, and no allowance has been recorded for any wholesale loans.

Select Information on AgriBank District Associations

(in thousands)		% of		Total	Total Regulatory	Risk Loans ⁽¹⁾ as a % of	Return
As of December 31, 2022	Wholesale Loan Amount	Wholesale Portfolio	Total Assets	Allowance and Capital	Capital Ratio	Total Loans	on Assets
Farm Credit Services of America	\$32,580,841	27.5 %	\$40,419,978	\$7,124,776	15.0 %	0.4 %	2.0 %
Farm Credit Mid-America	26,015,258	21.9 %	32,158,514	5,659,091	16.6 %	0.8 %	1.5 %
Compeer Financial	24,149,070	20.4 %	29,673,309	4,744,413	14.9 %	0.4 %	1.9 %
GreenStone Farm Credit Services	10,678,542	9.0 %	13,203,981	2,300,863	15.4 %	0.3 %	2.3 %
AgCountry Farm Credit Services ⁽²⁾	9,525,137	8.0 %	12,239,535	2,527,506	16.8 %	0.3 %	1.8 %
FCS Financial	5,062,214	4.3 %	6,281,256	1,128,387	15.7 %	0.3 %	1.9 %
Farm Credit Illinois	4,538,616	3.8 %	5,788,981	1,165,978	17.7 %	0.1 %	1.8 %
AgHeritage Farm Credit Services	1,745,144	1.5 %	2,199,511	433,664	16.0 %	0.3 %	2.0 %
Farm Credit Services of Western Arkansas	1,457,353	1.2 %	1,870,458	366,539	18.0 %	0.8 %	1.6 %
Farm Credit Services of Mandan	1,216,745	1.0 %	1,581,322	341,376	18.0 %	0.3 %	1.8 %
Farm Credit Midsouth	954,489	0.8 %	1,243,300	271,113	18.1 %	0.0 %	1.6 %
Farm Credit Southeast Missouri	736,861	0.6 %	950,941	196,926	18.1 %	0.3 %	2.1 %
Delta Agricultural Credit Association ⁽³⁾	_	— %	7,165	7,162	NM	- %	NM
Total	\$118,660,270	100.0 %	\$147,618,251	\$26,267,794	-		
District Association weighted average ratio	S				15.8 %	0.4 %	1.8 %

⁽¹⁾Risk loans are comprised of nonaccrual loans, accruing restructured loans and accruing loans 90 days or more past due.

⁽²⁾Loan amounts do not include fair value adjustments due to merger.

⁽³⁾Not meaningful; due to the pending liquidation status and minimal assets remaining at Delta, ACA, certain ratios for the entity have been excluded for this table.

The previous chart illustrates that wholesale credit risk is concentrated in a few individually large loans to District Associations. Significant deterioration in a single wholesale loan could have a material adverse effect on our financial condition. This concentrated credit risk is substantially offset by the composition of the underlying collateral, which is made up of many diversified retail loans and other assets. Credit risk on wholesale loans is also reduced by the strong financial condition of District Associations.

At December 31, 2022, all outstanding wholesale loans were classified as acceptable.

AgriBank's wholesale credit risk mitigation is primarily through the General Financing Agreement (GFA) covenants, which cover those matters reasonably related to the debtor/creditor relationship between the District Associations and AgriBank. We use various additional mechanisms to mitigate wholesale credit risk, including a robust wholesale credit underwriting process, wholesale loan collateral monitoring function, and review of Association-provided reports. Additionally, we maintain and periodically update the AgriBank Underwriting Guide (AUG), which is available to Associations via our District intranet site. The objective of the AUG is to communicate guidance to address lending requirements and underwriting criteria needed to support our wholesale lending relationships with Associations. Regarding the individual performance of District Associations, we internally generate multiple reports on the financial position, performance and loan portfolio performance of each District Association. These reports are produced monthly, quarterly, semi-annually or annually. We also conduct an annual stress test, which evaluates the impact of different severe scenarios on the Bank, District and individual Associations.

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Disciplined credit administration and servicing reduce credit risk on the wholesale portfolio. The GFA underlying each wholesale lending relationship contains typical commercial lending provisions, including advance rates based on the quality of pledged assets and financial performance covenants. Additional provisions include:

- A pledge of substantially all an Association's assets as collateral for the loan.
- A risk score calculated based on a District Association's profitability, credit quality, capital adequacy and asset classification correlation. A risk premium of up to 30 basis points is added to base pricing if a District Association's risk score falls below established levels. The risk score closely aligns with the Contractual Interbank Performance Agreement (CIPA) score. Refer to Note 9 of the accompanying Financial Statements for additional information related to the CIPA. Additionally, default interest rate provisions exist in the event the loan goes into default.
- A requirement that retail loans originated by a District Association over an established dollar amount, as well as all loans to a District Association's board members and employees and AgriBank board members, are approved by AgriBank's Credit Department in order to be eligible for inclusion in a District Association's borrowing base.
- A requirement that the District Association adopt and operate in accordance with policies, procedures and underwriting standards reasonably deemed necessary for satisfactory credit and credit administration as communicated in the AUG.

Throughout the year ended December 31, 2022, no District Association was declared in default of any GFA covenants.

AgriBank approval is required for significant structure changes at District Associations including, but not limited to: merger, acquisition, liquidation, or reaffiliation to another Farm Credit District. Refer to the Other Matters section herein and Note 15 of the accompanying financial statements for further information on structure changes.

Our pricing of wholesale loans is governed by a GFA with each District Association. The components of the wholesale interest rate include:

- A marginal cost of debt component
- A spread component, which includes cost of servicing, cost of liquidity and Bank profit
- A risk premium component, if applicable

Certain factors may impact wholesale interest rates, including market interest rate changes impacting marginal cost of debt as well as changes to pricing methodologies impacting the spread components described above.

No District Association paid a risk premium during any of the years ended December 31, 2022, 2021 or 2020 and no District Association is paying a risk premium heading into 2023.

Retail Credit Risk Management

Our retail portfolio management policies include maximum exposure limits by individual borrowers based on probabilities of default, loss given default, commodity and lead lender. AgriBank has created several different types of pool programs to assist Association business goals and effectively leverage existing District capital. Each pool program has underwriting parameters designed according to the risks inherent to each type of asset pool. The pools consist of five primary programs:

- The equipment financing pool program consists of numerous participation interests in retail equipment financing contracts that have individual loan balances of generally less than \$500 thousand. Loan participations purchased under this program are primarily underwritten based on standardized credit scoring.
- Real estate pool portfolios are primarily composed of participation interests in high-quality real estate and consumer mortgage loans that conform to criteria set forth in the respective program agreements. Individual loan participation balances held in the pool portfolios are generally less than \$5 million.
- A crop input financing pool program portfolio is composed of numerous participation interests in loans exclusively used for purchasing crop inputs from suppliers that have individual loan commitments of generally less than \$250 thousand. Loan participations purchased under the crop input financing pool program are primarily underwritten based on standardized credit scoring. Many of these loans include significant credit enhancements including guarantees with third parties that generally have strong financial positions.
- The vertical asset pool portfolio is primarily composed of participation interests of up to a 15 percent across most of an Association's loan portfolio.
- An adverse pool is composed of highly collateralized unimproved agriculture real estate loans. The loans eligible for this pool are typically classified as substandard credit quality, but have loan to value ratios of less than 50 percent, which minimizes the risk of loss. The pool is designed to help Associations manage portfolio risk, while adequately compensating AgriBank for the credit risk associated with these loans.

The remainder of the credits in our portfolio, primarily composed of participations purchased from District Associations, tend to be large (the majority are greater than \$5 million) and do not fit the standardized credit scoring for participations. We routinely monitor exceptions to underwriting standards and compliance with all portfolio management policies and guidelines.

Our concentrations in the 10 largest retail customers at December 31, 2022, (excluding OFIs) totaled \$332.7 million. All of these loans were in accrual status and 87.0% were classified as acceptable at December 31, 2022. Our largest retail customers may fluctuate each year due to changing market conditions.

10 Largest Retail Customers

As of December 31, 2022	
% of total retail loans	2.3 %
% of total loans	0.2 %
Concentration by commodity	
Dairy	30.5 %
Food Products	22.0 %
Farm Equipment and Supply	20.6 %
Poultry	14.7 %
Forestry	12.2 %

Risk Assets

Risk assets are composed of nonaccrual loans, accruing restructured loans, accruing loans 90 days or more past due (collectively, risk loans) and other property owned.

Components of Risk Assets

(in thousands)			
As of December 31,	2022	2021	2020
Nonaccrual loans	\$41,994	\$51,340	\$68,469
Accruing restructured loans	3,025	3,424	3,999
Accruing loans 90 days or more past due	746	2,531	1,331
Total risk loans	45,765	57,295	73,799
Other property owned	_	1,126	447
Total risk assets	\$45,765	\$58,421	\$74,246
As a percent of retail loans			
Risk loans	0.31 %	0.41 %	0.61 %
Nonaccrual loans	0.28 %	0.37 %	0.56 %
Delinquencies	0.62 %	0.43 %	0.56 %
As a percent of total loans			
Risk loans	0.03 %	0.05 %	0.07 %
Nonaccrual loans	0.03 %	0.04 %	0.06 %
Delinquencies	0.07 %	0.05 %	0.06 %

Note: Accruing loans include accrued interest receivable.

Due to the low level of risk assets, movement of a single loan or borrower impacts the percent of risk assets year-over-year. Risk assets over the past three years have primarily been concentrated in the production and intermediate-term sector, including loans in our crop input financing portfolio, as well as the real estate mortgage sector. Higher input costs, including both intermediate costs and labor, as well as uncertainty surrounding supply chain recovery, inflation, and ongoing global economic factors, could impact risk assets and related allowance for loan losses as well as provision for loan losses in the coming year.

Total risk loans as a percentage of total loans remains well within our established risk management guidelines. At December 31, 2022, 75.6 percent, of nonaccrual loans were current as to principal and interest.

Our accounting policy requires loans past due 90 days to be transferred into nonaccrual status unless adequately secured and in the process of collection. Based on our analysis, accruing loans 90 days or more past due were eligible to remain in accruing status.

Allowance for Loan Losses

The allowance for loan losses is an estimate of losses on loans inherent in our portfolio as of the financial statement date. We determine the appropriate level of allowance for loan losses based on the periodic evaluation of factors such as loan loss history, estimated probability of default, estimated loss severity, portfolio quality and current economic and environmental conditions. We believe the allowance for loan losses is reasonable in relation to the risk in the portfolio at December 31, 2022. Effective January 1, 2023, we adopted Accounting Standards Update (ASU) 2016-13 "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." Refer to the Critical Accounting Policies discussion and Note 2 for additional information.

(in thousands)	2022		2021		2020	
As of December 31,	Amount	%	Amount	%	Amount	%
Real estate mortgage	\$3,932	12.4 %	\$4,809	12.8 %	\$3,751	9.4 %
Production and intermediate term	22,350	70.4 %	30,572	81.4 %	34,779	87.3 %
Loans to OFIs	305	1.0 %	280	0.7 %	285	0.7 %
Other	5,152	16.2 %	1,897	5.1 %	1,035	2.6 %
Total allowance for loan losses	\$31,739	100.0 %	\$37,558	100.0 %	\$39,850	100.0 %

Allowance for Loan Losses by Loan Category

With most of our loan portfolio composed of wholesale loans, the inherent risk in the portfolio is significantly reduced by adequate allowances, strong earnings and capital positions at District Associations. We have not recorded a provision for loan loss, charge-off or recovery on a wholesale loan for any period presented.

We determine the amount of allowance that is required by analyzing wholesale loans, risk loans and loans to other Farm Credit Institutions individually, and all other loans by grouping them into loan segments sharing similar risk characteristics. These loan segments include pool programs, other financing institutions loans and retail participation loans. We use a combination of estimated probability of default and estimated loss given default assumptions to estimate losses in these loan segments. These estimated losses may be adjusted for relevant current environmental factors. These factors may vary by the different segments, reflecting the risk characteristics of each segment. As these factors change, earnings are impacted. For all loans analyzed individually, we record a specific allowance, if appropriate, to reduce the carrying amount of the risk loan to the lower of book value or the net realizable value of collateral.

AgriBank's retail loan portfolio is primarily made up of participated credits from District Associations. Generally, we review and follow the lead lender's credit analysis and recommendations regarding specific reserves and charge-offs on risk loans, unless our individual analysis and knowledge of the exposure supports an alternative conclusion.

As of December 31,	2022	2021	2020
Allowance as a percentage of:			
Loans	0.02 %	0.03 %	0.04 %
Retail loans	0.21 %	0.27 %	0.33 %
Nonaccrual loans	75.58 %	73.16 %	58.20 %
Total risk loans	69.35 %	65.55 %	54.00 %
Adverse assets to capital and allowance for loan losses	4.28 %	4.64 %	5.87 %
For the year ended December 31,	2022	2021	2020
Net charge-offs as a % of average loans	0.00 %	0.00 %	0.00 %
Net charge-offs (recoveries) as a % of average retail loans	0.00 %	(0.03)%	(0.03)%

Allowance Coverage Ratios

Refer to the Results of Operations - Provision for Credit Losses section for further discussion of provision for loan loss changes.

Investment Portfolio and Liquidity

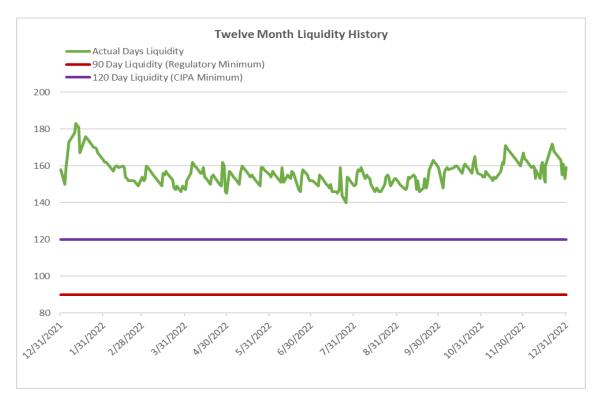
Liquidity Risk Management

We are responsible for meeting the District's funding, liquidity and asset/liability management needs. Access to the unsecured debt capital markets remains our primary source of liquidity. The System continues to have reliable access to the debt capital markets to support its mission of providing credit to farmers, ranchers and other eligible borrowers. During the year ended December 31, 2022, investor demand for Systemwide Debt Securities remained sufficient to meet our funding needs.

We also maintain a secondary source of liquidity through a high-quality investment portfolio and other short-term liquid assets. We manage liquidity for our operating and debt repayment needs by forecasting and anticipating seasonal demands, as well as through managing debt maturities. We manage short-term liquidity needs by maintaining maturing investments and cash balances of at least \$700 million on hand each day to meet cash management and loan disbursement needs in the normal course of business.

We manage intermediate and longer-term liquidity needs through the composition of the liquidity investment portfolio, which is structured to meet both regulatory requirements and our operational demands. Specifically, we provide at least 15 days of liquidity coverage from cash, overnight investments and U.S. Treasury securities less than three years in maturity. Other short-term money market investments, as well as government and agency mortgage-backed securities (MBS), are positioned to cover regulatory requirements for 30- and 90-day intervals. Additionally, a supplemental liquidity buffer provides days coverage in excess of 90 days from money market instruments greater than 90 days in maturity and asset-backed securities (ABS). At December 31, 2022, we held qualifying assets in excess of each incremental level to meet the liquidity coverage intervals.

Our liquidity policy and FCA regulations require maintaining minimum liquidity on a continuous basis of 120 days and 90 days, respectively. The days of liquidity measurement refers to the number of days that maturing debt is covered by liquid investments. During 2022, we had a liquidity operating target between 135 and 185 days. As of December 31, 2022, we had sufficient liquidity to fund all debt maturing within 159 days. Some volatility in liquidity coverage is expected; therefore, the level of days coverage liquidity may rise and fall during the year. AgriBank also maintains an adequate level of unencumbered and marketable assets in its liquidity reserve that can be converted into cash to meet its net liquidity needs for 30 days based on estimated cash inflows and outflows under an acute stress scenario.



Contingency Funding Plan

We maintain a Contingency Funding Plan (CFP) that helps inform our operating and funding needs and addresses actions we would consider in the event that there is not ready access to traditional funding sources. These potential actions include borrowing overnight via federal funds, using investment securities as collateral to borrow, using the proceeds from maturing investments and selling our liquid investments. We size our investment portfolio using the CFP to cover all operating and funding needs for a

minimum of 30 days with a targeted \$700 million buffer. The buffer amount is periodically assessed and was most recently updated in October 2022. The Funding Corporation, on behalf of the System Banks, may also incur other obligations, such as federal funds purchased, that would be the joint and several obligations of the System Banks and would be insured by the Insurance Corporation to the extent funds are available in the Insurance Fund.

Funding from the Federal Financing Bank

The Insurance Corporation has an annual agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation. Under its existing statutory authority, the Insurance Corporation may use these funds to provide assistance to the System Banks in exigent market circumstances that threaten the banks' ability to pay maturing debt obligations. The 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.

Investment Securities

All investment securities are classified as available-for-sale (AFS).

Composition of Investment Securities

(in thousands)			
As of December 31,	2022	2021	2020
Commercial paper and other	\$8,318,423	\$4,049,426	\$6,538,715
U.S. Treasury securities	5,669,274	8,528,532	5,864,582
Mortgage-backed securities	5,962,719	5,653,330	5,637,301
Asset-backed securities	143,507	161,340	544,731
Total	\$20,093,923	\$18,392,628	\$18,585,329

Commercial paper and other is primarily corporate commercial paper and certificates of deposit. Mortgage-backed securities consist of instruments issued or guaranteed by the U.S. government, its agencies or government sponsored enterprises.

Commercial paper has increased during 2022 as money market assets have been more appealing due to increased spreads. U.S. Treasury securities decreased related to 2022 sales and existing positions maturing, as well as a strategic decision to not add new volume as other market opportunities became more attractive.

Our ALCO and Counterparty Risk Committee oversee the credit risk in our investment portfolio. We manage investment portfolio credit risk by investing only in securities that are liquid, of high quality and whose risks are well understood. The composition of our investment portfolio is influenced by our liquidity strategy which considers regulatory surpluses, risk and relative return available, diversification, and other factors. All securities must meet eligibility requirements as permitted by FCA regulations.

Fair Value of Eligible Investment Securities by Credit Rating

(in thousands)		Eligible				
As of December 31, 2022	AAA/Aaa	A1/P1/F1	Split Rated ⁽¹⁾	Total		
Commercial paper and other	\$—	\$5,779,282	\$2,539,141	\$8,318,423		
U.S. Treasury securities	_	_	5,669,274	5,669,274		
Mortgage-backed securities	-	_	5,962,719	5,962,719		
Asset-backed securities	143,507	_	_	143,507		
Total	\$143,507	\$5,779,282	\$14,171,134	\$20,093,923		

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

Credit risk in our investment portfolio is largely mitigated by investing primarily in securities issued or guaranteed by the U.S. government or one of its agencies. Credit risk in our investment portfolio primarily exists in investment securities that are not guaranteed by the U.S. government or one of its agencies, which include our certificates of deposit, commercial paper, non-agency

mortgage-backed securities and asset-backed securities, all of which were of high credit quality and met eligibility requirements as of December 31, 2022.

Holdings of split-rated securities are related to U.S. government securities. At December 31, 2022, we held no ineligible securities.

We evaluate all investment securities in an unrealized loss position for other-than-temporary impairment (OTTI) on a quarterly basis. We continually evaluate our assumptions used in estimating fair value and impairment and adjust those assumptions as appropriate. We concluded from these evaluations that we did not hold any OTTI investment securities at December 31, 2022, 2021 or 2020, and we did not record any impairment losses during these periods. Effective January 1, 2023, we adopted Accounting Standards Update (ASU) 2016-13 "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." Refer to the Critical Accounting Policies discussion and Note 2 for additional information.

Refer to Note 4 of the accompanying Financial Statements for further information on investment securities.

Shareholders' Equity

We believe a sound capital position is critical to long-term financial stability, and we are committed to long-term capital optimization within the AgriBank District. Capital management under our capital plan supports adequate capital protection to absorb adversity and support our mission over the long term. Our capital reflects strong risk-based regulatory capital measures while optimizing the non-risk-based regulatory capital measure to maintain a targeted tier 1 leverage ratio. Under our capital plan, capital growth is anticipated to be in the form of stock, either purchased or allocated through declaration of stock patronage, with retained earnings remaining relatively constant.

Total shareholders' equity was \$7.2 billion, \$7.0 billion and \$6.6 billion at December 31, 2022, 2021 and 2020, respectively. Total shareholders' equity increased \$179.6 million in 2022. This increase was driven by strong net income and net stock issuances, which positively impacted shareholders' equity. These increases were mostly offset by unrealized investment losses, primarily on U.S. Treasury securities and fixed-rate U.S. government guaranteed mortgage-backed securities, related to the rapid increase in interest rates in 2022. The unrealized investment losses do not represent a deterioration in the quality of the investment portfolio and, based on our analysis, no investments are other than temporarily impaired at this time. Patronage distributions declared also offset the overall increases in equity.

Select Capital Ratios

	Regulatory minimum			
As of December 31,	and buffer	2022	2021	2020
Shareholders' equity to assets		4.6 %	4.9 %	5.0 %
Retained earnings and allowance to risk loans (:1)		69.3	55.5	43.1
Retained earnings to total shareholders' equity		43.7 %	44.8 %	47.7 %
Tier 1 capital ratio	8.5 %	16.9 %	17.4 %	17.3 %
Tier 1 leverage ratio	5.0 %	5.2 %	5.2 %	5.2 %

We have \$250 million of Series A Non-cumulative Perpetual Preferred Stock (Series A Preferred Stock) outstanding. Dividends on the Series A Preferred Stock, if declared by our board in its sole discretion, are non-cumulative and are payable quarterly in arrears.

Capital Plan and Regulatory Requirements

FCA regulatory capital requirements for System Banks and Associations consist of risk-based ratios, including common equity tier 1 capital, tier 1 capital and total capital. The requirements also include the non-risk-adjusted ratios of tier 1 leverage and unallocated retained earnings and equivalents (UREE). Capital requirements also include capital conservation buffers. We exceeded all regulatory capital requirements in 2022, 2021 and 2020, including the capital conservation buffers.

Strong earnings, retail participation and pool programs, and stock investments have allowed us to maintain strong regulatory capital ratios while efficiently leveraging existing Bank capital for the benefit of District Associations. The various retail participation and pool programs leverage our strong risk-adjusted capital position while strengthening our non-risk-adjusted tier 1 leverage ratio.

We maintain a formal capital plan that addresses our capital targets in relation to our risks and establishes the required investment levels. The plan assesses the capital level and composition necessary to support financial viability and our mission over the long

term. The plan considers factors such as credit risk and allowance levels, quality and quantity of earnings, sufficiency of liquid funds, operational risk, interest rate risk, and growth in determining optimal capital levels. Our capital plan continues to reflect strong risk-based regulatory capital measures while optimizing the non-risk-based tier 1 leverage ratio. We periodically review and modify these targets to reflect current business and economic conditions. Our capital plan is updated at least annually and is subject to change at the discretion of our board.

2023 Business Plan - Capital Ratio Targets

	Target	Regulatory Minimum	Regulatory Minimum plus buffer
Tier 1 leverage ratio	5.15% with at least 1.80% in UREE	4.0% with 1.5% UREE	5.0% with 1.5% UREE
Common equity tier 1 capital ratio	No lower than 7.15%	4.5%	7.0%
Tier 1 capital ratio	No lower than 8.65%	6.0%	8.5%
Total capital ratio	No lower than 10.65%	8.0%	10.5%
Permanent capital ratio	No lower than 9.65%	7.0%	n/a

UREE - unallocated retained earnings and equivalents

As part of our business plan, we model economic capital requirements and perform stress testing for AgriBank. In addition, we model economic capital requirements for District Associations. Economic capital measures total enterprise risk looking at credit, interest rate and operational risk.

AgriBank Patronage Programs and Dividend Distributions

All patronage and dividend payments are at the sole discretion of the board and are determined based on actual financial results, projections and long-term capital goals. Fundamental to our capital plan, we will first retain sufficient current period earnings to meet our capital and UREE targets and then distribute any remaining earnings as cash patronage. We may pay a portion of wholesale patronage, to District Associations and OFIs, in the form of allocated stock. Patronage was paid in cash and stock for the years ended December 31, 2022 and 2021, and in cash for the year ended December 31, 2020. Pool program patronage was primarily cash distributions from earnings on our various pool programs in the years ended December 31, 2022, 2021 and 2020.

(in thousands)			
For the year ended December 31,	2022	2021	2020
Wholesale patronage	\$590,324	\$588,243	\$548,187
Pool program patronage	183,023	159,780	142,912
Total patronage	\$773,347	\$748,023	\$691,099
Wholesale patronage in basis points	50.8	56.2	57.0

Total Patronage Distributions

The wholesale bank earnings patronage rate is targeted to equal 100 percent of net income after preferred stock dividends and pool patronage, subject to the capital needs of AgriBank.

In addition to patronage to our members, our board declared perpetual preferred stock dividends of \$17.2 million during each of 2022, 2021 and 2020, which is required to be paid before patronage distributions. Refer to Note 6 of the accompanying Financial Statements for additional information about Shareholders' Equity.

Accumulated Other Comprehensive Loss

Our derivative portfolio includes certain derivatives designated as cash flow hedges. Unrealized gains and losses on the effective portion of cash flow hedges are reported as a separate component of shareholders' equity. Unrealized gains and losses are reclassified into earnings when the hedged interest payments affect earnings. The majority of cash flow derivatives are hedging rising long-term interest rates.

Due to increasing interest rates, the value of certain cash flow derivatives increased, resulting in \$189.5 million and \$71.0 million of net other comprehensive income for the years ended December 31, 2022 and 2021, respectively. Inversely, there was \$123.1 million of net other comprehensive loss for the year ended December 31, 2020, due to declining interest rates.

Our investment portfolio is held primarily for liquidity purposes; accordingly, it is considered available-for-sale and is carried at fair value. Unrealized gains and losses on investment securities that are not OTTI are reported as a separate component of shareholders' equity. Unrealized gains and losses related to the non-credit component of OTTI investment securities are also reported as a separate component of shareholders' equity; however, we held no OTTI securities at any time during the years ended December 31, 2022, 2021 or 2020.

The value of our fixed-rate AFS investment securities have an inverse relationship with interest rates. Other comprehensive losses on AFS investment securities totaled \$847.4 million and \$169.1 million for the years ended December 31, 2022 and 2021, respectively, primarily driven by increasing interest rates. Additionally, other comprehensive gains of \$88.8 million for the year ended December 31, 2020, was primarily driven by decreasing interest rates.

Results of Operations

Net income increased \$25.5 million, or 3.3 percent, for the year ended December 31, 2022, primarily driven by higher net interest income. Return on average assets ratio of 53 basis points in 2022 was in excess of our 50 basis point target. Our targeted return on assets ratio is a key part of our Bank financial framework which optimizes Bank earnings and capital combined with a focus on operational strength and disciplined cost management.

Profitability Information

(in thousands)			
For the year ended December 31,	2022	2021	2020
Net income	\$790,697	\$765,211	\$709,179
Return on average assets	0.53 %	0.57 %	0.58 %
Return on average shareholders' equity	11.36 %	11.13 %	10.97 %

Changes in Significant Components of Net Income

(in thousands)				Increase (decrease) in	Prior Year Increase (decrease) in
For the year ended December 31,	2022	2021	2020	Net Income	Net Income
Net interest income	\$854,444	\$779,788	\$714,361	\$74,656	\$65,427
Provision for credit losses	(6,000)	1,000	11,000	7,000	10,000
Non-interest income	115,018	145,548	190,088	(30,530)	(44,540)
Non-interest expense	184,765	159,125	184,270	(25,640)	25,145
Net income	\$790,697	\$765,211	\$709,179	\$25,486	\$56,032

Changes in Net Interest Income

(in thousands)

For the year ended December 31,	2022 vs 2021			2021 vs 2020		
Increase (decrease) due to:	Volume	Rate	Total	Volume	Rate	Total
Interest income:						
Loans	\$217,782	\$732,974	\$950,756	\$210,840	\$(469,137)	\$(258,297)
Investments	8,896	181,778	190,674	10,920	(110,192)	(99,272)
Total interest income	226,678	914,752	1,141,430	221,760	(579,329)	(357,569)
Interest expense:						
Systemwide debt securities and other	(137,274)	(929,500)	(1,066,774)	(138,767)	561,763	422,996
Net change in net interest income	\$89,404	\$(14,748)	\$74,656	\$82,993	\$(17,566)	\$65,427

Information regarding the average daily balances (ADB), average rates earned and components of net interest income (NII) on our portfolio follows:

(in thousands)			
For the year ended December 31,		2022	
	ADB	Rate	NII
Interest earning assets:			
Wholesale loans	\$111,558,976	2.02 %	\$2,252,305
Retail accrual loans	14,538,761	3.78 %	549,762
Retail nonaccrual loans	47,618	15.59 %	7,424
Investment securities and federal funds	20,563,870	1.45 %	298,969
Total earning assets	146,709,225	2.12 %	3,108,460
Interest bearing liabilities	140,272,505	1.61 %	2,254,016
Interest rate spread	\$6,436,720	0.51 %	
Impact of equity financing		0.07 %	
Net interest margin		0.58 %	
Net interest income			\$854,444
(in thousands)			
For the year ended December 31,		2021	
	ADB	Rate	NII
Interest earning assets:			
Wholesale loans	\$100,675,065	1.39 %	\$1,402,594
Retail accrual loans	13,021,674	3.43 %	447,290
Retail nonaccrual loans	60,313	14.67 %	8,851
Investment securities and federal funds	19,101,441	0.57 %	108,294
Total earning assets	132,858,493	1.48 %	1,967,029
Interest bearing liabilities	126,798,858	0.94 %	1,187,241
Interest rate spread	\$6,059,635	0.54 %	
Impact of equity financing		0.05 %	
Net interest margin		0.59 %	

(in thousands)			
For the year ended December 31,		2020	
	ADB	Rate	NII
Interest earning assets:			
Wholesale loans	\$92,687,900	1.81 %	\$1,684,805
Retail accrual loans	10,879,803	3.90 %	425,519
Retail nonaccrual loans	63,364	10.56 %	6,709
Investment securities and federal funds	18,091,339	1.14 %	207,566
Total earning assets	121,722,406	1.90 %	2,324,599
Interest bearing liabilities	115,943,573	1.39 %	1,610,238
Interest rate spread	\$5,778,833	0.51 %	
Impact of equity financing		0.08 %	
Net interest margin		0.59 %	
Net interest income			\$714,361

Net interest income increased during the year ended December 31, 2022, mainly due to the positive impact of non-interest bearing funding driven by the sharp rise in interest rates, loan growth in the retail portfolio, and increased spreads on investment securities.

Interest rate spreads decreased for the year ended 2022 compared to 2021, with average rates on interest earning assets and interest bearing liabilities both increasing in 2022 when compared to the same period of 2021. As both interest rates and callable debt spreads rose rapidly through 2022, opportunities to call and refinance debt have declined and conversions within the loan portfolio have also diminished. Competitive market pressures in a rising interest rate environment have compressed interest rate spreads. We estimate funding actions contributed 11 basis points to the interest rate spread in 2022, compared to 14 and 15 basis points in 2021 and 2020, respectively.

Net interest margin for the year ended December 31, 2022, declined slightly compared to the prior year as a result of lower spreads offset by an increase from the impact of equity financing. The impact of equity financing is strengthened in a higher interest rate environment. Equity financing represents the benefit of non-interest bearing funding.

Provision for Credit Losses

The "Provision for credit losses" in the Statements of Comprehensive Income includes a reversal/provision for loan losses as well as a reversal/provision for unfunded commitments, the latter of which was primarily related to the cyclical nature of the crop input financing pool program. There was a \$6.0 million reversal of provision for loan losses for the year ended December 31, 2022, resulting from overall stronger credit quality experienced during the year. AgriBank had no provision for credit losses related to the unfunded commitments during the year ended December 31, 2022.

Provision for loan losses in any given year can be impacted by a single loan or borrower. The allowance for loan losses directly impacts our provision for loan losses. Refer to the discussion of the allowance for loan losses in the Loan Portfolio - Allowance for Loan Losses section of this report and in Note 3 of the accompanying Financial Statements.

Non-interest Income

The decrease in non-interest income for the year ended December 31, 2022, compared to the same period of the prior year, was primarily driven by a decline in conversion and prepayment fees due to high interest rates, partially offset by increased mineral income.

Components of Non-Interest Income

(in thousands)

For the year ended December 31,	2022	2021	2020
Mineral income	\$89,636	\$54,487	\$33,993
Business services income	7,583	7,431	11,425
Loan prepayment and fee income	18,871	62,979	141,487
Other non-interest (loss) income, net	(1,072)	20,651	3,183
Total	\$115,018	\$145,548	\$190,088

Loan prepayment and fee income reflects prepayment and conversion fees recognized as a result of conversion activity, primarily related to funding our wholesale lending. The majority of our loan prepayment and fee income is recorded when District Association retail loans financed through our wholesale loan volume prepay or convert, and the District Association is assessed a wholesale fee. The decline in interest rates in 2020 resulted in significant wholesale fees as District Association retail loans prepaid or converted. Interest rates remained lower at the beginning of 2021, keeping this activity and related wholesale fees elevated compared to historical averages. As interest rates increased in the latter part of 2021 and more rapidly in 2022, prepayment and conversion activity slowed, returning prepayment and fee income closer to historical averages.

Mineral income increased during the year ended December 31, 2022, compared to the prior year primarily due to a significant rise in oil prices in 2022. After falling oil prices in 2020 and 2021 due to lower demand as a result of the pandemic, prices have increased in 2022 and remain at historical levels due to the ongoing conflict in Ukraine, as well as the decision by the Organization of the Petroleum Exporting Countries Plus to cut production quotas in the fourth quarter.

Other non-interest income, net decreased primarily due to a non-recurring insurance settlement in 2021.

Non-interest Expense

(in thousands)			
For the year ended December 31,	2022	2021	2020
Salaries and employee benefits	\$27,551	\$25,759	\$30,724
Other operating expenses:			
Purchased services	23,787	22,912	18,924
Occupancy and equipment	5,324	6,665	8,442
Examination expense	7,093	6,628	6,307
Other	10,410	7,923	9,462
Loan servicing and other fees paid to District Associations	78,542	68,517	57,428
Farm Credit System insurance expense	29,364	21,205	11,002
Other non-interest expense, net	2,694	(484)	41,981
Total non-interest expense	\$184,765	\$159,125	\$184,270

Components of Non-interest Expense

Loan servicing and other fees paid to District Associations increased as the volume of participations in pool programs continues to expand.

Farm Credit System insurance expense is directly impacted by the premium rate we are assessed. Premiums were 20 and 16 basis points for 2022 and 2021, respectively. Premiums were 8 basis points for the first half of 2020 and were updated to 11 basis points for the second half of 2020. The Insurance Corporation has announced premiums of 18 basis points in 2023. The Insurance Corporation board meets periodically throughout the year to review premium rates and has the ability to change these rates at any time.

Interest Rate Risk Management

Interest rate risk is the risk that changes in interest rates may adversely affect operating results and financial condition. Interest rate risk arises primarily from funding fixed rate loans that can be prepaid, adjustable rate loans with interest rate caps and decisions related to the investment of our equity. We manage substantially all of the District's interest rate risk. Our ability to effectively manage interest rate risk relies on our ability to issue debt with terms and structures that match our asset terms and structures. Because a substantial portion of those assets are prepayable, we manage our interest rate risk and reduce our funding costs using a variety of tools including callable debt and derivative products.

We manage exposure to changes in interest rates under policies established by our board and limits established by our ALCO. Policies and limits regulate maximum exposure to net interest income and economic value of equity changes for specified changes in market interest rates. A full analysis of interest rate risk is completed monthly. Through these analyses, appropriate funding strategies are developed to manage the sensitivity of net interest income and economic value of equity to changes in interest rates.

Our primary techniques used to analyze interest rate risk are:

- <u>Interest rate gap analysis</u>, which compares the amount of interest-sensitive assets to interest-sensitive liabilities repricing in selected time periods under various interest rate and prepayment assumptions.
- <u>Net interest income sensitivity analysis</u>, which projects net interest income in each of the next three years given various rate scenarios.
- <u>Economic value of equity sensitivity analysis</u>, which estimates the economic value of assets, liabilities and equity given various rate scenarios.

The assumptions used in our analyses are monitored routinely and adjusted as necessary. Assumptions about loan prepayment behavior are the most significant to the results. Prepayment speeds are estimated as a function of rate levels, age and seasoning. We monitor and track prepayment history and consider adjustments to our assumed prepayment speeds based on our historical observed experience. We use third-party prepayment models for MBS investments.

Interest Rate Gap Analysis

The following table is based on the known repricing dates of certain assets and liabilities and the assumed or estimated repricing dates of others under an implied forward rate scenario. Prepayment estimates for loans are calculated using our standard prepayment assumptions. Callable debt is shown at the first call date it is expected to be exercised given implied forward rates. Various assets and liabilities may not reprice according to the assumptions and estimates used. The analysis provides a static view of our interest rate sensitivity position and does not capture the dynamics of an evolving balance sheet, interest rate and spread changes in different interest rate environments, or the active role of asset and liability management.

Interest Rate Gap Position

(in millions)	Repricing Intervals						
As of December 31, 2022	Year 1	Year 2	Year 3	Year 4	Year 5	Over 5 Years	Total
Earning assets:							
Prepayable loans	\$59,219	\$10,388	\$9,947	\$8,224	\$6,827	\$32,595	\$127,200
Other loans	876	552	795	786	910	2,352	6,271
Investments and federal funds	15,267	2,323	728	690	308	778	20,094
Total earning assets	\$75,362	\$13,263	\$11,470	\$9,700	\$8,045	\$35,725	\$153,565
Callable debt	\$5,446	\$5 <i>,</i> 597	\$8,063	\$5,485	\$5,159	\$33,949	\$63,699
Other debt	67,868	8,258	3,829	1,905	1,013	1,657	84,530
Effect of interest rate swaps and other derivatives	305	(2,050)	_	_	_	1,745	_
Total rate-sensitive liabilities	\$73,619	\$11,805	\$11,892	\$7,390	\$6,172	\$37,351	\$148,229
Interest rate sensitivity gap	\$1,743	\$1,458	\$(422)	\$2,310	\$1,873	\$(1,626)	\$5,336
Cumulative gap	\$1,743	\$3,201	\$2,779	\$5,089	\$6,962	\$5,336	
Cumulative gap as a % of earning assets	2.3 %	3.6 %	2.8 %	4.6 %	5.9 %	3.5 %	

Net Interest Income and Economic Value of Equity (EVE) Sensitivity Analysis

The economic value of equity sensitivity analysis provides a point-in-time view of our interest rate sensitivity position, commensurate with the interest rate gap analysis. Net interest income projections and sensitivity analysis incorporate assumptions to capture the dynamics of an evolving balance sheet. Policy limits related to interest rate sensitivity assume interest rates for all points along the yield curve change immediately in the same direction and amount (a parallel shock). We also routinely review the impact of a gradual change over one year in interest rates in the same direction and same amount (a parallel ramp). Further, we routinely review multi-year net interest income projections and the impact of varying the amount of change in rates at different maturities (a twist, flattening or steepening of the yield curve). Our policies establish a maximum variance from our base case in a plus or minus 200 basis point change in rates, except when the U.S. Treasury three-month rate is below 4 percent, at which time the minus scenario is limited to one-half of the U.S. Treasury three-month rate.

Because of the sharp rise in interest rates during 2022, the down scenario was set to a down 200 basis point change based on our policies.

NII Sensitivity Analysis

	Basis Point Interest Rate Change					
As of December 31, 2022	Down 200	Down 100	Up 100	Up 200		
Immediate Change (Shock):						
NII sensitivity	(3.2)%	(1.5)%	1.5 %	2.9 %		
Board policy	(15.0)%			(15.0)%		
Gradual Change (Ramp):						
NII sensitivity			0.0 %	(0.1)%		

EVE Sensitivity Analysis

		Basis Point Interest Rate Change					
As of December 31, 2022	Down 200	Down 100	Up 100	Up 200			
Immediate Change (Shock):							
EVE sensitivity	8.9 %	3.8 %	(2.8)%	(5.0)%			
Board policy	(12.0)%			(12.0)%			

Derivative Financial Instruments

We primarily use derivative financial instruments to reduce funding costs, improve liquidity and manage interest rate risk. We do not hold or issue derivatives for speculative purposes.

Our derivative activities are monitored by our ALCO as part of the committee's oversight of our asset/liability and treasury functions. Our hedging strategies are developed within limits established by the board through our analysis of data derived from financial simulation models and other internal and industry sources. The resulting hedging strategies are then incorporated into our overall interest rate risk management strategies. The types and uses of derivatives we primarily utilize are:

Derivative Products	Purpose of the Hedge Transaction	Strategic Impact
Receive-fixed swaps	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.	These transactions enable us to improve liquidity, obtain lower funding cost or to hedge basis risk.
Pay-fixed swaps	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.	These transactions create lower cost synthetic fixed-rate funding, hedge future debt issuance costs or manage interest rate sensitivity.
Floating-for-floating swaps	To protect against large increases in interest rates on floating-rate liabilities by embedding an interest rate cap on the floating-rate payment leg of the swap.	These transactions help us to manage exposure to large increases in interest rates and offset interest rate caps that are embedded within our assets.

We also facilitate interest rate swaps to qualified borrowers of District Associations (referred to as customer swaps). These swaps allow qualified borrowers to manage their interest rate risk and lock in a fixed interest rate similar to a fixed-rate loan. We may manage the interest rate risk from customer swaps with the execution of offsetting interest rate swap transactions.

We may enter into commodity derivatives should the parameters of our mineral hedging program be met, including consideration for the expectations of oil prices over a specified length of time. These derivative instruments (put options on the price of oil) are used to mitigate a decline in mineral income in certain circumstances.

By using derivative instruments, we are subject to counterparty credit risk. If a counterparty is unable to perform under a derivative contract, our credit risk equals the net amount due to us. Generally, when the fair value of a derivative contract is positive, we have credit exposure to the counterparty, creating credit risk for us. When the fair value of the derivative contract is negative, we do not have credit exposure.

Derivative Credit Loss Exposure by Credit Rating

	Years to Maturity						
(in thousands) As of December 31, 2022	Less Than One Year	One to Five Years	Over Five Years	Maturity Distribution Netting	Exposure	Collateral Pledged	Exposure Net of Collateral
Moody's Credit Rating:							
Aa1	\$—	\$3,911	\$14,241	\$(11)	\$18,142	\$7,280	\$10,862
Aa2	5,644	253	7,509	_	13,406	_	13,406
A1	_	1,856	1,288	_	3,144	4,714	_
Cleared derivatives		_	74,940	(71,710)	3,230	_	3,230
Total	\$5,644	\$6,020	\$97,978	\$(71,721)	\$37,922	\$11,994	\$27,498

Derivative credit loss exposure is estimated by calculating the cost, on a present value basis, to replace all outstanding derivative contracts in a gain position. 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. Maturity distribution netting represents the impact of netting derivatives in a gain position and derivatives in a loss position for the same counterparty across different maturity categories.

Expected Maturities of Derivative Products and Other Financial Instruments

(in millions)						2028 and		Fair
As of December 31, 2022	2023	2024	2025	2026	2027	thereafter	Total	Value
Bonds and Notes:								
Fixed rate	\$16,060	\$13,275	\$12,283	\$8,585	\$6,422	\$35,833	\$92,458	\$83,449
Average interest rate	1.0 %	1.6 %	1.4 %	2.1 %	1.4 %	2.2 %	1.7 %	
Variable rate	26,459	27,613	1,207	-	492	-	55,771	54,776
Average interest rate	4.2 %	4.3 %	5.1 %	- %	5.3 %	— %	4.3 %	
Total bonds and notes	\$42,519	\$40,888	\$13,490	\$8,585	\$6,914	\$35,833	\$148,229	\$138,225
Derivative Instruments:								
Receive-fixed swaps								
Notional value	\$900	\$2,476	\$150	\$—	\$—	\$—	\$3,526	\$(72)
Weighted average receive rate	2.1 %	3.3 %	4.1 %	— %	— %	— %	3.0 %	
Weighted average pay rate	4.8 %	4.3 %	4.0 %	— %	— %	— %	4.4 %	
Pay-fixed swaps								
Notional value	3,000	_	5	38	_	1,822	4,865	107
Weighted average receive rate	4.8 %	— %	4.0 %	3.9 %	— %	3.5 %	4.3 %	
Weighted average pay rate	4.2 %	— %	3.9 %	1.2 %	— %	2.9 %	3.7 %	
Floating for floating swaps								
Notional value	2,650	-	100	650	100	300	3,800	16
Weighted average receive rate	4.8 %	— %	4.0 %	3.9 %	3.7 %	3.5 %	4.5 %	
Weighted average pay rate	4.9 %	— %	4.4 %	4.0 %	4.3 %	4.1 %	4.6 %	
Customer swaps								
Notional value	_	-	5	38	-	77	120	(10)
Weighted average receive rate	- %	— %	4.3 %	1.3 %	- %	2.1 %	2.0 %	
Weighted average pay rate	— %	— %	4.0 %	3.9 %	— %	3.3 %	3.5 %	
Credit valuation adjustment ⁽¹⁾								_
Variation margin settlement								(12)
Total derivative instruments ⁽²⁾	\$6,550	\$2,476	\$260	\$726	\$100	\$2,199	\$12,311	\$29
Total weighted average rates on s	swaps:							
Receive rate	4.4 %	3.3 %	4.1 %	3.7 %	3.7 %	3.5 %	4.0 %	
Pay rate	4.5 %	4.3 %	4.1 %	3.9 %	4.3 %	3.1 %	4.2 %	

⁽¹⁾ Credit valuation adjustment was immaterial as of December 31, 2022.

⁽²⁾ Excludes commodity hedges

The table was prepared based on implied forward variable interest rates as of December 31, 2022, and, accordingly, the actual interest rates to be received or paid will be different to the extent that the variable rates fluctuate from December 31, 2022, implied forward rates. A small portion of our derivative instruments include a reference rate tied to LIBOR. Refer to the LIBOR Transition section for further discussion about our derivatives impacted by LIBOR. Derivative instruments are also discussed further in Notes 2, 11 and 12 of the accompanying Financial Statements.

Other Risks

Operational Risk

Operational risk represents the risk of loss resulting from inadequate or failed internal processes or systems, errors by employees or external events. Our primary operational risk includes external reporting, business model, human capital, fraud, business interruption, data and model integrity, security, and corporate governance. Operational risk is inherent in all business activities, and the management of this risk is important to the achievement of our objectives. We manage operational risk through established internal control processes and business continuity and disaster recovery plans. We maintain systems of controls with the objectives of providing appropriate transaction authorization and execution, proper system operations, safeguarding of assets and reliability of financial and other data. We have a strong control environment, including an independent audit committee, a code of ethics for senior officers and key financial personnel and an anonymous whistleblower program. Our control framework includes periodic review of vendors and annual review of certain vendor service organization control reports to evaluate risks and determine if risk mitigation actions are needed. We have developed and regularly update comprehensive business continuity and disaster recovery plans and routinely test these plans with the goal of ensuring ongoing operations under a variety of adverse scenarios. In conjunction with our service provider, we maintain sound security infrastructure, which we periodically test. We also provide data confidentiality, physical security and cybersecurity awareness training to staff.

Reputational Risk

Reputational risk is defined as the negative impact resulting from events, real or perceived, that shape the image of the Farm Credit System or any of its entities. Such risks include impacts related to investors' perceptions about agriculture, the reliability of the System financial information or business practices by any System institution that may appear to conflict with the System mission. The Farm Credit System has various committees responsible for reviewing business practices and, where appropriate, risk mitigation efforts, as well as providing strategic direction on System reputation management initiatives.

Credit Risk Related to Joint and Several Liability

We have exposure to Systemwide credit risk because we are jointly and severally liable for all Systemwide debt issued. Under joint and several liability, if a System Bank is unable to pay its obligations as they come due, the other Banks in the System would ultimately be called upon to fulfill those obligations. The existence of the Farm Credit Insurance Fund (Insurance Fund), the CIPA and the Market Access Agreement (MAA) help to mitigate this risk. The Insurance Corporation was established to administer the Insurance Fund. Refer to Note 1 of the accompanying Financial Statements for further information on the Insurance Fund. Refer to Note 9 of the accompanying Financial Statements for additional information related to the CIPA and MAA.

Critical Accounting Policies

Our Financial Statements are reported based on accounting principles generally accepted in the United States of America and require that significant judgment be applied to various accounting, reporting and disclosure matters. We use assumptions and estimates to apply these principles where actual measurement is not possible or practical. For a complete discussion of significant accounting policies, refer to Note 2 of the accompanying Financial Statements. The following is a summary of certain critical accounting policies:

<u>Allowance for Credit Losses</u> - The allowance for loan losses is our best estimate of the amount of losses on loans in our portfolio as of the date of the Financial Statements. We determine the allowance for loan losses based on a periodic evaluation of our loan portfolio, which considers loan loss history, estimated probability of default, estimated loss severity, portfolio quality and current economic and environmental conditions. Refer to the Loan Portfolio - Allowance for Loan Losses section for further discussion.

Effective January 1, 2023, we adopted Accounting Standards Update (ASU) 2016-13 "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." This guidance established a single allowance framework for all financial assets measured at amortized cost and certain off-balance sheet credit exposures, and replaced the incurred loss guidance. This framework requires that management's estimate reflects credit losses over the asset's remaining expected life and considers expected future changes in macroeconomic conditions. The allowance for credit losses comprises the allowance for credit losses on loans, the allowance for unfunded commitments, and the allowance for credit losses on investment securities.

After adoption of this guidance, the allowance for credit losses takes into consideration relevant information about past events, current conditions, and macroeconomic forecasts of future conditions. An economic scenario is considered over a reasonable and supportable forecast period, after which, the framework incorporates historical loss experience. Final loss estimates also consider factors affecting credit losses not reflected in the scenario, due to the unique aspects of current conditions and expectations. These factors may include, but are not limited to, lending policies, portfolio concentrations, regulatory guidance, and/or lags in economic forecast information.

As a result of adoption of this guidance, the allowance for loan losses decreased by \$9.8 million and the reserve for unfunded commitments increased by \$1.0 million, with a cumulative-effect increase to retained earnings of \$8.8 million. No allowance for credit losses was recognized in relation to our investment portfolio upon adoption.

The decrease in the allowance for loan losses is largely due to the requirement of the standard to estimate losses to the assets' contractual maturities, resulting in a decrease of allowances attributable to our short-term portfolios. Partially offsetting the decline are modest increases in allowance attributable to our long-term real estate portfolios.

Additional information related to the adoption of this new guidance is included in Note 2 of the accompanying Financial Statements.

• <u>Fair Value Measurements</u> - We apply various valuation methods to assets and liabilities that often involve judgment, particularly when liquid markets do not exist for the particular items being valued. Quoted market prices are referred to when estimating fair values for certain assets, such as certain investment securities. However, for those items for which an observable active market does not exist, we utilize significant estimates and assumptions to value such items. These valuations require the use of various assumptions, including, among others, discount rates, rates of return on assets, prepayment rates, cash flows, default rates, loss severity rates and third-party prices. The use of different assumptions could produce significantly different results.

LIBOR Transition

ICE Benchmark Administration (the entity responsible for calculating LIBOR) ceased the publication of the one-week and two-month USD LIBOR settings immediately following the LIBOR publication on December 31, 2021, and has announced it intends to cease publication of the remaining USD LIBOR settings immediately following the LIBOR publication on June 30, 2023. It is widely anticipated that the Secured Overnight Financing Rate (SOFR) published by the CME group will be the fallback to LIBOR for certain types of outstanding loans, floating rate notes (which includes certain outstanding Systemwide Debt Securities) and derivatives based on LIBOR.

The Farm Credit System established a LIBOR transition workgroup to provide leadership in addressing the LIBOR phase-out across System entities. In coordination with this group, AgriBank developed a comprehensive project plan to address the issues surrounding a transition away from LIBOR. This plan was consistent with regulatory guidance from the FCA, and it incorporated actions to address risk identification and reporting, mitigation strategies, development or adoption of products utilizing alternative reference rates, operational and system impacts, a process for monitoring regulatory and industry developments, as well as communication to stakeholders.

We have some remaining exposure to LIBOR, including LIBOR-referenced financial instruments that mature after June 2023. Due to our limited exposure, we do not expect the discontinuation and replacement of LIBOR, including, but not limited to, changes to applicable laws, will have a material impact on us or District Associations.

LIBOR-Indexed Variable Rate Financial Instruments

(in thousands)

As of December 31, 2022

Year of Maturity	January 1 - June 30, 2023	July 1, 2023 and After	Total
Assets			
Loans	\$34,646	\$184,429	\$219,075
Investments	2	1,035,376	1,035,378
Total	\$34,648	\$1,219,805	\$1,254,453
Shareholders' equity			
Preferred stock ⁽¹⁾	\$—	\$250,000	\$250,000

Dollar LIBOR as defined with respect to the preferred stock will no longer be available after June 30, 2023, the annual rate will be replaced by a CME Term SOFR-based rate if the preferred stock is not redeemed on January 1, 2024. To the extent that any preferred stock has not been redeemed prior to June 30, 2023, pursuant to the Adjustable Interest Rate (LIBOR) Act and Federal Reserve Board Regulation ZZ, the LIBOR-based rate that would have been paid after December 31, 2023 under such preferred stock will be replaced by operation of law with a CME Term SOFR-based rate. Refer to Note 6 of the accompanying Financial Statements for additional information about the preferred stock.

(in millions)

Year of Termination	January 1 - June 30, 2023	July 1, 2023 and After	Total	
Derivatives (notional amount)	\$650	\$981	\$1,631	

Our exposure to loans indexed to LIBOR does not include wholesale loans, as they are not directly indexed to LIBOR. However, the wholesale pricing terms are generally matched to the District Association's retail portfolios, which contain loans indexed to LIBOR. As such, the wholesale loans have historically been partially funded by LIBOR-indexed bonds. LIBOR-indexed bonds were also used to fund a portion of our administered variable loans to District Associations and, in turn, their customers. As we have shifted our funding, with no remaining LIBOR-indexed bonds as of December 31, 2021, certain District Associations may see their basis risk increase. With limited exceptions in accordance to FCA guidance, District Associations have ceased issuing new loans indexed to LIBOR, somewhat mitigating this basis risk.

Human Capital

AgriBank recognizes that our people are the key to continued success achieved through inclusive people practices that align with strategic plans and that foster a productive and engaged workforce. We promote a work experience that embodies mission, integrity, excellence, support and improvement – all serving the needs of rural America and agriculture.

Our human capital strategy is to position AgriBank as a premier employer in a hybrid workplace landscape, with guidance and oversight from our board of directors. We adopted a People Plan (Plan) that focuses on: (1) an assessment of workforce and performance management, (2) succession planning, and (3) diversity and inclusion.

Assessment of Workforce and Performance Management

The Plan provides a description of our workforce and assess its strengths and weaknesses. We are continuously aligning our workforce, structure, and systems with AgriBank's strategic plan, by deploying leading practices in talent acquisition, learning and development, and performance management.

Succession Programs

Succession management at AgriBank is an ongoing process of talent reviews, critical role identification, and talent calibration. Essential to ensuring successful strategic execution as employees transition, the key goal is to maintain a robust pool of successor candidates for critical jobs.

Diversity and Inclusion

Inclusive practices are embedded throughout AgriBank's talent cycle of recruiting, learning and development, performance management, and succession planning. Prioritizing inclusion is the principal driver behind AgriBank's success in achieving an engaged, productive, and diverse workforce, and in fostering our positive work environment as a premier employer.

The number of personnel employed by AgriBank on a full-time equivalent basis was 121 and 119 composed of 57.0 percent and 57.1 percent men, 43.0 percent and 42.9 percent women, and 9.9 percent and 5.9 percent minorities at December 31, 2022 and 2021, respectively.

Other Matters

Our approval is required for significant structural changes at District Associations, including, but not limited to, merger, acquisition, liquidation or re-affiliation to another Farm Credit District.

On June 24, 2022, the boards of directors of Farm Credit Midsouth, ACA and Farm Credit Mid-America, ACA executed a letter of intent to merge the two Associations. The merged Association would be named Farm Credit Mid-America, ACA and headquartered in Louisville, Kentucky. Both Associations completed due diligence to assess merger benefits. The boards of both Associations and AgriBank approved the merger, and it was submitted to the Farm Credit Administration on September 22, 2022, for review. The Farm Credit Administration granted preliminary approval on December 15, 2022. On February 16, 2023, the customer/owners voted to approve the merger. The merger is awaiting final approval from the Farm Credit Administration, with a target effective date of April 1, 2023.

In 2021, Delta, ACA's (Delta's) board of directors determined that it was in the best interests of Delta to voluntarily dissolve, and approved a preliminary resolution to proceed with a plan to voluntarily liquidate and dissolve the Association (the Plan). On March 17, 2022, the FCA preliminarily approved the Plan. On April 14, 2022, Delta's stockholders approved the Plan, which includes an agreement to sell the loan portfolio to another District Association. Subsequently, on April 19, 2022, the FCA provided final approval of the Plan. The sale of Delta's entire loan portfolio to AgHeritage Farm Credit Services, ACA occurred on May 1, 2022. All Delta employees were terminated effective May 31, 2022. The remaining assets are under the control of a liquidation agent, and the ultimate timing of the final liquidation is uncertain and subject to multiple considerations.

Report of Management

AgriBank, FCB

We prepare the Financial Statements of AgriBank, FCB (AgriBank) and are responsible for their integrity and objectivity, including amounts that must necessarily be based on judgments and estimates. The Financial Statements have been prepared in conformity with accounting principles generally accepted in the United States of America. The Financial Statements, in our opinion, fairly present the financial condition of AgriBank. Other financial information included in the Annual Report is consistent with that in the Financial Statements.

To meet our responsibility for reliable financial information, we depend on accounting and internal control systems designed to provide reasonable but not absolute assurance that assets are safeguarded and transactions are properly authorized and recorded. Costs must be reasonable in relation to the benefits derived when designing accounting and internal control systems. Financial operations audits are performed to monitor compliance. PricewaterhouseCoopers LLP, our independent auditors, audit the Financial Statements. In addition, our independent auditor has audited our internal control over financial reporting as of December 31, 2022. The Farm Credit Administration also performs examinations for safety and soundness, as well as compliance with applicable laws and regulations.

The board of directors has overall responsibility for our system of internal control and financial reporting. The board of directors and its Audit Committee consult regularly with us and meet periodically with the independent auditors and other auditors to review the scope and results of their work. The independent auditor has direct access to the board of directors, which is composed solely of directors who are not officers or employees of AgriBank.

The undersigned certify we have reviewed AgriBank, FCB's December 31, 2022 Annual Report, and it has been prepared in accordance with all applicable statutory and regulatory requirements and the information contained herein is true, accurate and complete to the best of our knowledge and belief.

nicklaue A Vande Weerd

Nicklaus J. Vande Weerd Chair of the Board AgriBank, FCB

March 1, 2023

Jeffrey R. Swamherst

Jeffrey R. Swanhorst Chief Executive Officer AgriBank, FCB

March 1, 2023

Ang 2 Moore

Jeffrey L. Moore Chief Financial Officer AgriBank, FCB

March 1, 2023

Report of Audit Committee

AgriBank, FCB

The Financial Statements were prepared under the oversight of the Audit Committee. The Audit Committee is composed of a subset of the board of directors of AgriBank, FCB (AgriBank). The Audit Committee oversees the scope of AgriBank's internal audit program, the approval and independence of PricewaterhouseCoopers LLP (PwC) as independent auditors, the adequacy of AgriBank's system of internal controls and procedures and the adequacy of management's actions with respect to recommendations arising from those auditing activities. The Audit Committee's responsibilities are described more fully in the Internal Control Policy and the Audit Committee Charter.

Management is responsible for the preparation of the Financial Statements in accordance with accounting principles generally accepted in the United States of America. Additionally, management is responsible for the design and operating effectiveness of internal control over financial reporting for the Financial Statements. PwC is responsible for expressing opinions on the Financial Statements and internal control over financial reporting based on their integrated audits which are performed in accordance with auditing standards of the Public Company Accounting Oversight Board (PCAOB) and in accordance with generally accepted auditing standards in the United States of America. The Audit Committee's responsibilities include monitoring and overseeing these processes.

In this context, the Audit Committee reviewed and discussed the audited Financial Statements for the year ended December 31, 2022, with management. The Audit Committee also reviewed with PwC the matters required to be discussed by PCAOB Auditing Standard No. 1301, *Communications with Audit Committees*, and both PwC and the internal auditors directly provided reports on any significant matters to the Audit Committee.

The Audit Committee had discussions with and received written disclosures from PwC confirming its independence. The Audit Committee also reviewed the non-audit services provided by PwC, if any, and concluded these services were not incompatible with maintaining PwC's independence. The Audit Committee discussed with management and PwC any other matters and received any assurances from them as the Audit Committee deemed appropriate.

Based on the foregoing review and discussions, and relying thereon, the Audit Committee recommended the audited Financial Statements be included in the Annual Report for the year ended December 31, 2022.

Davar S. Chhura

Ivar S. Chhina Audit Committee Chair AgriBank, FCB

March 1, 2023

Laura Braun Stan Claussen Steve Cunningham

Report on Internal Control over Financial Reporting

AgriBank, FCB

AgriBank, FCB's (AgriBank) principal executives and principal financial officers or persons performing similar functions are responsible for establishing and maintaining adequate internal control over financial reporting. For purposes of this report, "internal control over financial reporting" is defined as a process designed by, or under the supervision of AgriBank'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 and the preparation of the 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 AgriBank, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements 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 AgriBank and (3) provide reasonable assurance regarding prevention or timely detection, of unauthorized acquisition, use or disposition of AgriBank's assets that could have a material effect on its financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

AgriBank's management has completed an assessment of the effectiveness of internal control over financial reporting as of December 31, 2022. In making the assessment, management used the 2013 framework in Internal Control - Integrated Framework, promulgated by the Committee of Sponsoring Organizations of the Treadway Commission, commonly referred to as the "COSO" criteria.

Based on the assessment performed, AgriBank concluded that as of December 31, 2022, the internal control over financial reporting was effective based upon the COSO criteria.

AgriBank'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, which expresses an unqualified opinion on the effectiveness of AgriBank's internal control over financial reporting as of December 31, 2022.

Jeffrey R. Sconterst

Jeffrey R. Swanhorst Chief Executive Officer AgriBank, FCB

March 1, 2023

uffy 2 Moore

Jeffrey L. Moore Chief Financial Officer AgriBank, FCB

March 1, 2023



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of AgriBank, FCB

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying statements of condition of AgriBank, FCB (the "Company") as of December 31, 2022, 2021 and 2020, and the related statements of comprehensive income, of changes in shareholders' equity and of cash flows for the years then ended, including the related notes (collectively referred to as the "financial statements"). We also have audited the Company'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 financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022, 2021 and 2020, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company 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 Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's financial statements and on the Company'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 Company 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 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 financial statements included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting 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.

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 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 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 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 3 to the financial statements, the allowance for loan losses was \$31.7 million, of which \$25.8 million is related to loans collectively evaluated for impairment as of December 31, 2022. As disclosed by management, the allowance for loan losses related to loans collectively evaluated for impairment is determined by management by grouping those loans into loan segments sharing similar risk characteristics. These loan segments include pool programs, loans to other financing institutions and retail participation loans. Management uses a combination of estimated probability of default and estimated loss given default assumptions to estimate losses related to loans collectively evaluated for impairment in these loan segments using a two-dimensional loan risk rating model that incorporates a 14-point rating scale to identify and track the probability of borrower default and a separate 6-point scale addressing the loss given default. These estimated losses may be adjusted for relevant current environmental 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 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.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the 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 used within the allowance for loan losses related to loans collectively evaluated for impairment. 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.

Pricewaterbouse Coopers LLP

Minneapolis, Minnesota March 1, 2023

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

Statements of Condition

AgriBank, FCB

(in thousands)			
As of December 31,	2022	2021	2020
Assets			
Loans	\$133,470,781	\$121,994,112	\$109,785,695
Allowance for loan losses	31,739	37,558	39,850
Net loans	133,439,042	121,956,554	109,745,845
Investment securities	20,093,923	18,392,628	18,585,329
Cash	1,356,976	1,304,994	622,092
Federal funds	-	_	639,700
Accrued interest receivable	1,028,153	519,172	495,635
Derivative assets	114,582	5,176	11,065
Other assets	430,092	238,072	208,468
Total assets	\$156,462,768	\$142,416,596	\$130,308,134
Liabilities			
Bonds and notes	\$148,228,998	\$134,702,607	\$123,029,564
Accrued interest payable	644,117	260,462	273,685
Derivative liabilities	85,784	55,284	86,529
Patronage payable and other payables	286,334	367,588	276,998
Other liabilities	31,979	24,740	61,841
Total liabilities	149,277,212	135,410,681	123,728,617
Commitments and contingencies (Note 9)			
Shareholders' equity			
Perpetual preferred stock	250,000	250,000	250,000
Capital stock and participation certificates	4,664,821	3,826,290	3,301,599
Allocated retained earnings	-	1,377	1,550
Unallocated retained earnings	3,139,365	3,139,203	3,139,203
Accumulated other comprehensive loss	(868,630)	(210,955)	(112,835)
Total shareholders' equity	7,185,556	7,005,915	6,579,517
Total liabilities and shareholders' equity	\$156,462,768	\$142,416,596	\$130,308,134

Statements of Comprehensive Income

AgriBan	k. FCB	

(in thousands)			
For the year ended December 31,	2022	2021	2020
Interest income			
Loans	\$2,809,491	\$1,858,735	\$2,117,033
Investment securities and federal funds	298,969	108,294	207,566
Total interest income	3,108,460	1,967,029	2,324,599
Interest expense	2,254,016	1,187,241	1,610,238
Net interest income	854,444	779,788	714,361
Provision for credit losses	(6,000)	1,000	11,000
Net interest income after provision for credit losses	860,444	778,788	703,361
Non-interest income			
Mineral income	89,636	54,487	33,993
Business services income	7,583	7,431	11,425
Loan prepayment and fee income	18,871	62,979	141,487
Other non-interest (loss) income, net	(1,072)	20,651	3,183
Total non-interest income	115,018	145,548	190,088
Non-interest expense			
Salaries and employee benefits	27,551	25,759	30,724
Other operating expense	46,614	44,128	43,135
Loan servicing and other expense	78,542	68,517	57,428
Farm Credit System insurance expense	29,364	21,205	11,002
Other non-interest expense, net	2,694	(484)	41,981
Total non-interest expense	184,765	159,125	184,270
Net income	\$790,697	\$765,211	\$709,179
Other comprehensive loss			
Not-other-than-temporarily impaired Investment activity	\$(847,420)	\$(169,122)	\$88,774
Derivatives and hedging activity	189,487	70,966	(123,109)
Employee benefit plan activity	258	36	(588)
Total other comprehensive loss	(657,675)	(98,120)	(34,923)
Comprehensive income	\$133,022	\$667,091	\$674,256

Statements of Changes in Shareholders' Equity

	AgriBank, F	СВ				
(in thousands)	Perpetual Preferred Stock	Capital Stock and Participation Certificates	Allocated Retained Earnings	Unallocated Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Total
Balance at December 31, 2019	\$250,000	\$2,871,767	\$227	\$3,138,311	\$(77,912)	\$6,182,393
Net income				709,179		709,179
Other comprehensive loss					(34,923)	(34,923)
Redemption of retained earnings allocated under patronage program			(75)			(75)
Cash patronage				(689,701)		(689,701)
Retained earnings allocated under patronage program			1,398	(1,398)		_
Perpetual preferred stock dividends				(17,188)		(17,188)
Capital stock/participation certificates issued		570,221				570,221
Capital stock/participation certificates retired		(140,389)				(140,389)
Balance at December 31, 2020	\$250,000	\$3,301,599	\$1,550	\$3,139,203	\$(112,835)	\$6,579,517
Net income				765,211		765,211
Other comprehensive loss					(98,120)	(98,120)
Redemption of retained earnings allocated under patronage program			(826)			(826)
Cash patronage				(658,678)		(658,678)
Stock patronage issued as capital stock		88,692		(88,692)		_
Retained earnings allocated under patronage program			653	(653)		_
Perpetual preferred stock dividends				(17,188)		(17,188)
Capital stock/participation certificates issued		466,465				466,465
Capital stock/participation certificates retired		(30,466)				(30,466)
Balance at December 31, 2021	\$250,000	\$3,826,290	\$1,377	\$3,139,203	\$(210,955)	\$7,005,915
Net income				790,697		790,697
Other comprehensive loss					(657,675)	(657,675)
Redemption of retained earnings allocated under patronage program			(1,508)			(1,508)
Cash patronage				(312,782)		(312,782)
Stock patronage issued as capital stock		460,434		(460,434)		_
Retained earnings allocated under patronage program			131	(131)		_
Perpetual preferred stock dividends				(17,188)		(17,188)
Capital stock/participation certificates issued		400,215				400,215
Capital stock/participation certificates retired		(22,118)				(22,118)
Balance at December 31, 2022	\$250,000	\$4,664,821	\$—	\$3,139,365	\$(868,630)	\$7,185,556

Statements of Cash Flows

AgriBank, FCB

(in thousands)

For the year ended December 31,	2022	2021	2020
Cash flows from operating activities		-	
Net income	\$790,697	\$765,211	\$709,179
Adjustments to reconcile net income to cash flows from operating activities:	<i>+····</i> ,-···	<i>,,,,,,,,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>\(\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>
Depreciation on premises and equipment	269	2,100	2,683
Provision for credit losses	(6,000)	1,000	11,000
Loss on sale of investment securities, net	3,998		
Amortization of (discounts) premiums on investments, net	(38,747)	47,678	(36,490)
Amortization of discounts on debt and deferred debt issuance costs, net	90,524	93,540	108,574
Loss on derivative activities, net	24,309	22,150	6,085
Loss on debt extinguishment	_	, _	12,981
Changes in operating assets and liabilities:			
Increase in accrued interest receivable	(2,307,348)	(1,409,119)	(1,678,289)
Increase in other assets	(167,259)	(57,912)	(61,243)
Increase (decrease) in accrued interest payable	383,655	(13,223)	(134,180)
Increase (decrease) in other liabilities	154,773	(23,057)	41,704
Net cash used in operating activities	(1,071,129)	(571,632)	(1,017,996)
Cash flows from investing activities			
Increase in loans, net	(9,678,121)	(10,826,127)	(9,579,717)
Purchases of investment securities	(10,753,433)	(12,399,013)	(21,771,775)
Proceeds from investment securities	7,349,681	12,374,914	17,679,868
Proceeds from the sale of investment securities	889,786	_	-
Other investing activities, net	448	(1,399)	(299)
Net cash used in investing activities	(12,191,639)	(10,851,625)	(13,671,923)
Cash flows from financing activities			
Bonds and notes issued	205,463,972	252,678,299	205,873,174
Bonds and notes retired	(191,957,978)	(241,093,634)	(191,291,284)
(Increase) decrease in cash collateral posted with counterparties, net	(18,663)	26,399	(10,048)
Variation margin received (paid) on cleared derivatives, net	16,610	19,506	(98,682)
Patronage distributions paid	(545,803)	(582,922)	(659,873)
Preferred stock dividends paid	(21,485)	(17,188)	(17,188)
Capital stock/participation certificates issued, net	378,097	435,999	429,832
Net cash provided by financing activities	13,314,750	11,466,459	14,225,931
Net increase (decrease) in cash and federal funds	51,982	43,202	(463,988)
Cash and federal funds at beginning of period	1,304,994	1,261,792	1,725,780
Cash and federal funds at end of period	\$1,356,976	\$1,304,994	\$1,261,792

Supplemental Statements of Cash Flows Information

AgriBank, FCB

(in thousands)

For the year ended December 31,	2022	2021	2020
Supplemental non-cash investing and financing activities			
(Decrease) increase in shareholders' equity from investment securities	\$(847,420)	\$(169,122)	\$88,774
Interest capitalized to loan principal	1,798,367	1,385,582	1,910,290
Patronage and preferred stock dividends accrued	77,143	312,954	236,370
Stock patronage issued	460,434	88,692	_
Supplemental non-cash fair value changes related to hedging activities			
(Increase) decrease in derivative assets and liabilities, net	\$(95,051)	\$(43,654)	\$129,907
Decrease in bonds from derivative activity	(70,127)	(5,162)	(713)
Increase (decrease) in shareholders' equity from cash flow derivatives	189,487	70,966	(123,109)
Supplemental Information			
Interest paid	\$1,757,326	\$1,085,014	\$1,630,259

Notes to Financial Statements

AgriBank, FCB

NOTE 1

Organization and Operations

Farm Credit System and District Organization

AgriBank, FCB (AgriBank) is one of the Banks of the Farm Credit System (the System), a federally chartered network of borrowerowned lending institutions comprised of cooperatives and related service organizations, established by Congress and subject to the provisions of the Farm Credit Act of 1971, as amended. Cooperatives are organizations that are owned and governed by their members who use the cooperatives' products, supplies or services. The System specializes in providing financing and related services to qualified borrowers for agricultural and rural purposes.

At January 1, 2023, the System included three Farm Credit Banks, one Agricultural Credit Bank and 61 Associations across the nation. System entities have specific lending authorities within their chartered territories. AgriBank is chartered to serve Associations in substantially all of Arkansas, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Tennessee, Wisconsin and Wyoming. Our chartered territory is referred to as the AgriBank District. We serve our chartered territory by lending to the District's Federal Land Credit Associations (FLCAs), Production Credit Associations (PCAs) and Agricultural Credit Associations (ACAs).

AgriBank is primarily owned by local Farm Credit Associations (District Associations). District Associations are comprised of ACA parent Associations, each of which has wholly owned FLCA and PCA subsidiaries. FLCAs are authorized to originate long-term real estate mortgage loans. PCAs are authorized to originate short-term and intermediate-term loans. ACAs are authorized to originate long-term real estate mortgage loans and short-term and intermediate-term loans either directly or through their FLCA and PCA subsidiaries. District Associations are also authorized to provide lease financing options for agricultural purposes and to purchase and hold certain types of investments. District Associations may also offer credit life, term life, credit disability, crop hail, and multiperil crop insurance to their borrowers and those eligible to borrow. Additionally, certain District Associations offer farm records, fee appraisals, income tax planning and preparation services, retirement and succession planning, and producer education services to their members. We are the primary funding source for all District Associations. We raise funds principally through the sale of consolidated Systemwide bonds and notes to the public through the Federal Farm Credit Banks Funding Corporation (the Funding Corporation).

The Farm Credit Act sets forth the types of authorized lending activity, persons eligible to borrow and financial services that we can offer. We are authorized to provide, in participation with other lenders, credit and related services to eligible borrowers. Eligible borrowers include farmers, ranchers, producers or harvesters of aquatic products, rural residents, farm-related service businesses, and processing or marketing operations. The Farm Credit Act, as amended, also allows us to participate with other lenders in loans to similar entities. Similar entities are parties that are not eligible for a loan from a System lending institution, but have operations that are functionally similar to the activities of eligible borrowers. We are also authorized to purchase and hold certain types of investments.

The Farm Credit Administration (FCA) is delegated authority by Congress to regulate the System Banks and Associations. The activities of the System Banks and Associations are examined by the FCA and certain actions by these entities require prior approval from the FCA.

The Farm Credit System Insurance Corporation (FCSIC or the Insurance Corporation) administers the Farm Credit Insurance Fund (Insurance Fund). The Insurance Fund is used to ensure the timely payment of principal and interest on Systemwide debt obligations, to ensure the retirement of protected borrower capital at par or stated value, and for other specified purposes.

The Insurance Corporation does not insure any payments on our preferred stock, common stock or risk participation certificates. In the event of default by another System Bank, and if no available amounts remain in the Insurance Fund, we are required to fund our allocated portion of another System Bank's portion of the Systemwide Debt Securities.

At the discretion of the Insurance Corporation, the Insurance Fund is also available to provide assistance to certain troubled System institutions and for the operating expenses of the Insurance Corporation. Each System Bank is required to pay premiums into the Insurance Fund until the assets in the Insurance Fund equal 2 percent (the secure base amount) of the aggregated insured obligations adjusted to reflect the reduced risk on loans or investments guaranteed by federal or state governments. The percentage

of aggregate obligations can be changed by the Insurance Corporation, at its sole discretion, to a percentage it determines to be actuarially sound. When the amount in the Insurance Fund exceeds the secure base amount, the Insurance Corporation is required to reduce premiums and, under certain circumstances, is required to transfer excess funds to establish Allocated Insurance Reserves Accounts (AIRAs). The Insurance Corporation may also distribute all or a portion of these accounts to the System Banks.

The basis for assessing premiums is insured debt outstanding. Nonaccrual loans and impaired investment securities are assessed a surcharge, while guaranteed loans and investment securities are deductions from the premium base. We, in turn, assess premiums to District Associations each year based on similar factors.

AgriBank Operations

We primarily lend to District Associations in the form of lines of credit to fund Associations' loan portfolios. These lines of credit (wholesale loans) are collateralized by a pledge of substantially all of each District Association's assets. The terms of the revolving lines of credit are governed by a General Financing Agreement (GFA) between us and each District Association. The wholesale funding we provide substantially matches the terms and embedded options of the Associations' retail loans. General operating expenses of the Associations are also funded through their lines of credit. We also fund District Association lending through the direct purchase of participations in retail loans from Associations.

In addition to providing loan funds to District Associations, we may provide certain business services to Associations and other Farm Credit entities. The revenue received for these services is included in "Business services income," a component of non-interest income, on our Statements of Comprehensive Income. As discussed in Note 2, effective April 1, 2020, SunStream Business Services (SunStream) began operating as a separate service corporation and offers certain services previously provided by AgriBank.

Service Organizations

System institutions jointly own several service organizations. These organizations were created to provide a variety of services for the System. We have ownership interests in the following service organizations:

- Federal Farm Credit Banks Funding Corporation provides for the issuance, marketing and processing of Systemwide Debt Securities using a network of investment dealers and dealer banks and financial management and reporting services
- Farm Credit Services Building Association owns and leases premises and equipment to the System's regulator, the FCA
- Farm Credit System Association Captive Insurance Company provides corporate insurance coverage to member organizations
- Farm Credit Foundations (Foundations) provides benefits and payroll services to AgriBank and District Associations as well as certain other System entities
- SunStream Business Services (SunStream) provides applications, technology services and business services to Farm Credit entities

In addition, the Farm Credit Council acts as a full-service federated trade association that represents the System before Congress, the Executive Branch and others, and provides support services to System institutions on a fee basis.

NOTE 2

Summary of Significant Accounting Policies

Our accounting policies conform to generally accepted accounting principles in the United States of America (GAAP) and prevailing practices within the financial services industry. The preparation of Financial Statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Financial Statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Certain amounts in the prior years' Financial Statements have been reclassified to conform to current year presentation.

The Financial Statements include the accounts of AgriBank. These Financial Statements do not include the assets, obligations or results of operations of District Associations. AgriBank operates as a single segment for reporting purposes. SunStream results of operations are included in the Financial Statements through March 31, 2020, during which time it operated as a division of AgriBank. Effective April 1, 2020, SunStream began operating as separate service corporation, under Section 4.25 of the Farm Credit Act, and is owned by AgriBank and certain District Associations. The separation of SunStream did not have a material impact on these Financial Statements.

Loans: Loans are carried at their principal amount outstanding, net of any unearned income, cumulative net charge-offs and unamortized deferred fees. Loan interest is accrued and credited to interest income based upon the daily principal amount outstanding. Accrued interest on wholesale loans is capitalized to loan principal on a monthly basis. Origination fees, net of related costs, are deferred and recognized over the life of the loan as a yield adjustment in net interest income. The net amount of loan fees and related origination costs are not material to the Financial Statements taken as a whole. The majority of our loan-related fees are through funding our wholesale loans. These fees are considered funding charges, because the fees are related to actions of the underlying Association retail loans, which are funded through the wholesale loans. These wholesale fees are not subject to deferral and are recognized in the period in which they are assessed.

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 remains 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.

Loans are placed in nonaccrual status when principal or interest is delinquent for 90 days or more (unless adequately secured and in the process of collection) or circumstances indicate that full collection is not expected. When a loan is placed in nonaccrual status, and the interest is determined to be both uncollectible and the loss is known, we reverse current year accrued interest to the extent principal plus accrued interest exceeds the net realizable value of the collateral prior to reclassification. When we deem a loan to be uncollectible, we charge the loan principal and prior year(s) accrued interest against the allowance for loan losses. Subsequent recoveries, if any, are added to the allowance for loan losses. Any cash received on nonaccrual loans is applied to reduce the recorded investment in the loan, except in those cases where the collection of the recorded investment is fully expected and certain other criteria are met. In these circumstances interest is credited to income when cash is received. Loans are charged off at the time they are determined to be uncollectible. Nonaccrual loans may be returned to accrual status when principal and interest are current, the customer's ability to fulfill the contractual payment terms is fully expected, and, if the loan was past due when placed in nonaccrual status, the loan has evidence of sustained performance in making on-time contractual payments (typically based on payment frequency).

In situations where, for economic or legal reasons related to the borrower's financial difficulties, we grant a concession for other than an insignificant period of time to the borrower that we would not otherwise consider, the related loan is classified as a troubled debt restructuring, also known as a formally restructured loan for regulatory purposes. A concession is generally granted in order to minimize economic loss and avoid foreclosure. Concessions vary by program and borrower and may include interest rate reductions, term extensions, payment deferrals, or an acceptance of additional collateral in lieu of payments. In limited circumstances, principal may be forgiven. Loans classified as troubled debt restructurings are considered risk loans (as defined in the Allowance for Loan Losses section). There may be modifications made in the normal course of business that would not be considered troubled debt restructurings (TDRs).

Allowance for Loan Losses: The allowance for loan losses is an estimate of losses inherent in our loan portfolio as of the financial statement date. We determine the appropriate level of allowance for loan losses based on periodic evaluation of factors such as loan loss history, estimated probability of default, estimated loss severity, portfolio quality and current economic and environmental conditions.

Loans in our portfolio that are considered impaired are assessed individually to establish a specific allowance. A loan is impaired when it is probable that all amounts due will not be collected according to the contractual terms of the loan agreement. We generally measure impairment based on the net realizable value of the collateral. Risk loans include nonaccrual loans, accruing restructured loans and accruing loans 90 days or more past due. All risk loans are considered to be impaired loans.

We record a specific allowance to reduce the carrying amount of the risk loan by the amount the recorded investment exceeds the net realizable value of collateral. When we deem a loan to be uncollectible, we charge the loan principal and prior year(s) accrued interest against the allowance for loan losses. Subsequent recoveries, if any, are added to the allowance for loan losses.

We determine the amount of allowance that is required by assessing risk loans and wholesale loans individually and all other retail loans by grouping them into loan segments sharing similar risk characteristics. An allowance is recorded for probable and estimable credit losses as of the financial statement date for loans that are not individually assessed, using a two-dimensional loan risk rating model that incorporates a 14-point rating scale to identify and track the probability of borrower default and a separate 6-point scale addressing the loss severity. The combination of estimated default probability and loss severity is the primary basis for recognition and measurement of loan collectability of these pools of loans. These estimated losses may be adjusted for relevant current environmental factors.

Changes in the allowance for loan losses consist of provision activity, recorded in "Provision for credit losses" in the Statements of Comprehensive Income, recoveries and charge-offs.

For purchased loans acquired that are not deemed impaired at acquisition, credit discounts representing the principal losses expected over the life of the loan are a component of the initial fair value. Subsequent to the purchase date, the methods utilized to estimate the required allowance for credit losses for these loans is similar to originated loans; however, we record a provision for credit losses only when the required allowance exceeds any remaining credit discounts. The remaining differences between the purchase price and the unpaid principal balance at the date of acquisition are recorded in interest income over the life of the loans.

Investment Securities: Our investment securities have been classified as available-for-sale (AFS). These investments are reported at fair value, and unrealized holding gains and losses on investments that are not other-than-temporarily impaired are netted and reported as a separate component of shareholders' equity ("Accumulated other comprehensive loss"). Changes in the fair value of investment securities are reflected as direct charges or credits to "Other comprehensive loss," unless the security is deemed to be other-than-temporarily impaired. Purchased premiums and discounts are amortized or accreted using the interest method over the terms of the respective securities.

We evaluate our investment securities for other-than-temporary impairment (OTTI) on a quarterly basis. Factors considered in determining whether an impairment is other-than-temporary include: the financial condition and near-term prospects of the issuer, the financial condition of any financial guarantor, if applicable, a current projection of expected cash flow compared to current net carrying value and contractual cash flow, our intent to sell the impaired security and whether we are more likely than not to be required to sell the security before recovery and qualitative consideration of other available information when assessing whether impairment is other-than-temporary.

When OTTI exists and we do not intend to sell the impaired debt security, nor are we more likely than not to be required to sell the security before recovery, we separate the loss into credit-related and non-credit-related components. If a security is deemed to be other-than-temporarily impaired, the security is written down to fair value, the credit-related component is recognized through earnings and the non-credit-related component is recognized in "Other comprehensive loss." Realized gains and losses are determined using the specific identification method and are recognized in current operations.

Cash: Cash, as included on the Financial Statements, represents cash on hand, money markets and deposits in banks.

Federal Funds: Federal funds, as included on the Financial Statements, represent excess reserve funds on deposit at the Federal Reserve banks 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.

Mineral Rights: In connection with past foreclosure and sale proceedings, we have retained certain mineral interests and equity positions in land from which we receive income from lease bonuses, rentals and leasing and production royalties. These intangible assets have no recorded value on the Statements of Condition. All income received on these mineral rights is recognized in the period earned and is included in "Mineral income" on the Statements of Comprehensive Income. The Farm Credit Act requires that mineral rights acquired after 1985 through foreclosure be sold to the buyer of the surface rights in the land.

Post-Employment Benefit Plans: The District has various post-employment benefit plans in which our employees participate. These plans are governmental plans and contain characteristics of multi-employer and multiple employer plans. Expenses related to these plans, except for the AgriBank District Pension Restoration Plan, are included in "Salaries and employee benefits" in the Statements of Comprehensive Income. For the Pension Restoration Plan, the service cost component is included in "Salaries and employee benefits" and the other components of net periodic benefit cost are included in "Other operating expense" on our Statements of Comprehensive Income.

Certain employees participate in the defined benefit retirement plan of the District. The plan is composed of two benefit formulas. At their option, employees hired prior to October 1, 2001, are on the cash balance formula or on the final average pay formula. Benefits-eligible employees hired between October 1, 2001, and December 31, 2006, are on the cash balance formula. Effective January 1, 2007, the AgriBank District Retirement Plan was closed to new employees. The District plan utilizes the "Projected Unit Credit" actuarial method for financial reporting and funding purposes.

Certain employees also participate in the non-qualified defined benefit Pension Restoration Plan of the AgriBank District. This plan restores retirement benefits to certain highly compensated eligible employees that would have been provided under the qualified plan if such benefits were not above the Internal Revenue Code compensation or other limits.

The defined contribution plan allows eligible employees to save for their retirement pre-tax, post-tax, or both, with an employer match on a percentage of the employee's contributions. We provide benefits under this plan for those employees that do not participate in the AgriBank District Retirement Plan in the form of a fixed percentage of salary contribution in addition to the employer match. Employer contributions are expensed when incurred.

We also provide certain health insurance benefits to eligible retired employees according to the terms of those benefit plans. The anticipated cost of these benefits is accrued during the employees' active service period.

Income Taxes: We are exempt from federal and other income taxes as provided in the Farm Credit Act.

Patronage Programs: We accrue patronage distributions throughout the year. We pay cash patronage in accordance with the declarations of the AgriBank Board of Directors (the board), throughout the year for which the patronage was declared. Accrued cash patronage is included in "Patronage payable and other payables" on the Statements of Condition. Stock patronage is issued in accordance with the declarations of the board, typically annually.

Preferred Stock Dividends: We accrue non-cumulative perpetual preferred stock dividends daily as declared by the board. Dividends on non-cumulative perpetual preferred stock are payable quarterly in arrears on the first day of January, April, July and October. Accrued dividends are included in "Patronage payable and other payables" on the Statements of Condition.

Derivative Instruments and Hedging Activity: We are party to derivative financial instruments, primarily interest rate swaps, which are used to manage interest rate risk on assets, liabilities and forecasted transactions. Derivatives are recorded at fair value on the Statements of Condition as assets or liabilities.

Changes in the fair values of derivatives are recorded as gains or losses through earnings or as a component of "Other comprehensive loss," on the Statements of Comprehensive Income, depending on the use of the derivative and whether it is designated and qualifies for hedge accounting.

For fair value hedge transactions in which we are hedging changes in the fair value of an asset or liability, changes in the fair value of the derivative instrument are offset in net income in "Interest expense" on the Statements of Comprehensive Income by changes in the fair value of the hedged item. Additionally, the gain or loss on the hedged item attributed to the hedged risk are recognized in current earnings.

For cash flow hedge transactions hedging the variability of cash flows related to a variable-rate asset or liability, changes in the fair value of the derivative instrument are reported in "Other comprehensive loss" on the Statements of Comprehensive Income. To the extent the hedge is effective, the gains and losses on the derivative instrument are reported in "Other comprehensive loss," until earnings are impacted by the variability of the cash flows of the hedged item. When reclassified to earnings, we include the gain or loss on the derivative in the "Interest expense" line item on the Statements of Comprehensive Income. The ineffective portion of all hedges is recognized in current period earnings.

For derivatives not designated as a hedging instrument, the related change in fair value is recorded in current period earnings in "Other non-interest (loss) income, net" on the Statements of Comprehensive Income.

We document all relationships between hedging instruments and hedged items, as well as our 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:

- Specific assets or liabilities on the Statements of Condition
- Firm commitments
- Forecasted transactions

For hedging relationships, we assess effectiveness of the hedging relationships through prospective effectiveness tests at inception and retrospective tests on an ongoing basis until the maturity or termination of the hedge. For prospective testing, we perform a shock test of interest rate movements. Alternative tests may be performed if those tests appear to be reasonable relative to the hedge relationship that is being evaluated. For retrospective testing, our procedure is to perform correlation and regression tests of the value change of the hedge versus the value change of the hedged item using weekly data. If the hedge relationship does not pass the minimum levels established for effectiveness tests, hedge accounting will be discontinued.

We discontinue hedge accounting prospectively when we determine that:

- A derivative is no longer effective in offsetting changes in the fair value or cash flows of a hedged item
- The derivative expires or is sold, terminated, exercised
- It is no longer probable that the forecasted transaction will occur
- A hedged firm commitment no longer meets the definition of a firm commitment
- Designating the derivative as a hedging instrument is no longer appropriate

When we discontinue hedge accounting for cash flow hedges and the forecasted transactions continue to be expected, any remaining accumulated other comprehensive income or loss is amortized into earnings over the remaining life of the original hedged item. If the forecasted transactions are no longer expected, any remaining accumulated other comprehensive income or loss is recognized immediately. When we discontinue hedge accounting for fair value hedges, changes in the fair value of the derivative will be recorded in current period earnings, and the basis adjustment to the previously hedged item will be taken into earnings using the interest method over the remaining life of the hedged item. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, we will carry the derivative at its fair value on the Statements of Condition, recognizing changes in fair value in current period earnings.

We may also enter into economic hedges for which we may choose not to elect hedge accounting treatment. We facilitate interest rate swaps to qualified borrowers of District Associations and execute an offsetting interest rate swap to manage the interest rate risk of the swap executed on behalf of the borrower. From time-to-time we also utilize commodity derivative instruments to manage mineral income volatility. The related derivative instruments are held at fair value with the change in fair value reported in "Other non-interest (loss) income, net" on the Statements of Comprehensive Income. Refer to Note 12 for further information.

Off-Balance Sheet Credit Exposures: Commitments to extend credit are agreements to lend to borrowers or participate in future lending arrangements in accordance with established contracts. These commitments generally have fixed expiration dates or other termination clauses. Standby letters of credit are agreements to pay a beneficiary if there is a default on a contractual arrangement. Commercial letters of credit are agreements to pay a beneficiary under specific conditions. Any reserve for unfunded lending commitments and unexercised letters of credit is based on management's best estimate of losses inherent in these instruments, but the commitments have not yet disbursed. Factors such as likelihood of disbursal and likelihood of losses given disbursement are utilized in determining a reserve, if needed. Based on management's assessment, any reserve is recorded in "Other liabilities" in the Statements of Condition and a corresponding loss is recorded in "Provision for credit losses" in the Statements of Comprehensive Income.

Statements of Cash Flows: For purposes of reporting cash flows, cash includes cash and overnight federal funds. Cash flows on hedges are classified in the same category as the items being hedged.

Fair Value Measurements: We utilize a hierarchy to disclose the fair value measurement of financial instruments. A financial instrument's categorization within the valuation hierarchy is based upon the least transparent input that is significant to the fair value measurement.

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

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:

Quoted prices for similar assets or liabilities in active markets

- Quoted prices for identical or similar assets or liabilities in markets that are not active so that they are traded less frequently than exchange-traded instruments, quoted prices that are not current, or principal market information that is not released publicly
- Inputs that are observable such as interest rates and yield curves, prepayment speeds, credit risks and default rates
- Inputs derived principally from or corroborated by observable market data by correlation or other means

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 our own judgments 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.

We may use various acceptable valuation techniques to determine fair value. The primary techniques used include:

- <u>Market Approach</u> uses prices and other relevant information generated by market transactions involving identical or comparable assets to derive a fair value amount
- <u>Income Approach</u> uses various valuation methods to convert future cash flows to a single discounted present value, which becomes the applicable fair value amount
- Cost Approach is based on the current cost to acquire a substitute asset of comparable utility

For certain pension investments presented at fair value, we have used net asset value per share as a practical expedient.

Refer to Notes 7 and 11 for further information on our fair value measurements.

Recently Issued or Adopted Accounting Pronouncements

We have assessed the potential impact of accounting standards that have been issued by the Financial Accounting Standards Board (FASB) and have determined the following standards to be applicable to our business:

Standard and effective date	Description	Adoption status and financial statement impact
In March 2020, the FASB issued Accounting Standards Update (ASU) 2020-04 "Reference Rate Reform, Topic 848." In January 2021, the FASB issued ASU 2021-01 further amending Topic 848. This guidance may be elected and applied prospectively over time beginning March 12, 2020.	The amendments in this update provide optional guidance for a limited time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. Additionally, the ASU 2021-01 clarifies that certain optional expedients and exceptions in Topic 848 for contract modifications and hedge accounting apply to derivatives that are	We adopted this standard effective March 12, 2020, with respect to hedge accounting. The standard applies to certain derivatives contracts we hold, and we expect to apply the expedients provided for in this standard as we transition from LIBOR as a reference rate. During first quarter 2021, we adopted this standard in relation to loans, leases and debt. Additionally, we intend to apply the
In December 2022, the FASB issued ASU 2022-06 "Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848", which deferred the sunset date of Topic 848 to December 31, 2024. After December 31, 2024, entities will no longer be permitted to apply the relief in Topic 848.	affected by the discounting transition.	relief granted in the extension. To date, the adoption of this standard has not had a material impact on our Financial Statements.

Standard and effective date	Description	Adoption status and financial statement impact
In June 2016, the FASB issued ASU 2016-13 "Financial Instruments - Credit Losses." The guidance is effective for non-U.S. Securities Exchange Commission filers for our first quarter of 2021. In November 2019, the FASB issued ASU 2019-10 which amends the mandatory effective date for this guidance for certain institutions. We have determined we qualified for the deferral of the mandatory effective date. As a result of the change, the standard is effective for our first quarter of 2023 and early adoption is permitted.	The guidance replaces the current incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. Credit losses relating to available- for-sale securities would also be recorded through an allowance for credit losses.	We adopted the standard as of January 1, 2023. As a result of adoption of this guidance, the allowance for loan losses decreased by \$9.8 million and the reserve for unfunded commitments increased by \$1.0 million, with a cumulative-effect increase to retained earnings of \$8.8 million. The adoption of the standard did not have a material impact related to our AFS investment portfolio as the substantial majority of these investments carry a full faith and credit guarantee of the U.S. government or an implicit credit guarantee from its agencies and have an immaterial risk of credit loss. No allowance for credit losses was recognized in relation to our investment portfolio upon adoption.
In April 2019, the FASB issued ASU 2019-04 "Codification Improvements to Topic 326, Financial Instruments— Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments." The guidance is effective the same as the effective dates and transition requirements in Update 2016-13 as amended.	The FASB decided to issue a separate Update for improvements to Updates 2016-01, 2016-13, and 2017-12 to increase stakeholders' awareness of the amendments and to expedite improvements to the Codification. The amendments in this Update are intended to improve the Codification or correcting its unintended application. The items addressed in the amendments generally are not expected to have a significant effect on current accounting practice or to create a significant administrative cost for most entities.	the amendments did not have a material
In March 2022, the FASB issued ASU 2022-02 "Financial Instruments— Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures." The guidance is effective at the same time that ASU 2016-13 is adopted.	This guidance eliminates the accounting guidance for troubled debt restructurings by creditors in Subtopic 310-40, Receivables —Troubled Debt Restructurings by Creditors, while enhancing disclosure requirements for certain loan refinancings and restructurings. This guidance also requires that an entity disclose current-period gross write-offs by year of origination for financing receivables and net investments in leases within the scope of Subtopic 326-20, Financial Instruments—Credit Losses—Measured at Amortized Cost.	We adopted the portion of the guidance relevant to us concurrent with the adoption of ASU 2016-13 as amended on January 1, 2023. The accounting standard update and the amendments did not have a material impact on our financial statements, but will modify certain disclosures required under ASU 2016-13.

Loans and Allowance for Loan Losses

Loans by Type

(in thousands)	2022		2021		2020	
As of December 31,	Amount	%	Amount	%	Amount	%
Wholesale loans	\$118,660,270	88.9 %	\$108,166,365	88.7 %	\$97,777,508	89.1 %
Retail loans:						
Real estate mortgage	4,710,046	3.5 %	4,373,338	3.6 %	4,355,940	4.0 %
Production and intermediate-term	7,894,068	5.9 %	7,678,693	6.3 %	6,408,983	5.8 %
Loans to other financing institutions (OFIs)	749,969	0.6 %	703,471	0.6 %	610,952	0.6 %
Other	1,456,428	1.1 %	1,072,245	0.8 %	632,312	0.5 %
Total retail loans	14,810,511	11.1 %	13,827,747	11.3 %	12,008,187	10.9 %
Total loans	\$133,470,781	100.0 %	\$121,994,112	100.0 %	\$109,785,695	100.0 %

The Other category was primarily composed of agribusiness and rural residential real estate loans.

Participations

We may purchase loan participations from and sell loan participations to others, primarily District Associations. We had no loan participation purchases outside of the System as of December 31, 2022, 2021 or 2020. During 2021, we sold certain loan participations from our pool programs back to a District Association of approximately \$1.1 billion. We also purchased loan participation interests totaling \$1.6 billion from the same Association. We did not have any material participation interests sold during the years ended December 31, 2022 or 2020.

Retail Loan Participations Purchased

(in thousands)			
As of December 31,	2022	2021	2020
Real estate mortgage	\$4,710,046	\$4,373,338	\$4,355,940
Production and intermediate-term	7,894,068	7,678,693	6,408,983
Other	1,445,398	1,072,245	632,312
Total loans	\$14,049,512	\$13,124,276	\$11,397,235

Portfolio Diversification

Loan concentrations exist when there are amounts loaned to multiple borrowers engaged in similar activities or within close proximity, which could cause them to be similarly impacted by economic or other conditions.

A substantial portion of our loan portfolio consists of individual wholesale loans. Wholesale loans range in size from \$736.9 million to \$32.6 billion. At December 31, 2022, the three largest District Associations represented 69.7 percent of wholesale loans and 62.0 percent of total loans. No other wholesale loan was greater than 10 percent of total loans.

The wholesale loans are used by District Associations to fund their loan portfolios, and, therefore, our distribution of credit risk in various commodities and geographic concentrations approximate that of the District as a whole. AgriBank District credit risk policies focus on loan repayment capacity in addition to conservative loan-to-value levels on the collateral that secures loans.

Portfolio Performance

The primary credit quality indicator we utilize is the FCA Uniform Loan Classification System, which categorizes loans into five categories. The categories are:

- <u>Acceptable</u> assets are non-criticized assets representing the highest quality. They are expected to be fully collectible. This category is further differentiated into various probabilities of default.
- <u>Other Assets Especially Mentioned (Special Mention)</u> are currently collectible, but exhibit some potential weakness. These assets involve increased credit risk, but not to the point of justifying a substandard classification.
 - Substandard assets exhibit some serious weakness in repayment capacity, equity and/or collateral pledged on the loan
- <u>Doubtful</u> assets exhibit similar weaknesses as substandard assets. However, doubtful assets have additional weaknesses in existing factors, conditions and values that make collection in full highly questionable.
- Loss assets are considered uncollectible.

Credit Quality of Loans

(in thousands)

As of December 31, 2022	Acceptab	ole	Special ment	ion	Substandard/Doubtful		Total	
Wholesale loans	\$119,473,496	100.0 %	\$—	— %	\$—	— %	\$119,473,496	100.0 %
Retail loans:								
Real estate mortgage	4,666,308	98.4 %	21,950	0.5 %	53,402	1.1 %	4,741,660	100.0 %
Production and intermediate-term	7,545,597	94.0 %	285,805	3.6 %	191,064	2.4 %	8,022,466	100.0 %
Loans to OFIs	755,319	100.0 %	_	- %	_	- %	755,319	100.0 %
Other	1,392,199	95.2 %	6,498	0.4 %	64,151	4.4 %	1,462,848	100.0 %
Total retail loans	14,359,423	95.8 %	314,253	2.1 %	308,617	2.1 %	14,982,293	100.0 %
Total loans	\$133,832,919	99.6 %	\$314,253	0.2 %	\$308,617	0.2 %	\$134,455,789	100.0 %
(in thousands)								
As of December 31, 2021	Acceptat	ole	Special men	tion	Substandard/D	oubtful	Total	
Wholesale loans	\$107,132,392	98.7 %	\$1,392,500	1.3 %	\$—	— %	\$108,524,892	100.0 %
Retail loans:								
Real estate mortgage	4,279,841	97.2 %	44,016	1.0 %	77,339	1.8 %	4,401,196	100.0 %
Production and intermediate-term	7,269,150	93.5 %	265,026	3.4 %	242,036	3.1 %	7,776,212	100.0 %
Loans to OFIs	705,804	100.0 %	_	- %	_	- %	705,804	100.0 %
Other	1,059,292	98.6 %	7,671	0.7 %	7,728	0.7 %	1,074,691	100.0 %
Total retail loans	13,314,087	95.4 %	316,713	2.3 %	327,103	2.3 %	13,957,903	100.0 %
Total loans	\$120,446,479	98.3 %	\$1,709,213	1.4 %	\$327,103	0.3 %	\$122,482,795	100.0 %
(in thousands)								
As of December 31, 2020	Acceptab	le	Special ment	ion	Substandard/Do	oubtful	Total	
Wholesale loans	\$98,086,016	100.0 %	\$33,066	— %	\$—	— %	\$98,119,082	100.0 %
Retail loans:								
Real estate mortgage	4,111,458	93.6 %	122,449	2.8 %	158,658	3.6 %	4,392,565	100.0 %
Production and intermediate-term	6,050,490	93.1 %	223,001	3.4 %	224,874	3.5 %	6,498,365	100.0 %
Loans to OFIs	613,089	100.0 %	-	— %	_	- %	613,089	100.0 %
Other	628,459	99.2 %	432	0.1 %	4,716	0.7 %	633,607	100.0 %
Total retail loans	11,403,496	94.0 %	345,882	2.8 %	388,248	3.2 %	12,137,626	100.0 %
Total loans	\$109,489,512	99.3 % 	\$378,948	0.3 %	\$388,248	0.4 %	\$110,256,708	100.0 %

Note: Accruing loans include accrued interest receivable.

We had no loans categorized as Loss at December 31, 2022, 2021 or 2020.

Aging Analysis of Loans

(in thousands) As of December 31, 2022	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due Less than 30 Past Due	Total Loans	Accruing loans 90 days or more past due
Wholesale loans	\$—	\$—	\$—	\$119,473,496	\$119,473,496	\$—
Retail loans:						
Real estate mortgage	22,767	1,498	24,265	4,717,395	4,741,660	76
Production and intermediate-term	54,295	6,131	60,426	7,962,040	8,022,466	670
Loans to OFIs	-	-	_	755,319	755,319	-
Other	8,316	282	8,598	1,454,250	1,462,848	_
Total retail loans	85,378	7,911	93,289	14,889,004	14,982,293	746
Total loans	\$85,378	\$7,911	\$93,289	\$134,362,500	\$134,455,789	\$746

(in thousands) As of December 31, 2021	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due Less than 30 Past Due	Total Loans	Accruing loans 90 days or more past due
Wholesale loans	\$—	\$—	\$—	\$108,524,892	\$108,524,892	\$—
Retail loans:						
Real estate mortgage	5,485	1,316	6,801	4,394,395	4,401,196	_
Production and intermediate-term	42,582	10,348	52,930	7,723,282	7,776,212	2,531
Loans to OFIs	_	_	_	705,804	705,804	_
Other	346	161	507	1,074,184	1,074,691	_
Total retail loans	48,413	11,825	60,238	13,897,665	13,957,903	2,531
Total loans	\$48,413	\$11,825	\$60,238	\$122,422,557	\$122,482,795	\$2,531

(in thousands) As of December 31, 2020	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due Less than 30 Past Due	Total Loans	Accruing loans 90 days or more past due
Wholesale loans	\$—	\$—	\$—	\$98,119,082	\$98,119,082	\$—
Retail loans:						
Real estate mortgage	5,825	4,511	10,336	4,382,229	4,392,565	190
Production and intermediate-term	41,951	14,422	56,373	6,441,992	6,498,365	1,141
Loans to OFIs	_	_	-	613,089	613,089	_
Other	607	249	856	632,751	633,607	_
Total retail loans	48,383	19,182	67,565	12,070,061	12,137,626	1,331
Total loans	\$48,383	\$19,182	\$67,565	\$110,189,143	\$110,256,708	\$1,331

Note: Accruing loans include accrued interest receivable.

Risk Loans

Risk loans are loans for which it is probable that all principal and interest will not be collected according to the contractual terms. Interest income recognized and cash payments received on nonaccrual risk loans are applied as described in Note 2.

Risk Loan Information

(in thousands)

As of December 31,	2022	2021	2020
Nonaccrual loans:			
Current as to principal and interest	\$31,731	\$37,785	\$46,271
Past due	10,263	13,555	22,198
Total nonaccrual loans	41,994	51,340	68,469
Accruing restructured loans	3,025	3,424	3,999
Accruing loans 90 days or more past due	746	2,531	1,331
Total risk loans	\$45,765	\$57,295	\$73,799
Volume with specific reserves	\$26,271	\$34,929	\$49,844
Volume without specific reserves	19,494	22,366	23,955
Total risk loans	\$45,765	\$57,295	\$73,799
Specific reserves	\$5,904	\$7,561	\$9,795

Note: Accruing loans include accrued interest receivable.

For the year ended December 31,	2022	2021	2020
Income on accrual risk loans	\$554	\$627	\$1,338
Income on nonaccrual loans	7,424	8,851	6,709
Total income on risk loans	\$7,978	\$9,478	\$8,047
Average risk loans	\$59,986	\$73,514	\$86,632

Risk Loans by Type

(in thousands)

As of December 31,	2022	2021	2020
Nonaccrual loans:			
Real estate mortgage	\$13,055	\$16,068	\$20,668
Production and intermediate-term	27,296	33,869	47,419
Other	1,643	1,403	382
Total nonaccrual loans	\$41,994	\$51,340	\$68,469
Accruing restructured loans:			
Real estate mortgage	\$2,935	\$3,334	\$3,367
Production and intermediate-term	90	41	581
Other	_	49	51
Total accruing restructured loans	\$3,025	\$3,424	\$3,999
Accruing loans 90 days or more past due:			
Real estate mortgage	\$76	\$—	\$190
Production and intermediate-term	670	2,531	1,141
Total accruing loans 90 days or more past due	\$746	\$2,531	\$1,331
Total risk loans	\$45,765	\$57,295	\$73,799

Note: Accruing loans include accrued interest receivable.

Nonaccrual loans represented 0.03 percent of total loans at December 31, 2022, of which 75.6 percent were current as to principal and interest.

Our accounting policy requires loans past due 90 days to be transferred into nonaccrual status unless adequately secured and in the process of collection. Based on our analysis, accruing loans 90 days or more past due were eligible to remain in accruing status.

We had no wholesale loans classified as risk loans at December 31, 2022, 2021 or 2020.

All risk loans are considered to be impaired loans.

Additional Impaired Loan Information by Loan Type

	As of	December 31, 20	For the year ended D	ecember 31, 2022	
(in thousands)	Recorded Investment ⁽¹⁾	Unpaid Principal Balance ⁽²⁾	Related Allowance	Average Impaired Loans	Interest Income Recognized
Impaired loans with a related allowance for loan losses:					
Real estate mortgage	\$6,889	\$7,710	\$1,833	\$7,899	\$—
Production and intermediate-term	18,164	20,575	3,774	22,758	-
Other	1,218	1,380	297	752	_
Total	\$26,271	\$29,665	\$5,904	\$31,409	\$—
Impaired loans with no related allowance for loan losses:					
Real estate mortgage	\$9,177	\$9,705	\$—	\$10,676	\$2,678
Production and intermediate-term	9,892	25,744	_	17,286	5,297
Other	425	661	_	615	3
Total	\$19,494	\$36,110	\$—	\$28,577	\$7,978
Total impaired loans:					
Real estate mortgage	\$16,066	\$17,415	\$1,833	\$18,575	\$2,678
Production and intermediate-term	28,056	46,319	3,774	40,044	5,297
Other	1,643	2,041	297	1,367	3
Total	\$45,765	\$65,775	\$5,904	\$59,986	\$7,978

	As of	December 31, 20	For the year ended December 31, 2021		
(in thousands)	Recorded Investment ⁽¹⁾	Unpaid Principal Balance ⁽²⁾	Related Allowance	Average Impaired Loans	Interest Income Recognized
Impaired loans with a related allowance for loan losses:					
Real estate mortgage	\$8,433	\$9,206	\$2,745	\$9,850	\$—
Production and intermediate-term	25,437	28,534	4,450	32,096	_
Other	1,059	1,169	366	489	_
Total	\$34,929	\$38,909	\$7,561	\$42,435	\$—
Impaired loans with no related allowance for loan losses:					
Real estate mortgage	\$10,969	\$12,543	\$—	\$11,751	\$3,417
Production and intermediate-term	11,004	30,051	_	18,482	6,058
Other	393	519	_	846	3
Total	\$22,366	\$43,113	\$—	\$31,079	\$9,478
Total impaired loans:					
Real estate mortgage	\$19,402	\$21,749	\$2,745	\$21,601	\$3,417
Production and intermediate-term	36,441	58,585	4,450	50,578	6,058
Other	1,452	1,688	366	1,335	3
Total	\$57,295	\$82,022	\$7,561	\$73,514	\$9,478

	As c	of December 31, 202	For the year ended December 31, 2020			
(in thousands)	Recorded Investment ⁽¹⁾	Unpaid Principal Balance ⁽²⁾	Related Allowance	Average Impaired Loans	Interest Income Recognized	
Impaired loans with a related allowance for loan losses:						
Real estate mortgage	\$11,967	\$12,583	\$2,625	\$4,590	\$—	
Production and intermediate-term	37,848	40,951	7,159	38,172	_	
Other	29	39	11	30		
Total	\$49,844	\$53,573	\$9,795	\$42,792	\$—	
Impaired loans with no related allowance for loan losses:						
Real estate mortgage	\$12,258	\$19,880	\$—	\$13,937	\$2,983	
Production and intermediate-term	11,293	29,386	_	29,669	5,061	
Other	404	502	_	234	3	
Total	\$23,955	49,768	\$—	\$43,840	\$8,047	
Total impaired loans:						
Real estate mortgage	\$24,225	\$32,463	\$2,625	\$18,527	\$2,983	
Production and intermediate-term	49,141	70,337	7,159	67,841	5,061	
Other	433	541	11	264	3	
Total	\$73,799	\$103,341	\$9,795	\$86,632	\$8,047	

⁽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 charge-off of the investment. ⁽²⁾Unpaid principal balance represents the contractual principal balance of the loan.

We did not have any material commitments to lend additional money to borrowers whose loans were at risk at December 31, 2022.

Troubled Debt Restructurings

Included within our loans are troubled debt restructurings (TDRs). These loans have been modified by granting a concession in order to maximize the collection of amounts due when a borrower is experiencing financial difficulties. All risk loans, including TDRs, are analyzed within our allowance for loan losses. The primary types of modification typically include interest rate reduction below market, deferral of principal, extension of maturity or forgiveness of interest. Our loans classified as TDRs and activity on these loans were not material at any time during the years ending December 31, 2022, 2021 or 2020. We did not have material loan commitments to lend additional money to borrowers whose loans have been modified in a TDR at December 31, 2022.

Allowance for Loan Losses

Changes in Allowance for Loan Losses

(in thousands)			
For the year ended December 31,	2022	2021	2020
Balance at beginning of period	\$37,558	\$39,850	\$32,089
Provision for loan losses	(6,000)	1,000	10,000
Charge-offs	(3,934)	(8,762)	(10,215)
Recoveries	4,115	5,470	7,976
Balance at end of period	\$31,739	\$37,558	\$39,850

The "Provision for credit losses" in the Statements of Comprehensive Income includes a provision for loan losses as presented in the previous chart, as well as a provision for unfunded commitments. The reserve for unfunded commitments is recorded in "Other liabilities" in the Statements of Condition and was not significant as of December 31, 2022, 2021 or 2022.

Changes in Allowance for Loan Losses and Period End Recorded Investments by Loan Type

_(in thousands)	Wholesale loans	Real estate mortgage	Production and intermediat e- term	Loans to OFIs	Other	Total
Allowance for loan losses:						
Balance as of December 31, 2021	\$—	\$4,809	\$30,572	\$280	\$1,897	\$37 <i>,</i> 558
Provision for loan losses	-	(887)	(8,437)	25	3,299	(6,000)
Charge-offs	-	(5)	(3,874)	_	(55)	(3,934)
Recoveries		15	4,089	_	11	4,115
Balance as of December 31, 2022	\$	\$3,932	\$22,350	\$305	\$5,152	\$31,739
As of December 31, 2022						
Ending balance: individually evaluated for impairment	\$—	\$1,833	\$3,774	\$—	\$297	\$5,904
Ending balance: collectively evaluated for impairment	\$—	\$2,099	\$18,576	\$305	\$4,855	\$25,835
Recorded investments in loans outstanding:						
Ending balance as of December 31, 2022	\$119,473,496	\$4,741,660	\$8,022,466	\$755,319	\$1,462,848	\$134,455,789
Ending balance for loans individually evaluated for impairment	\$119,473,496	\$16,066	\$28,056	\$—	\$12,770	\$119,530,388
Ending balance for loans collectively evaluated for impairment	\$	\$4,725,594	\$7,994,410	\$755,319	\$1,450,078	\$14,925,401

(in thousands)	Wholesale loans	Real estate mortgage	Production and intermediate - term	Loans to OFIs	Other	Total
Allowance for loan losses:						
Balance as of December 31, 2020	\$—	\$3,751	\$34,779	\$285	\$1,035	\$39,850
Provision for loan losses	—	1,053	(1,948)	(5)	1,900	1,000
Charge-offs	—	(160)	(7,553)	_	(1,049)	(8,762)
Recoveries		165	5,294	_	11	5,470
Balance as of December 31, 2021	\$—	\$4,809	\$30,572	\$280	\$1,897	\$37,558
As of December 31, 2021						
Ending balance: individually evaluated for impairment	\$—	\$2,745	\$4,450	\$—	\$366	\$7,561
Ending balance: collectively evaluated for impairment	\$—	\$2,064	\$26,122	\$280	\$1,531	\$29,997
Recorded investments in loans outstanding:						
Ending balance as of December 31, 2021	\$108,524,892	\$4,401,196	\$7,776,212	\$705,804	\$1,074,691	\$122,482,795
Ending balance for loans individually evaluated for impairment	\$108,524,892	\$19,402	\$36,441	\$—	\$1,452	\$108,582,187
Ending balance for loans collectively evaluated for impairment	\$—	\$4,381,794	\$7,739,771	\$705,804	\$1,073,239	\$13,900,608

(in thousands)	Wholesale Ioans	Real estate mortgage	Production and intermediate - term	Loans to OFIs	Other	Total
Allowance for loan losses:						
Balance as of December 31, 2019	\$—	\$1,992	\$29,187	\$404	\$506	\$32,089
Provision for loan losses	_	1,633	7,960	(119)	526	10,000
Charge-offs	_	(42)	(10,171)	_	(2)	(10,215)
Recoveries		168	7,803	—	5	7,976
Balance as of December 31, 2020	\$—	\$3,751	\$34,779	\$285	\$1,035	\$39,850
As of December 31, 2020						
Ending balance: individually evaluated for impairment	\$—	\$2,625	\$7,159	\$—	\$11	\$9,795
Ending balance: collectively evaluated for impairment	\$—	\$1,126	\$27,620	\$285	\$1,024	\$30,055
Recorded investments in loans outstanding:						
Ending balance as of December 31, 2020	\$98,119,082	\$4,392,565	\$6,498,365	\$613,089	\$633,607	\$110,256,708
Ending balance for loans individually evaluated for impairment	\$98,119,082	\$24,225	\$49,141	\$—	\$433	\$98,192,881
Ending balance for loans collectively evaluated for impairment	\$—	\$4,368,340	\$6,449,224	\$613,089	\$633,174	\$12,063,827

Note: Accruing loans include accrued interest receivable.

Investment Securities

All investment securities are classified as AFS.

AFS Investment Securities

(in thousands)		Unrealized	Unrealized		Weighted
As of December 31, 2022	Amortized Cost	Gains	Losses	Fair Value	Average Yield
Commercial paper and other	\$8,324,569	\$186	\$6,332	\$8,318,423	4.8%
U.S. Treasury securities	5,867,026	-	197,752	5,669,274	0.4%
Mortgage-backed securities	6,682,825	160	720,266	5,962,719	2.5%
Asset-backed securities	145,261	271	2,025	143,507	3.7%
Total	\$21,019,681	\$617	\$926,375	\$20,093,923	2.8%
(in thousands)		Unrealized	Unrealized		Weighted
As of December 31, 2021	Amortized Cost	Gains	Losses	Fair Value	Average Yield
Commercial paper and other	\$4,049,164	\$356	\$94	\$4,049,426	0.2%
U.S. Treasury securities	8,560,950	6,702	39,120	8,528,532	0.4%
Mortgage-backed securities	5,700,211	20,665	67,546	5,653,330	1.0%
Asset-backed securities	160,643	715	18	161,340	1.4%
Total	\$18,470,968	\$28,438	\$106,778	\$18,392,628	0.6%
(in thousands)		Unrealized	Unrealized		Weighted
As of December 31, 2020	Amortized Cost	Gains	Losses	Fair Value	Average Yield
Commercial paper and other	\$6,538,166	\$565	\$16	\$6,538,715	0.3%
U.S. Treasury securities	5,831,098	33,572	88	5,864,582	1.2%
Mortgage-backed securities	5,586,928	55,825	5,452	5,637,301	1.4%
Asset-backed securities	538,353	6,416	38	544,731	2.6%
Total	\$18,494,545	\$96,378	\$5,594	\$18,585,329	1.2%

Commercial paper and other is primarily corporate commercial paper and certificates of deposit.

As of December 31, 2022, 2021 and 2020, we had no investment securities or federal funds pledged as collateral.

Contractual Maturities of AFS Investment Securities

	Year of Maturity						
(in thousands)	One Year or	One to Five	Five to Ten	More Than Ten			
As of December 31, 2022	Less	Years	Years	Years	Total		
Commercial paper and other	\$8,318,423	\$—	\$—	\$—	\$8,318,423		
U.S. Treasury securities	3,594,281	2,074,993	-	-	5,669,274		
Mortgage-backed securities	13	127,513	175,593	5,659,600	5,962,719		
Asset-backed securities		143,507	_	_	143,507		
Total Fair Value	\$11,912,717	\$2,346,013	\$175,593	\$5,659,600	\$20,093,923		
Total Amortized Cost	\$11,976,613	\$2,494,443	\$187,185	\$6,361,440	\$21,019,681		
Weighted average yield	3.4 %	0.9 %	1.6 %	2.5 %	2.8 %		

Expected maturities differ from contractual maturities because borrowers may have the right to prepay these obligations. The remaining expected average life is 1.9 years for asset-backed securities and 5.8 years for mortgage-backed securities at December 31, 2022.

A summary of the investment securities in an unrealized loss position presented by the length of time that the securities have been in a continuous unrealized loss position follows:

	Less than 12 months		More than 12 months		
(in thousands)		Unrealized		Unrealized	
As of December 31, 2022	Fair Value	Losses	Fair Value	Losses	
Commercial paper and other	\$5,165,371	\$6,332	\$—	\$—	
U.S. Treasury securities	454,723	6,034	5,214,551	191,718	
Mortgage-backed securities	3,593,031	205,179	2,319,333	515,087	
Asset-backed securities	80,037	1,957	4,203	68	
Total	\$9,293,162	\$219,502	\$7,538,087	\$706,873	

	Less than 12 months		More than 12 months		
(in thousands)		Unrealized		Unrealized	
As of December 31, 2021	Fair Value	Losses	Fair Value	Losses	
Commercial paper and other	\$832,849	\$94	\$—	\$—	
U.S. Treasury securities	7,142,735	39,039	9,916	81	
Mortgage-backed securities	2,811,181	54,858	538,480	12,688	
Asset-backed securities	11,231	18	_	_	
Total	\$10,797,996	\$94,009	\$548,396	\$12,769	

	Less than 12	2 months	More than 12 months		
(in thousands)		Unrealized		Unrealized	
As of December 31, 2020	Fair Value	Losses	Fair Value	Losses	
Commercial paper and other	\$1,075,692	\$16	\$—	\$—	
U.S. Treasury securities	2,156,894	88	_	_	
Mortgage-backed securities	814,600	3,305	1,046,723	2,147	
Asset-backed securities	9,887	38	_	_	
Total	\$4,057,073	\$3,447	\$1,046,723	\$2,147	

We sold \$893.8 million of U.S. Treasury securities during the year ended December 31, 2022, resulting in losses of \$4.0 million. There were no AFS investment securities sold during the years ended December 31, 2021 and 2020.

We evaluate our investment securities for OTTI on a quarterly basis. We have determined no securities were in an OTTI loss position at December 31, 2022, 2021 or 2020. There was no OTTI activity during the years ended December 31, 2022, 2021 or 2020. Refer to Note 2 for additional information regarding fair value measurements and the accounting policy for assessing OTTI.

NOTE 5

Bonds and Notes

The System obtains funds for its lending operations primarily from the sale of Systemwide Debt Securities issued by the System Banks through the Funding Corporation. Systemwide bonds and discount notes are joint and several obligations of the System Banks. Refer to Note 9 for further information.

AgriBank's Participation in Systemwide Bonds and Notes

(in thousands)			
As of December 31,	2022	2021	2020
Systemwide obligations:			
Bonds	\$143,422,992	\$130,736,411	\$118,721,054
Discount notes	1,612,845	1,929,107	2,778,488
Member investment bonds	3,193,161	2,037,089	1,530,022
Total	\$148,228,998	\$134,702,607	\$123,029,564

Maturities and Weighted Average Interest Rate of Bonds and Notes

(in thousands)	Sy	Systemwide Obligations			Membe	r			
As of December 31, 2022	Bonds		Discount N	otes	Investment Bonds		Total		
Year of maturity	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	
2023	\$37,713,091	2.9 %	\$1,612,845	3.6 %	\$3,193,161	3.1 %	\$42,519,097	2.9 %	
2024	40,888,096	3.4 %	_	— %	_	— %	40,888,096	3.4 %	
2025	13,490,184	1.7 %	_	— %	_	— %	13,490,184	1.7 %	
2026	8,585,045	2.1 %	_	— %	_	— %	8,585,045	2.1 %	
2027	6,914,012	1.7 %	_	— %	_	— %	6,914,012	1.7 %	
2028 and thereafter	35,832,564	2.2 %	_	— %_		— %_	35,832,564	2.2 %	
Total	\$143,422,992	2.6 %	\$1,612,845	3.6 %	\$3,193,161	3.1 %	\$148,228,998	2.7 %	

Discount notes are issued with maturities ranging from one to 365 days. The average maturity of discount notes at December 31, 2022, was 83 days.

Callable debt may be called on the first call date and generally is continuously callable thereafter.

Bonds and Notes with Call Options

(in millions)	Maturing	Callable
As of December 31, 2022	Amount	Amount
Year of maturity / next call:		
2023	\$3,580	\$58,755
2024	5,675	3,422
2025	8,284	1,168
2026	6,683	105
2027	5,409	249
2028	5,114	-
2029	4,404	-
Thereafter	24,550	—
Total	\$63,699	\$63,699

Participation in Systemwide Debt Securities

Certain conditions must be met before System Banks can participate in the issuance of Systemwide Debt Securities. As one condition of participation, System Banks are required by the Farm Credit Act and FCA regulation to maintain specified eligible assets at least equal in value to the total amount of debt securities outstanding for which they are primarily liable. This requirement does not provide holders of Systemwide Debt Securities or bank bonds with a security interest in any assets of the System Banks. However, System Banks and the Funding Corporation have entered into a Market Access Agreement (MAA), which established criteria and procedures for the System Banks to provide certain information to the Funding Corporation and, under certain circumstances, for restricting or prohibiting an individual System Bank's participation in Systemwide debt issuances, thereby reducing other System Banks' exposure to statutory joint and several liability. At December 31, 2022, we were, and as of the date of this report remain, in compliance with the conditions of participation in the issuance of Systemwide Debt Securities.

Member Investment Bonds

Member investment bonds, specifically authorized by the Farm Credit Act, are an alternative source of funding in which we sell bonds directly to District members and employees. Member investment bonds issued by AgriBank are offered primarily through the Farm Cash Management program, which links a District Association members' revolving line of credit with an AgriBank investment bond to optimize the members' use of their funds. Member investment bonds are an unsecured obligation of AgriBank and are not insured or guaranteed by any other entity.

Insurance Fund

The Insurance Fund is available to insure the timely payment of principal and interest on consolidated bonds and notes of System Banks to the extent net assets are available in the Insurance Fund. At December 31, 2022, the assets of the Insurance Fund were \$6.7 billion; however, due to the other authorized uses of the Insurance Fund, there is no assurance that the amounts in the Insurance Fund will be sufficient to fund the timely payment of principal, or interest on, insured debt securities in the event of default by any System Bank having primary liability for repayment of the debt. Refer to Note 1 for further information about the Insurance Fund.

Short-term Borrowings

We use short-term borrowings as a source of funds.

Short-term borrowings by Category

	20)22	2021		20	20
(in thousands)	Amount	Weighted average interest rate	Amount	Weighted average interest rate	Amount	Weighted average interest rate
Systemwide discount notes:						
Outstanding as of December 31	\$1,612,845	3.6 %	\$1,929,107	0.1 %	\$2,778,488	0.4 %
Average during year	2,199,918	1.1 %	2,370,083	0.1 %	4,257,240	0.8 %
Maximum month-end balance during the year	3,138,773		3,397,525		6,783,584	
Systemwide bonds ⁽¹⁾ :						
Outstanding as of December 31	\$862,215	2.6 %	\$2,897,427	0.1 %	\$1,720,020	0.2 %
Average during year	1,978,976	0.5 %	2,512,904	0.4 %	1,364,563	0.9 %
Maximum month-end balance during the year	2,741,579		3,147,672		1,741,311	

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

NOTE 6

Shareholders' Equity

Description of Equities

All shares and participation certificates are \$5 par value, except the Series A Non-cumulative Perpetual Preferred Stock (Series A Preferred Stock), which is \$100 par value.

(in whole numbers)	Number of Shares Outstanding			
As of December 31,	2022	2021	2020	
Series A Preferred Stock	2,500,000	2,500,000	2,500,000	
Class F Common Stock	134,289,408	105,172,072	78,855,306	
Class P Common Stock	791,428,464	653,119,468	575,235,516	
Series A Participation Certificates	7,232,396	6,946,857	6,199,282	
Protected Series C Participation Certificates	14,000	19,600	29,600	

Perpetual Preferred Stock

We have an authorized class of preferred stock that may be issued to investors in accordance with applicable rules of offering and approvals required by FCA regulations. This stock is non-voting and may bear dividends. There are 8 million shares authorized at \$100 per share.

We have \$250 million of Series A Preferred Stock outstanding, representing 2.5 million shares at \$100 per share par value. This series may be held or transferred in blocks having an aggregate par value of \$25 thousand to investors meeting the eligibility requirements and an investor must hold at least 250 shares. We used the net proceeds from the issuance for general corporate purposes. For regulatory capital purposes, our Series A Preferred Stock is included in permanent capital, tier 1 capital and total capital, subject to certain limitations as defined by the FCA.

Dividends on the Series A Preferred Stock, if declared by our board in its sole discretion, are non-cumulative and are payable quarterly in arrears on the first day of January, April, July and October. Dividends accrue at a fixed annual rate of 6.875 percent from the date of issuance through December 31, 2023, and beginning January 1, 2024, will accrue at an annual rate equal to three-month United States Dollar LIBOR rate, reset quarterly, plus 4.225 percent. Since United States Dollar LIBOR as defined with respect to the preferred stock will no longer be available after June 30, 2023, the annual rate will be replaced by CME Term SOFR-based rate if the preferred stock is not redeemed on January 1, 2024. To the extent that any preferred stock has not been redeemed prior to June 30,

2023 pursuant to the Adjustable Interest Rate (LIBOR) Act and Federal Reserve Board Regulation ZZ, the LIBOR-based rate that would have been paid after December 31, 2023, under such preferred stock will be replaced by operation of law with a CME Term SOFR-based rate.

The Series A Preferred Stock is not mandatorily redeemable at any time. However, the Series A Preferred Stock will be redeemable at par value plus accrued and unpaid dividends, in whole or in part, at our option, quarterly beginning January 1, 2024. In addition, the Series A Preferred Stock will be redeemable in whole, at our option, at any time upon the occurrence of certain defined regulatory events.

The Series A Preferred Stock is junior to any series of preferred stock we may issue in the future with priority rights. The Series A Preferred Stock is senior to our outstanding capital stock.

Member Stock

In accordance with the Farm Credit Act, eligible borrowers are required to purchase common stock in AgriBank as a condition of borrowing. District Associations fund member stock purchases and stock patronage through cash liquidity generated from capital and earnings. OFIs make cash purchases of Series A Participation Certificates as a condition of borrowing.

Member stock is comprised of Class D Preferred Stock, Class F Common Stock, Class P Common Stock, Series A Participation Certificates, Series B Participation Certificates and Protected Series C Participation Certificates.

Class D Preferred Stock is available to be issued solely to District Associations based on allocated equities issued and as a conversion of Class P Common Stock that is in excess of the minimum amounts required under our capital plan. Class D Preferred Stock has no voting rights. No stock of this kind was outstanding at December 31, 2022, 2021 or 2020.

Class F Common Stock is issued to other System institutions. Class F Common Stock has no voting rights.

Class P Common Stock is issued to District Associations and as a conversion of Class D Preferred Stock. Class P Common Stock has voting rights as provided in our bylaws so long as the stock is held by an eligible holder. In certain circumstances, a holder of Class P Common Stock can convert to an equal number of units of Series B Participation Certificates.

Series A Participation Certificates are issued to those entities, including OFIs, identified in the Farm Credit Act that meet certain requirements of the Act in connection with loans made after October 5, 1988, in an amount required by our capital plan. Series A Participation Certificates have no voting rights.

Series B Participation Certificates are available to be issued to District Associations and direct borrowers. Series B Participation Certificates have no voting rights, and no stock of this kind was outstanding at December 31, 2022, 2021 or 2020.

Protected Series C Participation Certificates are issued to entities identified in the Farm Credit Act that meet certain requirements of the Act that were in existence before the close of business on October 5, 1988. Refer to discussion under Protection Mechanisms. Protected Series C Participation Certificates have no voting rights. Protected Series C Participation Certificates of \$70 thousand, \$98 thousand and \$148 thousand as of December 31, 2022, 2021 and 2020, respectively, are included in Capital Stock and Participation Certificates on the Statements of Changes in Shareholders' Equity.

All member stock shall have such rights, designations and restrictions as provided in our bylaws. No fractional shares of such stock or participation certificates, or cash in lieu of fractional shares, shall be issued or paid. All member stock is transferable to any eligible holder of such equities. If at any time we are out of compliance with minimum capital requirements as determined by the FCA, all member stock required to be purchased as a condition for obtaining a loan must be purchased from us.

Protected Series C Participation Certificates must be retired and paid at par value in accordance with FCA regulations as they relate to the retirement of stock protected by the provisions of the Farm Credit Act. The board is authorized, but not required, to make retirements of all other member stock on a case-by-case basis when requested by a holder of such equities without regard to the holder's total investment in us relative to the other holders of our equities. Such other member stock shall be retired at book value not to exceed par or face value and cannot be retired while we are not in compliance with capital adequacy standards as determined by the FCA, or if such retirement would cause us to be out of compliance with capital adequacy standards and may be retired only at the discretion of the board.

All member stock is subject to a statutory first lien in favor of us to secure any indebtedness of the holder of such capital investments to us.

In the event of our liquidation or dissolution, according to our bylaws, any remaining assets after payment or retirement of all liabilities will be distributed in the following order of priority:

- First, ratably to the holders of Series A Preferred Stock
- Second, to the holders of Class P and F Common Stock, Class D Preferred Stock and Series A, B and C Participation Certificates
- Third, to the holders of allocated retained earnings, pro rata, until an amount equal to the aggregate book value not to exceed face value has been distributed
- Finally, any remaining assets shall be distributed in accordance with established attribution of unallocated surplus.

In the event of impairment, losses will be absorbed pro rata by all classes of common stock and participation certificates then by Class D Preferred Stock followed by Series A Preferred Stock; however, protected stock will be retired at par value regardless of impairment.

Capitalization Requirements

In accordance with the Farm Credit Act, and our capitalization bylaws, we are authorized to issue Series A Preferred Stock, Class D Preferred Stock, Classes F and P Common Stock, Series A, B and C Participation Certificates and such other classes of equity in such amounts as may be necessary to conduct our business.

As a condition of borrowing, District Associations and OFIs are required to maintain an investment in AgriBank. Our bylaws authorize us to require an investment of up to 4 percent of the borrower's average wholesale loan balance with us (District Associations) or borrower's line of credit with us (OFIs) upon board approval. Our capital plan is updated at least annually and is subject to change at the discretion of our board. Our current capital plan requires an investment based on average wholesale loan balances (District Associations) and loan commitments (OFIs). The 2022 requirement was 2.55 percent on average loan balances/commitments. Additionally, pool programs are typically capitalized at a higher rate that is mutually agreed upon in the pool agreements. The 2023 requirement is 3.00 percent on average loan balances/commitments.

Protection Mechanisms

Protection of certain borrower capital is provided under the Farm Credit Act, which requires us to retire protected capital at par or stated value regardless of its book value when retiring protected borrower capital. Series C Participation Certificates are protected capital. Stock and participation certificates issued after October 5, 1988 are not subject to these protection provisions. If we are unable to retire protected borrower equity at par value or stated value, amounts required to retire this equity would be obtained from the Insurance Fund, if available.

Regulatory Capitalization Requirements and Restrictions

FCA regulations require us to maintain certain minimum capital ratios. If the capital ratios fall below the total requirements, including the buffer amounts, capital distributions (equity redemptions, dividends and patronage) and discretionary senior executive bonuses are restricted or prohibited without prior FCA approval. No such prohibitions were in effect as of December 31, 2022.

Regulatory Capital Requirements and Ratios

As of December 31,	2022	2021	2020	Regulatory Minimums	Capital Conservation Buffer	Total
Risk-adjusted:						
Common equity tier 1 capital ratio	16.3 %	16.8 %	16.6 %	4.5 %	2.5 %	7.0 %
Tier 1 capital ratio	16.9 %	17.4 %	17.3 %	6.0 %	2.5 %	8.5 %
Total capital ratio	16.9 %	17.5 %	17.4 %	8.0 %	2.5 %	10.5 %
Permanent capital ratio	16.9 %	17.4 %	17.3 %	7.0 %	— %	7.0 %
Non-risk-adjusted:						
Tier 1 leverage ratio	5.2 %	5.2 %	5.2 %	4.0 %	1.0 %	5.0 %
UREE ⁽¹⁾ leverage	2.3 %	2.4 %	2.5 %	1.5 %	— %	1.5 %

⁽¹⁾ Unallocated retained earnings and equivalents

Risk-adjusted assets have been defined by FCA regulations as the Statement of Condition assets and off-balance-sheet commitments adjusted by various percentages, depending on the level of risk inherent in the various types of assets. Risk-adjusted assets is calculated differently for the permanent capital ratio (referred herein as PCR risk-adjusted assets) compared to the other risk-based

capital ratios. The primary difference is the inclusion of the allowance for loan losses as a deduction to risk-adjusted assets for the permanent capital ratio.

These ratios are based on a three-month average daily balance in accordance with the FCA regulations and are calculated as follows:

- Common equity tier 1 capital ratio is the core capital of AgriBank including all at-risk borrower stock as it is intended to be held for a minimum of seven years, unallocated retained earnings as regulatorily prescribed, less certain regulatory required deductions including certain investments in other System institutions, divided by average risk-adjusted assets.
- Tier 1 capital ratio is common equity tier 1 capital plus non-cumulative perpetual preferred stock, divided by average riskadjusted assets.
- Total capital ratio is tier 1 capital plus allowance for loan losses and reserve for credit losses subject to certain limitations, divided by average risk-adjusted assets.
- Permanent capital ratio is all at-risk borrower stock, non-cumulative perpetual preferred stock, unallocated retained earnings as regulatorily prescribed, less certain investments in other System institutions divided by PCR risk-adjusted assets.
- Tier 1 leverage ratio is tier 1 capital, including regulatory deductions, divided by average assets less regulatory deductions subject to tier 1 capital.
- UREE leverage is unallocated retained earnings as regulatorily prescribed, less certain regulatory required deductions, divided by average assets less regulatory deductions subject to tier 1 capital.

The amount of third-party capital instruments, including preferred stock and subordinated notes that may be counted in the total capital ratio must not exceed the lesser of 40 percent of total capital or 100 percent of common equity tier 1.

Patronage Distributions and Dividends

Payment of discretionary patronage and/or dividends is allowed under our bylaws if the distribution is in accordance with applicable laws and regulations, including the FCA capital adequacy regulations, and approved by the board. Patronage distributions may be in cash or stock. Cash patronage totaled \$312.8 million, \$658.7 million and \$689.7 million for the years ended December 31, 2022, 2021 and 2020, respectively. Stock patronage totaled \$460.4 million and \$88.7 million for the years ended December 31, 2022 and 2021, respectively. No stock patronage was issued during the year ended December 31, 2020. We declared patronage on certain pool programs in the form of allocated retained earnings. Allocated retained earnings is eligible to be declared for redemption in future years and is not included in total regulatory capital. Patronage declared as allocated retained earnings was \$131 thousand, \$653 thousand, and \$1.4 million for the years ended December 31, 2022, 2021 and 2020, respectively.

We declared \$17.2 million of non-cumulative perpetual preferred stock dividends during each year ended December 31, 2022, 2021 and 2020. Dividends on non-cumulative perpetual preferred stock are payable quarterly on the first day of January, April, July and October.

In the event preferred stock dividends for the current dividend period have not been declared, we may not declare or pay any dividends, patronage refunds or distributions on, or redeem, purchase, acquire or make a liquidation payment with respect to, any shares of our capital stock (including borrower stock, participation certificates and preferred stock), other than exercising our statutory lien under the Farm Credit Act, which allows us to apply member stock and/or participation certificates to reduce the aggregate principal amount of outstanding loans to District Associations. Dividends have been declared as scheduled since issuing preferred stock.

NOTE 7

Employee Benefit Plans

The Farm Credit Foundations Plan Sponsor and Trust Committees provide oversight of the benefit plans for which AgriBank and District Associations are participating employers. These governance committees are comprised of elected or appointed representatives (senior leadership and/or boards of director members) from the participating organizations. The Plan Sponsor Committee is responsible for employer decisions regarding all benefits plans including retirement benefits. These decisions could include plan design changes, vendor changes, determination of employer subsidies (if any) and termination of specific benefits plans. Any action to change or terminate the retirement plan can only occur at the direction of the AgriBank District participating employers. The Trust Committee is responsible for fiduciary and plan administrative functions.

The funded status of the post-employment benefit plans is recorded at the District level. Additional District-level financial information for these plans may be found in the "District-Level Pension and Post-Employment Benefit Plans Disclosures" section of this footnote.

Pension Benefit Plans

Pension Plan: Certain employees participate in the AgriBank District Retirement Plan, a Districtwide defined benefit retirement plan. The Department of Labor has determined the plan to be a governmental plan; therefore, the plan is not subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). As the plan is not subject to ERISA, the plan's benefits are not insured by the Pension Benefit Guaranty Corporation. Accordingly, the amount of accumulated benefits that participants would receive in the event of the plan's termination is contingent on the sufficiency of the plan's net assets to provide benefits at that time. This Plan is noncontributory and covers certain eligible District employees. The assets, liabilities and costs of the plan are not segregated by participating entities. As such, plan assets are available for any of the participating employers' retirees at any point in time. Additionally, if a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers. Further, if we choose to stop participating in the plan, we may be required to pay an amount based on the underfunded status of the plan. Because of the nature of the plan, any individual employer is not able to unilaterally change the provisions of the plan. If an employee transfers to another employer within the same plan, the employee benefits under the plan transfer. Benefits are based on salary and years of service. There is no collective bargaining agreement in place as part of this plan. Since the formation of SunStream on April 1, 2020, SunStream is responsible for the funding for its employees in the plan.

AgriBank District Retirement Plan Information

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(in thousands)			
As of December 31,	2022	2021	2020
Unfunded liability	\$87,688	\$46,421	\$169,640
Projected benefit obligation	1,204,130	1,500,238	1,563,421
Fair value of plan assets	1,116,442	1,453,817	1,393,781
Accumulated benefit obligation	1,083,610	1,384,554	1,426,270
For the year ended December 31,	2022	2021	2020
Total plan expense	\$30,475	\$28,048	\$42,785
Our allocated share of plan expenses	1,189	1,013	2,860
Contributions by participating employers	90,385	90,000	90,000
Our allocated share of contributions	6,793	6,861	7,625

The unfunded liability reflects the net of the fair value of the plan assets and the projected benefit obligation as of December 31. The projected benefit obligation is the actuarial present value of all benefits attributed by the pension benefit formula to employee service rendered prior to the measurement date based on assumed future compensation levels. The accumulated benefit obligation is the actuarial present value of the benefits attributed to employee service rendered before the measurement date and based on current employee service and compensation. The funding status is subject to many variables including performance of plan assets and interest rate levels. Therefore, changes in assumptions could significantly affect these estimates.

Costs are determined for each individual employer based on costs directly related to their current employees as well as an allocation of the remaining costs based proportionately on the estimated projected liability of the employer under this plan. We recognize our proportional share of expense and contribute a proportional share of funding.

Benefits paid to participants in the District were \$132.1 million in 2022. While the plan is a governmental plan and is not subject to minimum funding requirements, the employers contribute amounts necessary on an actuarial basis to provide the plan with sufficient assets to meet the benefits to be paid to participants. The amount of the total District employer contributions expected to be paid into the pension plans during 2023 is \$45.0 million. Our allocated share of these pension contributions is expected to be \$2.9 million. The amount ultimately to be contributed and the amount ultimately recognized as expense, as well as the timing of those contributions and expenses, are subject to many variables including performance of plan assets and interest rate levels. These variables could result in actual contributions and expenses being greater than or less than the anticipated amounts.

Pension Restoration Plan: We also participate in the Districtwide non-qualified defined benefit Pension Restoration Plan. This plan restores retirement benefits to certain highly compensated eligible employees that would have been provided under the qualified plan if such benefits were not above the Internal Revenue Code compensation or other limits. The Pension Restoration Plan is unfunded, and we make annual contributions to fund benefits paid to our retirees covered by the plan. The obligation, cost and

contributions were not material to any of the years presented. There were no benefits paid under the Pension Restoration Plan to our senior officers who were actively employed during the year.

Other Post-Employment Benefit Plans

Retiree Medical Plans: District employers also provide certain health insurance benefits to eligible retired employees according to the terms of the benefit plans. The anticipated costs of these benefits are accrued during the period of the employee's active status. Postretirement benefit costs related to the retiree medical plans were not considered material for any of the years presented. Cash contributions were equal to the benefits paid.

Defined Contribution Plans

We participate in a Districtwide defined contribution retirement savings plan. For employees hired before January 1, 2007, employee contributions are matched dollar for dollar up to 2.0 percent and 50 cents on the dollar on the next 4.0 percent on both pre-tax and post-tax contributions. The maximum employer match is 4.0 percent. For employees hired after December 31, 2006, we contribute 3.0 percent of the employee's compensation and will match employee contributions dollar for dollar up to a maximum of 6.0 percent on both pre-tax and post-tax contributions. The maximum employer. The maximum employer contributions is 9.0 percent.

We also participate in a Districtwide Non-qualified Deferred Compensation Plan. Eligible participants must meet one of the following criteria: certain salary thresholds as determined by the IRS, be either a chief executive officer or president of a participating employer or have previously elected pre-tax deferrals in 2006 under predecessor non-qualified deferred compensation plans. Under this plan, the employee may defer a portion of his/her salary, bonus and other compensation. Additionally, the plan provides for supplemental employer matching contributions related to any compensation deferred by the employee that would have been eligible for a matching contribution under the retirement savings plan if it were not for certain IRS limitations.

Additionally, we participate in the Pre-409A Frozen Nonqualified Deferred Compensation Plan. This plan serves the same purpose as the Nonqualified Deferred Compensation Plan. However, the plan was frozen effective January 1, 2007. As such, no additional participants are eligible to enter the plan and no additional employer contributions will be made to the plan.

District-Level Pension and Post-Employment Benefit Plans Disclosures

All District employers, with the exception of one District Association, participate in the defined benefit pension plan. Certain District employers also participate in the nonqualified retirement plan. Additionally, District employers provide certain health insurance benefits to eligible retired employees in the District. The current measurement date is December 31 for the defined benefit and other post-employment benefit plans.

The decreases in the benefit obligation of the pension plans were primarily due to actuarial gains reflecting an increase in the discount rates.

AgriBank District Obligations and Funded Status

(in thousands)	P	Pension Benefits			Other Benefits			
As of December 31,	2022	2021	2020	2022	2021	2020		
Change in benefit obligation:								
Benefit obligation at beginning of year	\$1,568,350	\$1,620,979	\$1,466,141	\$21,215	\$23,140	\$21,832		
Service cost	26,506	26,964	25,757	181	209	211		
Interest cost	36,205	30,422	41,059	457	387	582		
Plan amendments	24	1,941	332	_	_	_		
Curtailment	-	_	_	_	_	_		
Actuarial (gain) loss	(225,897)	(18,750)	163,606	(4,734)	(1,138)	1,968		
Benefits paid	(135,599)	(93,206)	(75,917)	(1,406)	(1,383)	(1,453)		
Special termination benefits	_	_	_	_	_	_		
Benefit obligation at end of year	\$1,269,589	\$1,568,350	\$1,620,978	\$15,713	\$21,215	\$23,140		
Change in plan assets:								
Fair value of plan assets at beginning of year	\$1,453,817	\$1,393,781	\$1,200,332	\$—	\$—	\$—		
Actual return on plan assets	(295,684)	58,627	174,382	_	_	_		
Employer contributions	93,908	94,615	94,984	1,406	1,383	1,453		
Benefits, premiums and expenses paid	(135,599)	(93,206)	(75,917)	(1,406)	(1,383)	(1,453)		
Fair value of plan assets at end of year	\$1,116,442	\$1,453,817	\$1,393,781	\$—	\$—	\$—		
Unfunded liability	\$(153,148)	\$(114,533)	\$(227,197)	\$(15,713)	\$(21,215)	\$(23,140)		
Accumulated benefit obligation	\$1,135,967	\$1,432,380	\$1,469,217	n/a	n/a	n/a		
(in thousands)	P	ension Benefit	s	c	ther Benefits			
As of December 31,	2022	2021	2020	2022	2021	2020		

As of December 31,	2022	2021	2020	2022	2021	2020
Amounts recognized in the District Statements of Condition consist of:						
Pension liabilities	\$153,148	\$114,533	\$227,197	\$15,713	\$21,215	\$23,140
Net loss (gain)	\$538,497	\$451,437	\$512,856	\$(11,288)	\$(7,498)	\$(7,118)
Prior service credit	(8,274)	(11,057)	(16,003)	—	_	_
Total recognized in accumulated other comprehensive loss (income)	\$530,223	\$440,380	\$496,853	\$(11,288)	\$(7,498)	\$(7,118)
Weighted-average assumptions used to determine benefit obligations:						
Discount rate	5.19 %	2.89 %	2.54 %	5.16 %	2.84 %	2.48 %
Rate of compensation increase ⁽¹⁾	7.20 %	4.60 %	4.60 %	n/a	n/a	n/a
Interest crediting rate	3.30 %	2.10 %	1.60 %	n/a	n/a	n/a

⁽¹⁾ The rate of compensation increase for the pension benefits utilizes an age-based scale beginning at 7.50%, ultimately decreasing to 4.00%

District Components of Net Periodic Benefit Cost

(in thousands)	Pension Benefits			0	Other Benefits		
For the year ended December 31,	2022	2021	2020	2022	2021	2020	
Net periodic benefit cost:							
Service cost	\$26,506	\$26,964	\$25,757	\$181	\$209	\$211	
Interest cost	36,205	30,422	41,059	457	387	582	
Expected return on plan assets	(66,796)	(64,138)	(66,574)	_	_		
Amortization of prior service credit	(2,759)	(3,004)	(2,673)	-	_	_	
Amortization of net loss (gain)	48,362	52,738	50,829	(944)	(757)	(1,215)	
Other cost	1,163	(4,558)	_	_	_	_	
Net periodic benefit cost	\$42,681	\$38,424	\$48,398	\$(306)	\$(161)	\$(422)	
Other changes in plan assets and benefit obligations recognized in other comprehensive income:							
Net loss (gain)	\$136,585	\$(13,238)	\$55,798	\$(4,734)	\$(1,137)	\$1,966	
Amortization of net (loss) gain	(49,525)	(48,180)	(50,829)	944	757	1,215	
Prior service cost	24	1,941	332	-	_	_	
Amortization of prior service credit	2,759	3,004	2,673	_	_	_	
Total recognized in other comprehensive income	\$89,843	\$(56,473)	\$7,974	\$(3,790)	\$(380)	\$3,181	
Total recognized in net periodic benefit cost and other comprehensive income	\$132,524	\$(18,049)	\$56,372	\$(4,096)	\$(541)	\$2,759	
Weighted-average assumptions used to determine net costs:							
Discount rate:							
Projected benefit obligation	2.89 %	2.54 %	3.26 %	2.84 %	2.48 %	3.21 %	
Service cost	3.02 %	2.72 %	3.38 %	3.14 %	2.88 %	3.46 %	
Interest cost	2.42 %	1.97 %	2.91 %	2.24 %	1.74 %	2.76 %	
Expected return on plan assets	4.75 %	4.75 %	5.75 %	n/a	n/a	n/a	
Rate of compensation increase	4.60 %	4.60 %	4.60 %	n/a	n/a	n/a	
Interest crediting rate	2.10 %	1.60 %	2.90 %	n/a	n/a	n/a	

Assumptions

Benefit obligations and net periodic benefit costs are measured using assumptions designed to reflect future economic conditions. The most significant assumptions used in calculating the benefit obligations are discount rates, mortality rates and compensation rate increases. In addition to these assumptions, expected return on plan assets is also a significant driver in the measurement of net periodic benefit cost.

The discount rates used 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 mortality improvement assumptions are updated when new tables are issued by the Society of Actuaries. The adoption of the most recent tables did not have a significant impact to the projected benefit obligation as of December 31, 2022.

Periodically, independent actuaries perform an assumption study based on actual plan participants' results over the past three years. Assumptions in this study include, but are not limited to: rates of termination, retirement age, and benefit form elected. The most recent study was completed in 2022. The impact of the assumption update for compensation increases was more than offset by the impact of higher interest rates on the obligation of the District pension plans.

The expected return on plan assets assumption is determined by the Plan Sponsor Committee with input from the Trust Committee. Historical return information is used to establish a best-estimate range for each asset class in which the plans are invested. The most appropriate rate is selected from the best-estimate range, taking into consideration the duration of plan benefit liabilities and Plan Sponsor Committee investment policies. Generally, a lower rate of return assumption correlates to an increase in the net periodic benefit cost.

Assumed health care cost trend rates affect the amounts reported for the health care plans. A one percent change in assumed health care cost trend rates would have minimal effect for the District.

Estimated Future Contributions and Benefit Payments

The amount of total District employer contributions expected to be paid into the plans during 2023 is \$48.9 million for Pension Benefits and \$1.3 million for Other Benefits.

The following benefit payments are expected to be paid by the District plans and reflect expected future service, as appropriate:

(in thousands)	Pension	Other
As of December 31, 2022	Benefits	Benefits
Year:		
2023	\$90,150	\$1,348
2024	111,630	1,345
2025	96,720	1,319
2026	106,300	1,301
2027	99,260	1,271
2028 to 2032	469,510	5,868

Plan Assets

The overall objective of the investment policy is intended to meet the benefit obligations for the plan beneficiaries and to earn a long-term rate of return consistent with the related cash flow profile of the underlying benefit obligations.

The policy uses a risk management strategy designed to reduce investment risks as the funded status improves. To implement the policy, the plan has adopted a diversified set of portfolio management strategies to optimize the risk reward profile of the plan. Plan assets are divided into two primary component portfolios:

• The "Growth Portfolio," which is a return-seeking portfolio that is invested in a diversified set of assets designed to generate return. Equity exposures are expected to be the primary drivers of excess returns, but also introduce the greatest level of volatility of returns. Accordingly, the Growth Portfolio contains additional asset classes that are intended to diversify equity risk as well as contribute to excess return.

The largest subset contains U.S. equities including securities that are both actively and passively managed to their benchmarks across a full spectrum of capitalization and styles. Non-U.S. equities contain securities both passively and actively managed as well as in both developed and emerging markets. Currency futures and forward contracts may be held for the sole purpose of hedging existing currency risk in the portfolio. Other investments that serve as equity diversifiers include:

- Non-core fixed income: fixed income portfolio including high yield debt, emerging market debt, and bank loans
- Real estate assets: publicly traded real estate and global infrastructure
- Hedge funds of funds: multi-manager strategies that seek to maximize skill-based returns by investing in a variety of active managers, including equity-oriented, diversification-oriented, and trend-following strategies
- Tactical tilt fund: portfolio including a variety of asset classes and instruments enabling a dynamic strategy to implement short- and medium-term views
- Private credit: multi-manager strategy of private debt managers
- Insurance-linked securities: investment structures that fund insurance companies for catastrophic losses

Other investment strategies may be employed to gain certain market exposures, reduce portfolio risk and to further diversify portfolio assets.

• The "Immunizing Portfolio," which is a liability hedging portfolio that is primarily invested in actively managed intermediateterm and long-term investment grade corporate bond strategies, paired with centrally cleared derivatives intended to match the plan's liability characteristics and reduce expected funded status risk. The combination of physical public credit investments, private placements (private corporate investment grade debt issuances), senior direct loans, and derivatives are intended to hedge interest rate and credit spread risk targets.

Finally, there is a disbursement account intended to pay periodic plan benefits and expenses.

Portfolios are measured and monitored daily to ensure compliance with the investment policy. For year-end 2022, the asset allocation policy of the pension plan provides a target of 31.0 percent of assets in the Growth Portfolio and 69.0 percent of assets in the Immunizing Portfolio, but may be adjusted as plan funded status improves. Over time as the plan funded status improves, the size of the Growth Portfolio will decline and the Immunizing Portfolio will increase.

(in thousands)	Fair Value Measurements						
As of December 31, 2022	Level 1 Level 2		Level 3	Total			
Assets:							
Cash and cash equivalents	\$100,869	\$—	\$—	\$100,869			
Mutual funds:							
International funds	74,854	27,335	-	102,189			
Domestic funds	86,974	5,866	-	92,840			
Bond funds	34,806	_	-	34,806			
Real estate equity funds	-	_	5,325	5,325			
Other funds	13,584	40,429	82,385	136,398			
Investment insurance contracts	-	_	4,722	4,722			
Corporate bonds	-	568,853	-	568,853			
Other debt securities		70,440	—	70,440			
Total assets at fair value	\$311,087	\$712,923	\$92,432	\$1,116,442			

AgriBank District Fair Value of Pension Plan Assets

(in thousands)	Fair Value Measurements					
As of December 31, 2021	Level 1	Level 2	Level 3	Total		
Assets:						
Cash and cash equivalents	\$77,149	\$—	\$ —	\$77,149		
Mutual and exchange traded funds:						
International funds	151,621	46,520	_	198,141		
Domestic funds	160,410	13,229	_	173,639		
Bond funds	59,261	_	_	59,261		
Real estate equity funds	—	_	4,602	4,602		
Other funds	23,881	65,378	38,703	127,962		
Investment insurance contracts	—	_	4,829	4,829		
Corporate Bonds	—	645,848	_	645,848		
Other Debt Securities		162,386	_	162,386		
Total assets at fair value	\$472,322	\$933,361	\$48,134	\$1,453,817		

Level 1	Level 2		
		Level 3	Total
\$26,076	\$ —	\$—	\$26,076
30,590	234,954	_	265,544
_	329,830	_	329,830
42,607	122,744	_	165,351
_	337,157	_	337,157
_	61,077	3,728	64,805
_	_	61,080	61,080
	_	4,987	4,987
\$99,273	\$1,085,762	\$69,795	\$1,254,830
			138,951
			\$1,393,781
	30,590 42,607 	30,590 234,954 - 329,830 42,607 122,744 - 337,157 - 61,077 - - - -	30,590 234,954 - 329,830 42,607 122,744 - 337,157 - 61,077 3,728 - 61,080 - 4,987

⁽¹⁾Certain investments that are measured at fair value using the net asset value per share as a practical expedient have not been classified in the fair value hierarchy. 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.

The increase in Level 3 pension plan assets was due to purchases during the year ended December 31, 2022, and there were no material changes during the years ended December 31, 2021 and 2020.

Valuation Techniques

Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets would be classified as Level 1. Inputs other than quoted prices included in Level 1 that are observable for the asset or liability through corroboration with observable market data would be classified as Level 2. In addition, assets measured at Net Asset Value (NAV) per share and that can be redeemed at NAV per share at the measurement date are classified as Level 2. Assets valued using unobservable inputs (e.g., a company's own assumptions and data) would be classified as Level 3. All assets are evaluated at the fund level. Refer to Notes 2 and 11 for a complete description of fair value measurements.

Related Party Transactions

As discussed in Notes 1, 3 and 10, we lend to District Associations to fund their loan portfolios.

We also purchase participations from District entities. At December 31, 2022, we had \$13.8 billion of such loan participations purchased.

We pay compensation within the District for servicing loans and loan participations. We paid \$78.2 million, \$68.2 million and \$57.3 million in 2022, 2021 and 2020, respectively, to District Associations and related entities.

Interest income recognized on District Associations' wholesale loans was \$2.3 billion, \$1.4 billion and \$1.7 billion during 2022, 2021 and 2020, respectively. In addition, we recorded fees of \$15.0 million, \$59.2 million and \$138.1 million during 2022, 2021 and 2020, respectively, representing fees assessed on funding District Associations' wholesale loans.

As of December 31, 2022, we offer certain business services to District entities. Until the formation of SunStream on April 1, 2020, we also offered financial and retail information technology, collateral, tax reporting, and insurance services. These services are now offered by SunStream. Refer to Note 1 for further information on the formation of SunStream. Business services income recorded from District entities totaled \$7.4 million, \$7.2 million and \$11.2 million during 2022, 2021 and 2020, respectively.

We, along with other System entities, collectively own the AgriBank District service entities, Foundations and SunStream. Both service entities sublease office space from us. We purchase human resource information systems, benefit, payroll, and workforce management services from Foundations. Our investment in Foundations was \$25.0 thousand at December 31, 2022, 2021 and 2020, respectively. We purchase information technology, loan accounting and related services, and tax compliance services from SunStream. Our investment in SunStream was \$5.6 million at December 31, 2022 and 2021, respectively. Additionally, both Sunstream and Foundations have a line of credit with AgriBank of \$40.0 million and \$1.0 million, respectively. As of December 31, 2022, only Sunstream had an outstanding balance of \$11.1 million.

Elected members of our board are District Association borrowers. We have no direct lending relationships with any of our board members or senior officers. We may, from time to time, participate in loans to our directors under pool programs or through other commercial participations. These participations are not material for any year presented and are purchased under the established pool program parameters and in the normal course of business. Further, in the ordinary course of business, our directors and senior officers are eligible to hold member investment bonds under the same terms and conditions as all other District Association borrowers and AgriBank employees. There were no material member investment bonds held by our directors or senior officers at December 31, 2022, 2021 or 2020. Refer to Note 5 for additional information regarding member investment bonds.

NOTE 9

Commitments and Contingencies

In the normal course of business, we have various contingent liabilities and commitments outstanding, primarily commitments to extend credit, which may not be reflected in the accompanying Financial Statements. We do not anticipate any material losses because of the contingencies or commitments.

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 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 lawsuit was dismissed.

Additionally, from time to time we may be named as defendants in lawsuits or legal actions in the normal course of business. At the date of these Financial Statements, our management team was not aware of any material actions. However, management cannot ensure that such actions or other contingencies will not arise in the future.

While primarily liable for our portion of Systemwide bonds and notes, we are jointly and severally liable for the Systemwide bonds and notes of the other System Banks. The total bonds and notes of the System at December 31, 2022, were \$390.0 billion.

We, together with all System Banks and the Funding Corporation, have entered into the Contractual Interbank Performance Agreement. This agreement establishes agreed-upon standards of District financial condition and performance to achieve and maintain. AgriBank, and each of the other System Banks, exceeded the minimum performance measures at December 31, 2022.

We, together with all System Banks and the Funding Corporation, have entered into the MAA. This agreement establishes criteria and procedures for the System Banks to provide information and, under specific circumstances, restricting or prohibiting participation in issuances of Systemwide Debt Securities. The agreement is intended to identify and resolve individual System Bank financial problems in a timely manner. AgriBank, and each of the other System Banks, were in compliance with all aspects of the agreement at December 31, 2022.

If a System Bank fails to meet the MAA performance criteria, it will be placed into one of three categories. Each category gives the other System Banks progressively more control over a System 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.

NOTE 10

Financial Instruments With Off-Balance Sheet Risk

We originate and participate in financial instruments with off-balance sheet risk to satisfy the financing needs of borrowers. These financial instruments are in the form of commitments to extend credit and letters of credit. The instruments involve, to varying degrees, elements of credit risk in excess of the amount recognized on the Financial Statements. Commitments to extend credit are agreements to lend to a borrower or participate in a future lending arrangement in accordance with established contracts. At December 31, 2022, AgriBank had various commitments, primarily to extend credit, totaling \$30.1 billion, of which \$25.5 billion were on wholesale loans. Standby letters of credit are agreements to pay a beneficiary if there is default on a contractual arrangement. At December 31, 2022, we had issued standby letters of credit of \$153.9 million.

Commitments to extend credit and letters of credit generally have fixed expiration dates or other termination clauses, and we may require payment of a fee. If commitments and letters of credit remain unfulfilled or have not expired, they may have credit risk not recognized on the Financial Statements. Many of the commitments to extend credit and letters of credit will expire without being fully drawn upon. Therefore, the total commitments do not necessarily represent future cash requirements. Certain letters of credit may have recourse provisions that would enable us to recover from third parties amounts paid under guarantees, thereby limiting our maximum potential exposure. The credit risk involved in issuing these financial instruments is essentially the same as that involved in extending loans to borrowers, and we apply the same credit practices. The amount of collateral obtained, if deemed necessary by us upon extension of credit, is based on management's credit evaluation of the borrower.

NOTE 11

Fair Value Measurements

The fair value of financial instruments is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We utilize a fair value hierarchy intended to maximize the use of observable inputs and is based upon the transparency of inputs used in the valuation of an asset or liability. A financial instrument's categorization within the valuation hierarchy is based upon the least transparent input that is significant to the fair value measurement. Refer to Note 2 for additional information about our fair value measurement policy.

Recurring Measurements

The following is a list of financial instruments each with a summary of the methods, valuation techniques and inputs used to measure fair value on a recurring basis:

	Source	Valuation Technique	Inputs
Federal funds	Counterparty report	Cost approach	Principal plus accrued interest
Commercial paper and other	Third-party pricing service	Market approach	Benchmark yield curves
U.S. Treasury securities	Third-party pricing service	Market approach	Benchmark yield curves
			Quoted prices
			Bid prices
			Trade prices, yields, spreads
			Other observable market information
Mortgage-backed securities	Third-party pricing service	Market approach	Benchmark yield curves
			Volatilities
			Market spreads
			Prepayment speeds
			Quoted prices
Asset-backed securities	Third-party pricing service	Market approach	Benchmark yield curves
			Volatilities
			Market spreads
			Prepayment speeds
			Quoted prices
Cash collateral posted with counterparties	Counterparty report	Cost approach	Principal plus accrued interest
Cash collateral posted by counterparties	Counterparty report	Cost approach	Principal plus accrued interest
Derivative assets	Internally developed	Market approach	Benchmark yield curves
			Volatilities
			Quoted prices
Derivative liabilities	Internally developed	Market approach	Benchmark yield curves
			Volatilities
			Quoted prices

Valuation Techniques and Significant Inputs Used to Measure Fair Value on a Recurring Basis

Federal Funds: The fair value of federal funds is generally their face value, plus accrued interest, as these instruments are readily convertible to cash.

Investments Available-for-Sale: The fair value of nearly all of our investment securities is determined from third-party valuation services that estimate current market prices using market-based measurements that are processed through a rules-based pricing application. Level 2 inputs and assumptions related to third-party market valuation services are typically observable in the marketplace.

Cash Collateral Posted With/By Counterparties: Derivative contracts are supported by bilateral collateral agreements with counterparties requiring us/them to either post cash or pledge investment securities as collateral in the event certain dollar thresholds of credit exposure are reached or in the case of cleared derivatives, the posting of initial and variation margins. The market value of cash collateral posted with counterparties and by counterparties is the face value of the collateral posted, as that approximates fair value.

Derivative Assets and Liabilities: The fair value of our derivative financial instruments is the estimated amount to be received to sell a derivative asset or paid to transfer a derivative liability in active markets among willing participants at the reporting date. Estimated fair values are determined through internal market valuation models and inputs are observable directly or indirectly in the marketplace. We compare internally calculated derivative valuations to broker/dealer quotes to substantiate the results.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Fair Valu	Ising	Total Fair	
Level 1	Level 2	Level 3	Value
\$—	\$8,318,423	\$—	\$8,318,423
_	5,669,274	_	5,669,274
_	5,962,719	_	5,962,719
_	143,507	_	143,507
_	20,093,923	_	20,093,923
56,504	_	_	56,504
_	114,582	_	114,582
\$56,504	\$20,208,505	\$—	\$20,265,009
\$7,280	\$—	\$—	\$7,280
\$—	\$85,784	\$—	\$85,784
\$7,280	\$85,784	\$—	\$93,064
Fair Valu	ie Measurement U	lsing	Total Fair
Level 1	Level 2	Level 3	Value
\$—	\$4,049,426	\$—	\$4,049,426
			φ1,013,1 <u>2</u> 0
_	8,528,532	_	8,528,532
_	8,528,532 5,653,330	-	
_ _ _		_ _ _	8,528,532
_ _ 	5,653,330	_ _ 	8,528,532 5,653,330
	5,653,330 161,340	- - - -	8,528,532 5,653,330 161,340
	5,653,330 161,340	_ _ _ _ _	8,528,532 5,653,330 161,340 18,392,628
	5,653,330 161,340 18,392,628 —	_ _ _ _ _ _ _ _ _ 	8,528,532 5,653,330 161,340 18,392,628 30,561
	5,653,330 161,340 18,392,628 — 5,176	 \$	8,528,532 5,653,330 161,340 18,392,628 30,561 5,176
	5,653,330 161,340 18,392,628 — 5,176	_ _ _ _ _ _ _ _ _ _ 	8,528,532 5,653,330 161,340 18,392,628 30,561 5,176
	Level 1	Level 1 Level 2 \$ \$8,318,423 5,669,274 5,962,719 143,507 20,093,923 56,504 114,582 \$56,504 \$20,208,505 \$7,280 \$ \$- \$85,784 \$7,280 \$85,784 \$7,280 \$85,784 \$7,280 \$85,784 \$20,208,505 \$20,208,505	\$ \$8,318,423 \$ - 5,669,274 - - 5,962,719 - - 143,507 - - 20,093,923 - 56,504 - - - 114,582 - \$56,504 \$20,208,505 \$ \$56,504 \$20,208,505 \$ \$7,280 \$ \$ \$7,280 \$ \$ \$7,280 \$ \$ \$7,280 \$ \$ \$7,280 \$85,784 \$ Fair Value Measurement Using

(in thousands)	Fair Valu	sing	Total Fair	
As of December 31, 2020	Level 1	Level 1 Level 2		Value
Assets:				
Federal funds	\$—	\$639,700	\$—	\$639,700
Investments available-for-sale:				
Commercial paper and other	_	6,538,715	_	6,538,715
U.S. Treasury securities	_	5,864,582	_	5,864,582
Mortgage-backed securities	_	5,637,301	_	5,637,301
Asset-backed securities	_	544,731	_	544,731
Total investments available-for-sale	_	18,585,329	_	18,585,329
Cash collateral posted with counterparties	56,960	_	_	56,960
Derivative assets	_	11,065	_	11,065
Total assets	\$56,960	\$19,236,094	\$—	\$19,293,054
Liabilities:				
Derivative liabilities	\$—	\$86,529	\$—	\$86,529
Total liabilities	\$—	\$86,529	\$—	\$86,529

There were no Level 3 assets measured at fair value on a recurring basis during the years ended December 31, 2022, 2021 or 2020.

Non-Recurring Measurements

We had \$21.4 million, \$28.7 million and \$42.1 million of level 3 impaired loans measured at fair value on a non-recurring basis as of December 31, 2022, 2021 and 2020, respectively. Impaired loans measured at fair value on a non-recurring basis are loans that were evaluated for individual impairment based on the appraised value of the underlying collateral. When the value of the collateral, less estimated costs to sell, is less than the principal balance of the loan, a specific reserve is established. Costs to sell represent transaction costs and are not included as a component of the asset's fair value. If the process uses observable market-based information, they are classified as Level 2. If the process requires significant input based on management's knowledge of and judgment about current market conditions, specific issues relating to the collateral and other matters, they are classified as Level 3.

Other Financial Instrument Measurements

Financial Instruments Not Measured at Fair Value on the Statements of Condition

(in thousands)	Total Carrying –	Fair Valu	Fair Value Measurement Using		
As of December 31, 2022	Amount	Level 1	Level 2	Level 3	Total Fair Value
Assets:					
Cash	\$1,356,976	\$1,356,976	\$—	\$—	\$1,356,976
Net loans	133,418,675	—	_	123,867,470	123,867,470
Total assets	\$134,775,651	\$1,356,976	\$—	\$123,867,470	\$125,224,446
Liabilities:					
Bonds and notes	\$148,228,998	\$—	\$—	\$138,225,184	\$138,225,184
Unrecognized financial instruments:					
Commitments to extend credit and letters of credit		\$—	\$—	\$(2,279)	\$(2,279)

(in thousands)	Total Carrying –	Fair Valu	e Measuremen	t Using	Total Fair
As of December 31, 2021	Amount	Level 1	Level 2	Level 3	Value
Assets:					
Cash	\$1,304,994	\$1,304,994	\$—	\$—	\$1,304,994
Net loans	121,929,186	_	-	121,710,345	121,710,345
Total assets	\$123,234,180	\$1,304,994	\$—	\$121,710,345	\$123,015,339
Liabilities:					
Bonds and notes	\$134,702,607	\$—	\$—	\$134,021,282	\$134,021,282
Unrecognized financial instruments:					
Commitments to extend credit and letters of credit		\$—	\$—	\$(1,770)	\$(1,770)

(in thousands)	Total Carrying –	Fair Valu	t Using	Total Fair	
As of December 31, 2020	Amount	Level 1	Level 2	Level 3	Value
Assets:					
Cash	\$622,092	\$622,092	\$—	\$—	\$622,092
Net loans	109,705,796	_	_	111,363,242	111,363,242
Total assets	\$110,327,888	\$622,092	\$—	\$111,363,242	\$111,985,334
Liabilities:					
Bonds and notes	\$123,029,564	\$—	\$—	\$124,244,196	\$124,244,196
Unrecognized financial instruments:					
Commitments to extend credit and letters of credit		\$—	\$—	\$(1,455)	\$(1,455)

NOTE 12

Derivative and Hedging Activity

Use of Derivatives

We 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. Our goals are to manage interest rate sensitivity by modifying the repricing or maturity characteristics of certain balance sheet assets and liabilities so that movements in interest rates do not adversely affect net interest margin. As a result of interest rate fluctuations, fixed-rate liabilities will appreciate or depreciate in market value. The effect of this unrealized appreciation or depreciation is expected to be substantially offset by our gains or losses on the derivative instruments that are linked to fixed-rate liabilities. Another result of interest rate fluctuations is that the interest expense of floating-rate liabilities will increase or decrease. The effect of this variability in earnings is expected to be substantially offset by our gains and losses on the derivative instruments that are linked to these floating-rate liabilities. We consider the use of derivatives to be a prudent method of managing interest rate sensitivity, as it prevents earnings from being exposed to undue risk posed by changes in interest rates.

All of our derivative activities are monitored by the Asset/Liability Committee (ALCO) as part of the Committee's oversight of our asset/liability and treasury functions. ALCO ensures that the bank's derivative hedging strategies are implemented in line with the board's risk appetite and are incorporated into our overall asset/liability risk-management framework.

Interest Rate Risk Management

We primarily enter into derivative transactions, particularly interest rate swaps, to reduce funding costs, improve liquidity and manage interest rate sensitivity. Interest rate swaps allow us to change the characteristics of fixed or floating rate debt we issue by swapping to a synthetic fixed or floating rate lower than those available to us if borrowings were made directly. Under interest rate swap arrangements, we agree with other parties to exchange, at specified intervals, payment streams calculated on a specified notional principal amount, with at least one stream based on a specified floating rate index.

Other Derivative Uses

Other uses for derivatives are as follows:

- We also facilitate interest rate swaps to qualified borrowers of the District Associations. These swaps allow qualified borrowers to manage their interest rate risk and lock in a fixed interest rate similar to a fixed rate loan. We manage the interest rate risk from customer swaps with the execution of offsetting interest rate swap transactions.
- We may utilize commodity derivative instruments to manage mineral income volatility. We may purchase commodity put options to protect against a decline in oil prices, which could significantly impact our mineral income. We had put option contracts with a total notional of 110 thousand and 688 thousand barrels of oil as of December 31, 2022 and 2021, respectively, which are not included in the table below. No put options were outstanding as of December 31, 2020.

Derivative Instruments Activity (notional amount)

(in millions)	Receive- Fixed Swaps	Pay-Fixed Swaps	Floating-for- Floating	Other Derivatives	Total
As of December 31, 2019	\$1,251	\$2,304	\$2,300	\$156	\$6,011
Additions	1,205	_	_	_	1,205
Terminations	_	(823)	_	_	(823)
Maturities/amortization	(951)	(109)	(300)	(8)	(1,368)
As of December 31, 2020	\$1,505	\$1,372	\$2,000	\$148	\$5,025
Additions	700	6,000	_	_	6,700
Terminations	_	(705)	_	_	(705)
Maturities/amortization	(1,305)	(1,125)	(600)	(6)	(3,036)
As of December 31, 2021	\$900	\$5,542	\$1,400	\$142	\$7,984
Additions	2,676	11,650	2,600	5	16,931
Maturities/amortization	(50)	(12,327)	(200)	(27)	(12,604)
As of December 31, 2022	\$3,526	\$4,865	\$3,800	\$120	\$12,311

Other derivatives consisted of retail customer interest rate swaps.

Credit Risk Management

By using derivative instruments, we are subject to credit and market risk. If a counterparty is unable to perform under a derivative contract, our credit risk equals the net amount due to us. Generally, when the fair value of a derivative contract is positive, we have credit exposure to the counterparty, creating credit risk for us. When the fair value of the derivative contract is negative, we do not have credit exposure.

With the exception of retail customer swaps, to minimize the risk of credit losses, we deal only with bilateral counterparties that have an investment-grade or better credit rating from a rating agency, and we monitor the credit standing and levels of exposure to individual counterparties. At December 31, 2022, we do not anticipate nonperformance by any of these counterparties. We typically enter into master agreements that contain netting provisions. These provisions allow us to require the net settlement of covered contracts with the same counterparty in the event of default by the counterparty on one or more contracts. All such derivative contracts are supported by bilateral collateral agreements with counterparties requiring collateral to be posted in the event certain dollar thresholds of exposure of one party to the other are reached. These thresholds vary depending on the counterparty's current credit rating.

Bilateral Derivatives

(In thousands)			
As of December 31,	2022	2021	2020
Notional amount ⁽¹⁾	\$4,370,313	\$1,942,175	\$2,647,554
Cash collateral posted with counterparties	\$—	\$24,750	\$38,490
Cash collateral posted by counterparties	(7,280)	_	_
Securities posted by counterparties	(4,714)	_	_
Total collateral posted with counterparties, net	\$(11,994)	\$24,750	\$38,490

⁽¹⁾ Excludes notional amount for commodity hedges

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

Centrally Cleared Derivatives

(in thousands)			
As of December 31,	2022	2021	2020
Notional Amount	\$7,940,313	\$6,042,175	\$2,377,554
Initial margin posted with counterparties	\$56,504	\$5,811	\$18,470

Certain derivative instruments contain provisions that require us to post additional collateral upon the occurrence of a specified credit risk-related event. These events, which are defined by existing derivative contracts, are downgrades in the credit rating of AgriBank or if the Farm Credit System is no longer considered a Federally Chartered Instrumentality of the United States. The fair value of all derivative instruments with credit-risk-related contingent features that were in a liability position at December 31, 2022, and any collateral that we may be required to post related to these derivatives was \$53 thousand. In the event that we are downgraded, a tiered collateral posting would be activated which may require us to post collateral of up to \$53 thousand.

Accounting for Derivatives

Refer to Note 2 for information for information on the accounting for derivatives.

Financial Statement Impact of Derivatives

The fair value of our derivative contracts are presented as "Derivative assets" and "Derivative liabilities" on the Statements of Condition.

	2022		2021		20	20
(in thousands)	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
As of December 31,	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Derivatives designated as hedging instruments:						
Receive-fixed swaps	\$—	\$72,410	\$725	\$3,251	\$2,865	\$234
Pay-fixed swaps	99,449	2,927	_	53,576	_	148,796
Floating-for-floating swaps	15,743	45	—	1,403	_	2,448
Total derivatives designated as hedging instruments	115,192	75,382	725	58,230	2,865	151,478
Derivatives not designated as hedging instruments:						
Pay-fixed swaps	11,612	-	306	2,676	-	9,170
Other derivative products	29	10,402	5,183	_	11,021	_
Total derivatives not designated as hedging instruments	11,641	10,402	5,489	2,676	11,021	9,170
Variation margin settled	(12,019)	-	-	(4,591)	_	(71,254)
Credit valuation adjustments	(232)	-	(7)	_	44	_
Total gross amounts of derivatives	\$114,582	\$85,784	\$6,207	\$56,315	\$13,930	\$89,394

Notwithstanding collateral and netting provisions, derivative assets and liabilities are not offset in the accompanying Statements of Financial Position. The amount of collateral posted by or with counterparties is calculated on a net basis, by counterparty. The following table summarizes derivative assets and liabilities, related accrued interest and amounts of collateral exchanged pursuant to our agreements.

(in thousands)			
As of December 31,	2022	2021	2020
Derivative assets	\$114,582	\$6,207	\$13,930
Derivative liabilities	(85,784)	(56,315)	(89,394)
Accrued interest payable on derivatives, net	(733)	(1,196)	(978)
Gross amounts not offset in Statements of Condition:			
Cash collateral posted by counterparties	(7,280)	_	_
Cash collateral posted with counterparties	56,504	30,561	56,960
Securities posted as collateral pledged by counterparties	(4,714)	_	_
Net exposure amounts	\$72,575	\$(20,743)	\$(19,482)

The fair value of derivatives includes credit valuation adjustments (CVA). The CVA reflects credit risk of each derivative counterparty to which we have exposure, net of any collateral posted by the counterparty, and an adjustment for our credit worthiness where the counterparty has exposure to us. The CVA was not material in any of the periods presented. The change in the CVA for the period is included in "Interest expense" on the Statements of Comprehensive Income.

In relation to our cash flow hedges, the following table presents the amount of other comprehensive income (OCI) recognized on derivatives and the amount reclassified from accumulated other comprehensive income (AOCI) into earnings on effective cash flow hedges. During the next 12 months, \$25.2 million in gains on derivative instruments that qualify as cash flow hedges are expected to be reclassified into earnings.

Cash Flow Hedging Relationships

(in thousands) For the year ended December 31, 2022	Amount of Gain Recognized in OCI on Derivatives	Amount of Loss Reclassified from AOCI into Income
Pay-fixed swaps	\$144,351	\$(28,034)
Floating-for-floating swaps	14,490	(2,612)
Total	\$158,841	\$(30,646)
(in thousands) For the year ended December 31, 2021	Amount of Gain Recognized in OCI on Derivatives	Amount of Loss Reclassified from AOCI into Income
Pay-fixed swaps	\$33,824	\$(36,097)
Floating-for-floating swaps	43	(1,002)
Total	\$33,867	\$(37,099)
(in thousands) For the year ended December 31, 2020	Amount of (Loss) Gain Recognized in OCI on Derivatives	Amount of Loss Reclassified from AOCI into Income
Pay-fixed swaps	\$(154,494)	\$(29,597)
Floating-for-floating swaps	630	(1,158)
Total	\$(153,864)	\$(30,755)

The following table shows the effect of fair value and cash flow hedge accounting as well as economic hedges on the Statements of Comprehensive Income for the year ended December 31, 2022.

(in thousands)	Other non-interest (loss) income, net			In	terest Expens	e
For the year ended December 31,	2022	2021	2020	2022	2021	2020
Total amount of income and expense line items presented in the Statements of Comprehensive Income in which the effects of the fair value, cash flow and economic hedges are recorded: Asset and Liability Management Positions Fair value hedges:	\$(1,072)	\$20,651	\$3,183	\$2,254,016	\$1,187,241	\$1,610,238
Interest rate derivatives	-	_	_	70,110	5,152	957
Bonds and notes	-	_	_	(70,127)	(5,162)	(713)
Cash flow hedges:						
Interest rate derivatives	-	-	-	30,646	37,099	30,755
Economic hedges:						
Interest rate derivatives	(585)	(82)	(131)	-	_	_
Commodity derivatives	(1,454)	(219)	-	_	-	_

Note: We do not exclude components from effectiveness testing for fair value or cash flow hedges. During the years ended December 31, 2022, 2021 and 2020, we reclassified gains or losses into earnings as a result of the discontinuance of certain cash flow hedges.

The following table shows the cumulative hedging adjustment (fair value adjustment) for fair value hedges that are included in the carrying amount of the hedged assets (liabilities):

(in thousands)	Carrying Am	ount of the Hed	ged Item	Cumulative Fair \ the Carrying A	/alue Adjustmen mount of the He	
As of December 31,	2022	2021	2020	2022	2021	2020
Line Item on the Statements of Condition						
Bonds and notes	\$3,448,815	\$896,191	\$1,507,453	\$(72,551)	\$(2,424)	\$2,738
Note: AgriBank did not have any material had	aina adjuctmonte fo	r discontinued f	air value hodge	c		

Note: AgriBank did not have any material hedging adjustments for discontinued fair value hedges.

NOTE 13

Accumulated Other Comprehensive Loss

Changes in Components of Accumulated Other Comprehensive (Loss) Income

(in thousands)	Not-other-than- temporarily impaired Investment Activity	Derivatives and Hedging Activity	Employee Benefit Plan Activity	Total
Balance at December 31, 2019	\$2,010	\$(78,520)	\$(1,402)	\$(77,912)
Other comprehensive income (loss) before reclassifications	88,774	(153,864)	(736)	(65,826)
Amounts reclassified from accumulated other comprehensive loss		30,755	148	30,903
Net other comprehensive income (loss)	88,774	(123,109)	(588)	(34,923)
Balance at December 31, 2020	\$90,784	\$(201,629)	\$(1,990)	\$(112,835)
Other comprehensive income (loss) before reclassifications	(169,122)	33,867	(181)	(135,436)
Amounts reclassified from accumulated other comprehensive loss		37,099	217	37,316
Net other comprehensive income (loss)	(169,122)	70,966	36	(98,120)
Balance at December 31, 2021	\$(78,338)	\$(130,663)	\$(1,954)	\$(210,955)
Other comprehensive (loss) income before reclassifications	(851,418)	158,841	23	(692,554)
Amounts reclassified from accumulated other comprehensive loss	3,998	30,646	235	34,879
Net other comprehensive (loss) income	(847,420)	189,487	258	(657,675)
Balance at December 31, 2022	\$(925,758)	\$58,824	\$(1,696)	\$(868,630)

The derivatives and hedging activity and employee benefit plans activity reclassified from AOCI is included in "Interest expense" and "Other operating expense" respectively, on the Statements of Comprehensive Income.

NOTE 14

Subsequent Events

We have evaluated subsequent events through March 1, 2023, which is the date the Financial Statements were available to be issued. There have been no material subsequent events that would require recognition in our 2022 Financial Statements or disclosure in the Notes to those Financial Statements.

AgriBank and District Associations

The accompanying Financial Statements exclude financial information of District Associations. AgriBank and District Associations are collectively referred to as the "District." We separately publish certain unaudited combined AgriBank District financial information, including a condensed statement of condition and statement of income, which can be found on our website at <u>www.AgriBank.com</u>.

Effective January 1, 2022, two District Associations, AgCountry Farm Credit Services, ACA and North Dakota, ACA merged and are doing business as AgCountry Farm Credit Services, ACA with headquarters in Fargo, N.D.

Additional Regulatory Information

AgriBank, FCB

(Unaudited) (In whole dollars unless otherwise noted)

Description of Business

General information regarding the business is incorporated herein by reference from Note 1 to the Financial Statements included in this Annual Report.

The description of significant business developments, if any, is incorporated herein by reference from the "Management's Discussion and Analysis" section included in this Annual Report.

Description of Property

We lease our headquarters located in St. Paul, Minn. In addition to base rent, we are responsible for our share of the operating costs of the building under the lease agreement. Our lease agreement expires October 31, 2026. We sublease a portion of our office space to Farm Credit Foundations and SunStream Business Services.

Legal Proceedings

Information regarding legal proceedings is incorporated herein by reference from Note 9 to the Financial Statements included in this Annual Report. We were not subject to any enforcement actions as of December 31, 2022.

Description of Capital Structure

Information regarding capital structure is incorporated herein by reference from Note 6 to the Financial Statements included in this Annual Report.

Description of Liabilities

Information regarding liabilities is incorporated herein by reference from Notes 5, 7, 9, 11 and 12 to the Financial Statements included in this Annual Report.

Selected Financial Data

"Five-Year Summary of Selected Financial Data," included at the beginning of this Annual Report, is incorporated herein by reference.

Management's Discussion and Analysis

"Management's Discussion and Analysis," included in this Annual Report, is incorporated herein by reference.

Board of Directors of AgriBank, FCB

The board is organized into the following committees to carry out board responsibilities:

- The Audit Committee assists the board in fulfilling its oversight responsibilities for financial reporting, the adequacy of the Bank's internal control systems, the scope of the Bank's internal audit program, the independence of the outside auditors and the Bank's process for monitoring compliance with laws, regulations, and the standards of conduct including the code of ethics. The Audit Committee also oversees the adequacy of management's action with respect to recommendations arising from auditing activities.
- The **Compensation Committee** oversees Bank human resource programs and policies in areas such as, compensation, benefits, succession planning, performance management, diversity and inclusion, and other AgriBank programs that impact human capital.
- The **Governance Committee** oversees matters related to board governance and board operations, monitors director training and development, and monitors the board's involvement in AgriBank's strategic planning process.
- The Risk Management Committee assists the full board in overseeing the integration of risk management in the Bank through an enterprise risk management process. The Committee monitors the risk framework of the Bank, promotes effective management of all risks and fosters the establishment and maintenance of an effective risk culture throughout the Bank.
- The Government Relations Committee monitors federal legislative and regulatory policies that may affect AgriBank and its mission as a Farm Credit Funding Bank, as well as issues that may affect the Farm Credit System, and considers appropriate positions.

Information regarding directors who served as of December 31, 2022, including business experience in the past five years and any other business interest where a director serves on the board of directors or as a senior officer follows:

Name	Principal Occupation, Board Committees and Other Affiliations
Nick Vande Weerd, Board Chair Age: 41 Board Service Began: 2015 Current Term Expires: 2023	 Principal Occupation: 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 Committees: Government Relations Committee Other Affiliations: Major in the South Dakota Air National Guard, a U.S. military service in Sioux Falls, S.D. Director of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Owner of Vande Weerd Marketing, LLC, an investing and farming operation in Brookings, S.D. Owner of FATE, LLC, an investing entity in Brookings, S.D. Director of Hilltop Farms LLC, a dairy operation in Brookings, S.D.
Stan Claussen, Board Vice Chair Age: 69 Board Service Began: 2016 Current Term Expires: 2024	 Principal Occupation: Self-employed 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 Committees: Audit Committee Vice Chair of the Government Relations Committee Other Affiliations: Investor/Member, Vice President of the Board of Bushmills Ethanol, Inc., an ethanol production company in Atwater, Minn. Director of the Fairland Management Company, a farm land management company in Windom, Minn. Director of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Director of the Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Director of the Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Director of the Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Director of the Farm Credit Council, a trade association representing the Farm Credit System in Washington, D.C. Investor in Limited Partnership, Riverview, LLP, a dairy farm in Hancock, Minn. Board Chair of Admiral Point 2/Sailfish Pass Homeowners Association in Punta Gorda, Fla.

Name	Principal Occupation, Board Committees and Other Affiliations
Jeff Austman Age: 51 Board Service Began: 2021 Current Term Expires: 2025	 Principal Occupation: Self-employed farmer at Austman Farms, a corn and soybean farming operation in Forrest, III. Board Committees: Risk Committee Other Affiliations: Secretary of Austman, Inc., a property management operation including farmland and timber in Forrest, III. Board Member for Gibson Area Fire Hospital Foundation, a charitable fundraising organization for a hospital in Gibson City, III.
Donald Blankenship Age: 48 Board Service Began: 2020 Current Term Expires: 2024	Principal Occupation: Self-employed crops and livestock farmer in Murfreesboro, Tenn. 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 Age: 63 Board Service Began: 2022 Current Term Expires: 2026	 Principal Occupation: Member Golden Maple Farms, LLC, a cash crop farming operation in Ovid, Mich. Board Committees: Audit Committee Government Relations Committee 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, a trade association representing the Farm Credit System in Washington, D.C.
Robert Bruxvoort Age: 68 Board Service Began: 2020 Current Term Expires: 2024	 Principal Occupation: 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 Committees: Compensation Committee Other Affiliations: None
Ivar Chhina Outside Director Financial Expert Age: 60 Board Service Began: 2021 Current Term Expires: 2025	 Principal Occupation: Retired executive in Bellevue, Wash. Board Committees: Chair of the Audit Committee Other Affiliations Director and Chair of the Audit Committee for Malibu Boats, Inc., a manufacturer of recreational boats (NASDAQ: MBUU) in Loudon, Tenn. Director and Chair of the Audit Committee for Sage Dental Management, LLC, a dental healthcare services company in Boca Raton, Fla. Director and Chair of the Audit Committee for PPV Holding Company, LLC, a veterinary healthcare services company in Olympia, Wash. Director and Chair of the Audit Committee for Lone Peak Holdings, LLC, a dental healthcare services company in Denver, Colo. Independent board observer for Aptive Environmental, LLC, a residential pest control company in Provo, Utah
Dale Crawford Age: 66 Board Service Began: 2017 Current Term Expires: 2025	Principal Occupation: Self-employed crop farmer in Sullivan, III. Board Committees: Vice Chair of the Compensation Committee Government Relations Committee Other Affiliations: Secretary/Treasurer of the Moultrie-Sullivan Fair Association, a county agricultural fair in Sullivan, III. Director of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn

Name	Principal Occupation, Board Committees and Other Affiliations
Steve Cunningham Outside Director Age: 53 Board Service Began: 2022 Current Term Expires: 2023 ⁽¹⁾	Principal Occupation: CFO Enova International, a non-bank financial services entity in Chicago, Illinois Board Committees: Vice Chair of the Audit Committee Other Affiliations: None
Randy Peters Age: 69 Board Service Began: 2020 Current Term Expires: 2024	 Principal Occupation: 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 Committees: Risk Management Committee Other Affiliations: None
Mark Pierce Age: 64 Board Service Began: 2022 Current Term Expires: 2026	 Principal Occupation: President and owner of Rippling Water Farms Inc, a crop and livestock farming operation in Dekalb, Missouri Board Committees: Governance Committee Other Affiliations: Director of Buchanan County Farm Bureau Board, agricultural service agency in St. Joseph, MO Director of Progressive Community Services Board, provides programs and resources to individuals with intellectual/developmental disabilities and their families in St. Joseph, MO Community event coordinator DeKalb Homecoming Board, a non-profit community festival board DeKalb, MO
Chris Roberts Age: 52 Board Service Began: 2022 Current Term Expires: 2026	Principal Occupation: Owner/Operator Delta Terre Planting LLC, a row crop farming operation in Ark. Board Committees: Governance Committee Other Affiliations: Director of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn
Timothy Rowe Age: 62 Board Service Began: 2017 Also Served: 2010-2014 Current Term Expires: 2025	 Principal Occupation: 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 Committees: Chair of the Risk Management Committee Government Relations Committee Other Affiliations: Board Chair of Country Partners Cooperative, a local supply co-op in Gothenburg, Neb. Director of the Nebraska Cooperative Council, a trade association representing agricultural cooperatives in Lincoln, Neb. Director of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Director of the Farm Credit Council, a trade association representing Farm Credit in Washington, D.C.
John Schmitt Age: 66 Board Service Began: 2007 Current Term Expires: 2023	Principal Occupation: Self-employed grain and beef cattle farmer in Quincy, Ill. Board Committees: Chair of the Government Relations Committee Vice Chair of the Governance Committee Other Affiliations: Director of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Director of the Farm Credit Council, a trade association representing the Farm Credit System in Washington, D.C.

Name	Principal Occupation, Board Committees and Other Affiliations				
George Stebbins Age: 69 Board Service Began: 2018 Current Term Expires: 2026	Principal Occupation: 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 Committees: Risk Management Committee Other Affiliations: Director on the Miami County Zoning Commission, a zoning commission in Troy, Ohio.				
Rollin Tonneson Age: 70 Board Service Began: 2019 Current Term Expires: 2023	 Principal Occupation: 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 Committees: Chair of the Compensation Committee Other Affiliations: Board Member for Grace Lutheran Brethren Church, a religious organization in Bottineau, N.D. Chairman Emmanuel Lutheran Brethren Church Foundation, a foundation for an inactive rural church in Carbury, N.D. Employee Benjamin Tonneson Farms, a farm operation in Souris, N.D. 				
Matthew Walther Age: 51 Board Service Began: 2011 Current Term Expires: 2023	 Principal Occupation: 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 Committees: Chair of the Governance Committee Other Affiliations: Board Chair of the Federal Farm Credit Banks Funding Corporation, the fiscal agent for the Farm Credit System, in Jersey City, N.J. 				
Tony Wolfe Age: 73 Board Service Began: 2021 Current Term Expires: 2025	Principal Occupation: Self-employed farmer at Wolfe Farms, a sole-proprietorship in Hazelton, Ind. Board Committees: Compensation Committee Other Affiliations: Director of Shiloh Cemetery Association, a volunteer board in Hazelton, Ind. Member of Wolfe Family Land, LLC, a limited liability company in Hazelton, Ind.				

⁽¹⁾ Appointed outside director effective January 2022 to fill an unexpired term for one year. The Board took action on January 25, 2023 to appoint to a full 4-year term beginning in March 2023.

Information regarding days served and compensation paid during 2022 for each director follows:

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	Days Served		_		
	Board Meetings	Other Activities	Compensation Paid for Service on a Board Committee or Chair/ Vice Chair Positions	Name of Committee	Total Compensation Paid ⁽⁴⁾
Nick Vande Weerd	9.0	29.0	\$14,853	Chair	\$97,619
Stan Claussen	9.0	20.0	7,427	Vice Chair	85,192
Jeff Austman	9.0	13.0	-		75,266
Donald Blankenship	8.5	13.0	-		75,266
Laura Braun ⁽¹⁾	7.0	10.0	-		56,014
Robert Bruxvoort	9.0	13.0	913	Governance	83,678
Ivar Chhina	9.0	14.0	5,601	Audit	83,367
Dale Crawford	9.0	16.0	-		75,266
Christine Crumbaugh (2)	2.0	6.0	-		23,252
Steve Cunningham ⁽³⁾	9.0	11.0	-		73,657
Randy Peters	9.0	11.0	-		75,266
Mark Pierce ⁽¹⁾	7.0	7.0	-		56,014
Chris Roberts ⁽¹⁾	7.0	7.0	-		56,014
Timothy Rowe	9.0	17.0	3,713	Risk	77,979
John Schmitt	9.0	17.0	-		80,266
Daniel Shaw ⁽²⁾	2.0	6.0	-		19,252
George Stebbins	9.0	13.0	913	Compensation	76,178
Rollin Tonneson	9.0	14.0	2,801	Compensation	80,567
Matthew Walther	8.0	14.0	2,801	Governance	82,392
			1,825	Audit	
Thomas Wilkie, III ⁽²⁾	2.0	6.0	-		19,252
Tony Wolfe	9.0	13.0			75,266
Total			\$40,847		\$1,427,023

⁽¹⁾ Elected to the Board in March 2022

⁽²⁾ Term expired in March 2022

⁽³⁾ Appointed outside director of the Board in March 2022

⁽⁴⁾ May include extraordinary income paid in 2022 to certain current board members as of December 31, 2022. Retroactive payments totaling \$10 thousand were paid to past board members for services performed during their term.

Days served in the preceding chart represent actual days at board meetings and activities. Board members may also spend additional time in preparation for meetings and in travel to and from meetings.

The board members receive a standard annual retainer, which is paid quarterly, for attendance at meetings and other official activities for which attendance is required or desirable. The retainer is adjusted for inflation effective the month following the Annual Meeting. The standard retainer effective April 1, 2021 through March 31, 2022 was \$73,007. The standard retainer effective April 1, 2022 through March 31, 2023 is \$74,686. An additional position retainer is paid for specified leadership roles on the board that involve an increased level of activity and time commitment. The leadership roles designated to receive the additional position retainer above the standard retainer, and the percentage of additional retainer, are as follows: Board Chair (20%); Board Vice Chair (10%); Audit Committee Chair (10%); Compensation, Risk, and Governance Chairs (5% each). In addition to the standard retainer and leadership position retainers, additional compensation may be provided to a director for extraordinary time and effort in the service of AgriBank and its shareholders. Such compensation is provided in the amount of \$1,000 per additional day of service, and is paid at the discretion of the board upon request of the individual director performing the additional services. Extraordinary compensation of \$60 thousand was paid in 2022 in connection with the search for the outside director in 2021. Directors are also reimbursed for reasonable travel and expenses incurred.

Senior Officers

The senior officers of AgriBank, FCB at December 31, 2022, included:

Name	Position	Business experience and employment during past five years			
Jeffrey R. Swanhorst	Chief Executive Officer	Position began in April 2018. Prior to that served as executive vice president and chief credit officer for AgriBank beginning in August 2011.			
		Other Affiliations: Board member on the Federal Farm Credit Banks Funding Corporation, the fiscal agent for the Farm Credit System in Jersey City, N. J. Chair of Presidents Planning Committee (PPC) and member of the Executive and Business Practices Committees of the PPC, which provides management coordination and acts in an advisory role on matters that have potential for national impact on, or implications for, the Farm Credit System. Chair of the SunStream Business Services board, a technology and business services provider in St. Paul, Minn. Chief executive officer/president of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Member of Executive Council of the National Council of Farmer Cooperatives, an organization advancing the business and policy interests of America's cooperatives and other farmer-owned enterprises in Washington, D.C.			
James B. Jones	Chief Credit Officer	Position began in October 2018. Prior to that served as chief risk officer for AgriBank beginning in August 2015.			
Jeffrey L. Moore	Chief Financial Officer	Position began in October 2017.			
		Other Affiliations: Member of the Farm Credit Foundations Trust Committee, a committee which serves as the fiduciary for the benefits plans and trust assets, and oversees the administration of the plans for Farm Credit Foundations in St. Paul, Minn. Treasurer of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Board Member and Treasurer of Acres for Life Therapy and Wellness Center, a non-profit providing mental health services in Forest Lake, Minn.			
Jeremy J. Renger	Chief Risk and Information Officer	Position began in 2022. Prior to that served as director of risk analytics and ERM for John Deere Financial in Johnston, Iowa beginning in September 2008.			
Barbara Kay Stille ⁽¹⁾	Chief Administrative Officer and General Counsel	Position began in October 2017. Other Affiliations: Vice chair of the board of governors and member of the Audit Committee of the Farm Credit System Association Captive Insurance Company, a captive insurance company in Greenwood Village, Colo. Secretary of the AgriBank District Farm Credit Council, a trade association representing the AgriBank District in St. Paul, Minn. Member of Stille Family Farm, LLC, a farm real estate holding entity in Alhambra, III.			

⁽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.

Senior Officer Compensation

All senior officers, including the chief executive officer (CEO), and highly compensated individuals are compensated with a mix of salary and incentives as well as various AgriBank Farm Credit District post-employment benefit plans. The Compensation Committee of the board determines the appropriate levels and mix of short-term and long-term incentives in a responsible manner. Annual compensation for senior officers and highly compensated individuals is intended to be competitive with annual compensation for comparable positions at peer organizations.

The Compensation Committee engages a consulting firm to conduct an independent review of external benchmark data on a regular basis for senior officers. Our compensation philosophy enables us to attract and retain highly qualified senior officers with the requisite skills and experience to achieve our desired business results, including our mission to ensure that safe, sound and reliable sources of credit and related services are provided to rural America.

Salary: Senior officers' and highly compensated individuals' base salaries reflect the individual's experience and level of responsibility. The base salary of the CEO is subject to review and approval by the board, and the Compensation Committee may make recommendations on the CEO's base salary to the board. All other senior officer salaries are subject to review and approval by the CEO.

Short-term Incentive Compensation: Annually, a short-term incentive compensation program is available to all employees, including senior officers and highly compensated individuals, based upon AgriBank performance criteria established by the board and personal objectives established by employees and their managers. The short-term incentive compensation amounts are calculated after the end of the plan year (calendar year) and are generally paid out in a lump sum within 90 days of year end. In all years presented, the criteria for AgriBank performance objectives included: financial measures for net operating expense and earnings available for wholesale patronage; a funding measure for our Contractual Interbank Performance Agreement (CIPA) performance score; and an operational strength measure for client satisfaction. The short-term incentive compensation of the CEO is subject to review and approval by the board, and the Compensation Committee may make recommendations on the CEO's short-term incentive to the board. Regardless of position, short-term compensation may be prorated based on hire date.

Long-term Incentive Compensation: The CEO and all senior officers participated in the long-term incentive compensation plan in each year presented. The long-term incentive compensation amounts for the CEO and senior officers are determined based upon three-year performance criteria established by the board. A new three-year plan is established each year. The criteria for the plan years beginning in each year presented were based on earnings available for wholesale patronage measure and our CIPA performance score. The long-term incentive compensation of the CEO is subject to review and approval by the board, and the Compensation Committee may make recommendations on the CEO's long-term incentive to the board.

The board, in its sole discretion, may increase or decrease the amount of any incentive calculated. The long-term incentive compensation amounts are calculated annually and are generally paid out in a lump sum within 90 days of the final three-year plan year. Additionally, long-term incentive compensation may be provided to new senior officers with immediate eligibility or on a phased in basis during the initial three years of participation in the long-term incentive program. Annual long-term incentive amounts reflect long-term incentives earned in the applicable year based on an estimate of the total incentive over the three-year period.

Perquisites: Perquisites may include compensation associated with group term life and long-term disability insurance premiums, taxable reimbursements, relocation assistance, signing bonuses, and tax reimbursement for perquisite compensation, as applicable. Due to the nature of timing and reimbursement for relocation assistance, it is included in the compensation table in the year it is paid.

Other:

- Employer contributions to the AgriBank District Retirement Savings Plan which is available to all employees, including senior officers and highly compensated individuals.
- Changes in the value of pension benefits, which is defined as the change in the vested portion of the present value of the accumulated benefit obligation from December 31 of the prior year to December 31 of the most recent year for the Districtwide Retirement Plan and Pension Restoration Plan, as applicable, as disclosed in Note 7 of the accompanying Financial Statements. This change in value does not represent cash payments made by AgriBank during the year, but rather is an estimate of the change in AgriBank's future obligations under the pension plans. Refer to the Pension Benefits Attributable to Senior Officers for further information regarding pension distributions.
- Service awards available to all employees meeting pre-established years of service anniversaries.
- Non-recurring performance payments for eligible employees, regardless of position, excluding the CEO.

- Separation payout, including vacation, in 2022 includes payments to AgriBank's former Chief Risk Officer. This separation did not require further payments beyond 2022.
- Tax reimbursements, available to all employees.

"Other" fluctuates from year to year based primarily on changes to pension actuarial assumptions and changes in composition of the aggregate senior officers and highly compensated individuals.

Retirement Plans: The AgriBank District has various post-employment benefit plans which are generally available to all AgriBank employees, including the CEO, senior officers and highly compensated individuals, based on dates of service to AgriBank and are not otherwise differentiated by position, unless specifically stated. Information regarding the post-employment benefit plans is incorporated herein by reference from Notes 2 and 7 of the accompanying Financial Statements included in this Annual Report.

Senior officers and certain other individuals over a specified salary amount have an option to defer payments of their salary as well as payments under both the short-term and long-term incentive programs in accordance with applicable laws and regulations. Deferred compensation is based on the year it is earned. Jeffrey R. Swanhorst, CEO, deferred \$154 thousand and \$149 thousand in 2022 and 2021, respectively. Mr. Swanhorst did not defer any compensation during 2020. Total amounts deferred by senior officers (excluding the CEO) were \$123 thousand, \$19 thousand, and \$190 thousand for amounts earned in 2022, 2021, and 2020, respectively.

Compensation Paid to Senior Officers and Highly Compensated Individuals

(in thousands)			Short-term	Long-term			
			Incentive	Incentive			
Name of Individual	Year	Salary	Compensation	Compensation ⁽¹⁾	Perquisites	Other ⁽²⁾	Total
CEO:							
Jeffrey R. Swanhorst	2022	\$738	\$495	\$608	\$12	\$163	\$2,016
Jeffrey R. Swanhorst	2021	714	511	607	12	139	1,983
Jeffrey R. Swanhorst	2020	692	596	537	8	92	1,925

Aggregate Number of Senior Officers and Highly Compensated Individuals (excluding CEO):

4 ⁽³⁾	2022	\$1,280	\$452	\$674	\$143	\$253	\$2,802
5 ⁽⁴⁾	2021	1,695	510	424	23	649	3,301
4	2020	1,354	519	492	21	959	3,345

⁽¹⁾ All compensation is disclosed in the year it is earned. As the long-term incentive is on a rolling three-year basis, adjustments for earnings plan-to-date in a particular plan year may be reduced so the cumulative earned long-term compensation reflects the actual payments received at the end of the three-year period.

⁽²⁾ Generally, pension benefits increase annually as a result of an additional year of credited service and related compensation for plan participants. The value of the pension benefits can also be significantly impacted by changes in interest rates as of the measurement date.

⁽³⁾ Includes compensation for one senior officer who left the organization in February 2022 and one senior officer who commenced employment in September 2022.

⁽⁴⁾ Includes one highly compensated individual not serving as a senior officer in 2021.

Farm Credit Administration (FCA) regulations require the disclosure of the compensation paid during the last fiscal year to all senior officers and highly compensated individuals included in the above table to AgriBank shareholders and shareholders of related institutions upon request.

There were no highly compensated individuals who required disclosure under FCA regulations in 2022 or 2020 in the Compensation Paid to Senior Officers and Highly Compensated Individuals table.

Pension Benefits Attributable to Senior Officers

(in thousands)				
2022				
Aggregate Number of			Present Value	Payments
Senior Officers		Years of	of Accumulated	Made during the
(excluding CEO)	Plan	Credited Service	Benefits	Reporting Period
3	AgriBank District Retirement Plan	25.7	\$3,952	\$—
3	AgriBank District Pension Restoration Plan	25.7	\$1,403	\$—

Effective January 1, 2007, the AgriBank District Retirement Plan was closed to new employees. Therefore, any employee starting employment with the AgriBank District after that date is not eligible to be in the plan, including the CEO.

The AgriBank District Pension Restoration Plan restores retirement benefits to certain highly compensated employees that would have been provided under the qualified plan if such benefits were not above the Internal Revenue Code compensation or other limits. Not all employees are eligible to participate in this plan.

Transactions with Senior Officers and Directors

Information regarding transactions with senior officers and directors, including investment bond transactions, is incorporated herein by reference from Note 8 of the accompanying Financial Statements included in this Annual Report. AgriBank had no other transactions with board members or senior officers in 2022.

Loans to Senior Officers and Directors

Elected directors of the AgriBank board are District Association borrowers. AgriBank does not have a direct lending relationship with any of its directors or senior officers. AgriBank may, from time to time, participate in loans to its directors under pool programs or through other commercial participations. These commercial participation may be to non-Farm Credit institutions or to affiliated organizations (as defined in FCA Regulation 620.1(a)) in which a director is a partner, director, officer or majority shareholder.

The Associations' direct lending to our directors, and in which we subsequently participated, were subject to special approval requirements contained in FCA regulations and were made on substantially the same terms and conditions as those prevailing at the time for comparable transactions with other persons. None of these loans outstanding at December 31, 2022, involved more than a normal risk of collectability.

Travel, Subsistence and Other Related Expenses

Directors and senior officers are reimbursed for reasonable travel, subsistence and other related expenses associated with AgriBank's business functions. AgriBank directors were reimbursed for expenses in the amount of \$557,178, \$260,116 and \$287,155 in 2022, 2021 and 2020, respectively. A copy of AgriBank's policy for reimbursing these costs is available upon request.

Involvement in Certain Legal Proceedings

There were no events during the past five years that are material to evaluating the ability or integrity of any person who served as a director or senior officer of AgriBank on January 1, 2023 or at any time during 2022.

Shareholder Privacy

Shareholders' nonpublic personal financial information is protected by FCA regulations. Our directors and employees are restricted from disclosing information not normally contained in published reports or press releases about AgriBank, District Associations or their shareholders.

Relationship with Qualified Public Accountant

There were no changes in independent auditors since the last Annual Report to members and we are in agreement with the opinion expressed by the independent auditors.

Fees for professional services paid during 2022 to our independent qualified independent accountants, were as follows:

- Audit services related to the integrated audit for 2022 were \$1.2 million, including \$125 thousand of additional fees related to our implementation of new accounting guidance, which was pre-approved by the Audit Committee. Out-of pocket expenses were \$44 thousand and \$2 thousand related to the 2022 and 2021 audits, respectively. The engagement letter for integrated audit services for 2022 for the Bank reflect a fee of \$1.1 million, plus reasonable out-of-pocket expenses and incremental fees that may be assessed based on additional work not originally planned at the on-set of the engagement.
- Non-audit fees of \$1 thousand for financial disclosure software that occurred in the normal course of business. All non-audit fees were pre-approved by the Audit Committee.

There were no other audit, tax or non-audit services paid in 2022.

Financial Statements

The "Report of Management", "Report on Internal Control over Financial Reporting", "Report of Audit Committee", "Report of Independent Registered Public Accounting Firm", "Financial Statements" and "Notes to Financial Statements" included in this Annual Report, are incorporated herein by reference.

Regulatory Capital

The following information contains regulatory disclosures as required under Regulations 628.62 and 628.63, for risk-adjusted ratios, common equity tier 1 capital, tier 1 capital and total capital ratios. Refer to Note 6 of the accompanying Financial Statements for information regarding the statutorily required permanent capital ratio. As required, these disclosures are made available for at least three years and can be accessed at AgriBank's website at www.AgriBank.com.

Disclosure Requirement	Description	Annual Report Reference
Scope of Application	Scope of Application Corporate entity and consolidated subsidiaries Description of entity consolidation Restrictions on transfers of funds or capital	
Capital Structure	Terms and conditions of capital instruments Regulatory capital components	Pages 77-80 Page 112
Capital Adequacy	Capital adequacy assessment Risk-weighted assets Regulatory capital ratios	Page 113 Page 113 Page 115
Capital Buffers	Quantitative disclosures	Pages 113-114
Credit Risk	Credit risk management and policies Summary of exposures Geographic distribution Additional industry and counterparty distribution Contractual maturity Impaired loans and allowance for credit losses	Pages 24-28, 40-42, 58 Pages 114 Page 115 Pages 31-32, 40-41 Pages 74, 116-117 Page 116 Pages 69-72, 116
Counterparty Credit Risk-Related Exposures	General description Counterparty exposures	Pages 116-117 Pages 40, 93-95, 116-117
Credit Risk Mitigation	General description Exposures with reduced capital requirements	Pages 24-28, 31, 39-41, 94-95, 116-117 Page 116-117
Securitization	General description Methods and key assumptions Securitization exposures	Pages 117-118 Page 89-90 Page 118
Equities	General description Equity exposures	Pages 118 Page 118
Interest Rate Risk for Non-Trading Activities	General description Interest rate sensitivity	Pages 38 Page 38-39

Scope of Application

AgriBank, FCB (AgriBank or the Bank) is one of the four Banks of the Farm Credit System (System), a nationwide system of cooperatively owned Banks and Associations, established by Congress and subject to the provisions of the Farm Credit Act of 1971, as amended. We prepare our financial statements in conformity with generally accepted accounting principles in the United States of America (GAAP) and prevailing practices within the financial services industry.

AgriBank has no subsidiaries; therefore, the financial statements are only those of AgriBank and are not consolidated with any other entity. In conjunction with other System entities, the Bank jointly owns certain service organizations: the Federal Farm Credit Banks Funding Corporation, the FCS Building Association, the Farm Credit Association Captive Insurance Corporation, Farm Credit Foundations and SunStream Business Services. The Bank's investments in other System institutions are deducted from regulatory capital as only the institution who issued the equities may count the amount as regulatory capital. The Bank has no unincorporated business entity (UBE) which would be included in risk-weighted assets and is not deducted from any capital component in accordance with FCA regulations. As AgriBank has no consolidated subsidiaries, there are no consolidated entities which the total capital requirement is deducted, there are no restrictions on transfer of funds or total capital with other consolidated entities, and no subsidiary exists which is below the minimum total capital requirement individually or when aggregated at the Bank's consolidated level.

Capital Structure

Refer to Note 6 of the accompanying Financial Statements for a description of capital structure.

Regulatory Capital Structure	
(in thousands)	3-month
As of December 31, 2022	Average Daily Balance
Common Equity Tier 1 Capital (CET1)	
Common Cooperative Equities:	
Statutory minimum purchased borrower stock	\$22
Other required member purchased stock	2,598,091
Allocated equities:	
Allocated stock subject to retirement	1,546,652
Qualified allocated equities subject to retirement	-
Nonqualified allocated equities subject to retirement	-
Nonqualified allocated equities not subject to retirement	-
Unallocated retained earnings	3,554,291
Paid-in capital	-
Regulatory adjustments and deductions made to CET1	(10,598)
Total CET1	\$7,688,458
Tier 1 Capital	
Non-cumulative perpetual preferred stock	\$250,000
Regulatory adjustments and deductions made to tier 1 capital	-
Total additional tier 1 capital	250,000
Total Tier 1 Capital	\$7,938,458
Total Capital	
Common Cooperative Equities not included in CET1	\$—
Subordinated debt	-
Allowance for loan losses and reserve for credit losses on off-balance sheet credit exposures	33,978
Regulatory adjustments and deductions made to total capital	_
Total tier 2 capital	33,978
Total Capital	\$7,972,436
Reconciliation to the December 31, 2022 Statement of Condition	End of Period
Total Shareholders' Equity	\$7,185,556
Adjustments to Regulatory Capital:	<i>ŢŢŢ</i> 200,000
Protected stock	(70)
Accumulated other comprehensive loss	868,630
Regulatory adjustments and deductions	(10,598)
Tier 2 allowance and reserve for credit losses	32,739
Total Capital ⁽¹⁾	\$8,076,257
⁽¹⁾ The amount of total capital presented in the Regulatory Capital Structure table above is the t	

⁽¹⁾ The amount of total capital presented in the Regulatory Capital Structure table above is the three-month average daily balance used in calculating capital ratios, as required by FCA regulations, whereas the total capital amount in the reconciliation section is the amount outstanding as of December 31, 2022.

Capital Adequacy and Capital Buffers

We regularly assess the adequacy of our capital to support current and future activities. This assessment includes maintaining a formal capital plan that addresses our capital targets in relation to our risks and establishes the required investment levels. The plan assesses the capital level and composition necessary to absorb adversity and to support our mission over the long term. The plan considers factors such as credit risk and allowance levels, quality and quantity of earnings, sufficiency of liquid funds, operational risk, interest rate risk and growth in determining optimal capital levels. We periodically review and modify these targets to reflect current business and economic conditions. Our capital plan is updated at least annually and is subject to change at the discretion of our board.

Risk-Weighted Assets

(Risk-weighted 3-month average daily balance in thousands)

As of December 31, 2022	
Exposures to:	
Sovereign entities	\$—
Foreign bank entities	712,672
Government-sponsored enterprises ⁽¹⁾	24,521,135
Depository institutions and credit unions ⁽²⁾	84,299
Public sector entities	-
Corporate, including borrower loans	19,906,559
Residential mortgage	1,254,082
Past due and nonaccrual	75,242
Securitization exposures	266,245
Cleared transactions	565
Unsettled transactions	-
All other assets	250,887
Deductions:	
Regulatory adjustments and deductions made to CET1	10,598
Regulatory adjustments and deductions made to ${\sf AT1}^{(3)}$	_
Regulatory adjustments and deductions made to $T2^{(4)}$	
Total standardized risk-weighted assets	\$47,061,088

⁽¹⁾ Includes exposures to Farm Credit System entities

 $^{\rm (2)}$ Includes exposures to OFIs that are risk-weighted as U.S. depository institutions and credit unions

⁽³⁾ AT1 capital is additional tier 1 capital

⁽⁴⁾ T2 is tier 2 capital

As of December 31, 2022, the Bank was well-capitalized and exceeded all capital requirements to which it was subject, including applicable capital buffers. Because our capital level exceeded the buffer requirements, the Bank currently has no limitations on distributions and discretionary bonus payments. The aggregate amount of eligible retained income was \$604.1 million as of December 31, 2022.

Regulatory Capital Requirements and Ratios

	Regulatory Minimums	Required Buffer	As of December 31, 2022	Calculated Buffer
Common equity tier 1 capital ratio	4.5 %	2.5 %	16.3 %	11.8 %
Tier 1 capital ratio	6.0 %	2.5 %	16.9 %	10.9 %
Total capital ratio	8.0 %	2.5 %	16.9 %	8.9 %
Capital conservation buffer				8.9 %
Tier 1 leverage ratio	4.0 %	1.0 %	5.2 %	1.2 %
Leverage buffer				1.2 %

Regulatory Capitalization Requirements and Restrictions

FCA regulations require us to maintain certain minimum capital ratios. If the capital ratios fall below the total requirements, including the buffer amounts, capital distributions (equity redemptions, dividends and patronage) and discretionary senior executive bonuses are restricted or prohibited without prior FCA approval. No such prohibitions were in effect as of December 31, 2022, and we do not foresee any events that would result in this prohibition during 2023.

Credit Risk

We are exposed to various forms of credit risk including wholesale loan credit risk, retail loan credit risk and counterparty credit risk. We do not hold any credit derivatives as a means to manage credit risk. Refer to the Credit Risk Management, Wholesale Credit Risk Management, Retail Credit Risk Management and Allowance for Loan Losses sections of the Management's Discussion and Analysis for information regarding the credit risk we are exposed to and the mitigation techniques applied to manage that risk.

Credit Exposures - Lending and Investments

(in thousands)		3-month Average
As of December 31, 2022	End of Period	Daily Balance
Loans	\$133,470,781	\$130,977,381
Investments	20,093,923	20,758,458
Loan and other commitments	30,118,671	27,981,111
Letters of credit	153,895	154,715

The table below shows derivative credit exposures segregated by cleared and bilateral contracts. Gross positive fair value represents the credit exposure attributed to derivatives before the mitigating effects of counterparty collateral.

Credit Exposures - Derivatives

	End of Period		3-month Average	e Daily Balance
(in thousands)		Gross Positive		Gross Positive
As of December 31, 2022	Notional Amount	Value	Notional Amount	Value
Cleared derivatives	\$7,940,313	\$15,408	\$7,005,961	\$8,464
Bilateral derivatives ⁽¹⁾	4,370,313	35,566	6,911,974	41,720

⁽¹⁾Excludes notional amount for commodity hedges

The following tables include distributions for the wholesale and retail loan portfolio as well as related commitments.

Loan and Commitment Geographic Distribution

A3 01 December 31, 2022			
Wholesale Por	rtfolio	R	etail Portfolio
Iowa	10 %	Illinois	12 %
Illinois	10 %	Minnesota	11 %
Nebraska	7 %	Nebraska	8 %
Minnesota	7 %	Indiana	7 %
Indiana	6 %	lowa	6 %
Michigan	6 %	Ohio	6 %
Wisconsin	5 %	Tennessee	6 %
Ohio	5 %	Other	44 %
South Dakota	5 %		
Other	39 %		
Total	100 %	Total	100 %

As of December 31, 2022

Wholesale loan and commitment portfolio distribution in the table above is based on the underlying District Associations' retail portfolios. For additional information regarding the geographic distribution of the retail loans held at District Associations, refer to the Portfolio Diversification section of the Management's Discussion and Analysis.

Loan and Commitment Commodity Distribution

As of December 31, 2022 Retail Portf

Retail Portfolio		
Crops	58 %	
Cattle	9 %	
Loans to OFIs	8 %	
Other	25 %	
Total	100 %	

Refer to the Portfolio Diversification section of the Management's Discussion and Analysis for additional detail of the commodities underlying the District Associations' loan portfolios.

Our retail portfolio is substantially concentrated within our chartered territory of Arkansas, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Tennessee, Wisconsin and Wyoming at 77 percent as of December 31, 2022. All impaired loans, past due loans and allowance are within our retail portfolio. Impaired loans, past due loans and allowance needs by geographic region are only considered in rare circumstances that may not otherwise be reflected in the probability of default and loss given default (flooding, drought, etc.). There was no allowance attributed to a geographic area as of December 31, 2022.

Maturities in the following table are reflective of the wholesale loan agreements and retail loan agreements, respectively, and are based on the final maturity without consideration for amortization payments. Loan exposures include accrued interest receivable, as applicable, and investment exposures are at fair value.

Exposures by Final Contractual Maturity

(in thousands) As of December 31, 2022	One Year or Less	Over One Year but Less than Five Years	Five Years or More	Total
Wholesale loans	\$—	\$119,473,496	\$—	\$119,473,496
Retail loans ⁽¹⁾	3,194,197	10,100,402	1,687,694	14,982,293
Investments (including federal funds)	11,912,717	2,346,013	5,835,193	20,093,923
Wholesale loan commitments	1,000	25,493,568	-	25,494,568
Retail loan and other commitments ⁽²⁾	1,904,093	2,583,427	136,583	4,624,103
Cleared derivative notional	3,650,000	2,668,391	1,621,922	7,940,313
Bilateral derivative notional ⁽³⁾	2,900,000	893,391	576,922	4,370,313

⁽¹⁾ Includes loans to OFIs and service entities

⁽²⁾ Includes commitments to OFIs and service entities

⁽³⁾ Excludes notional amount for commodity hedges

Note: Accruing loans include accrued interest receivable.

Refer to Note 2 of the accompanying Financial Statements for our policy for determining past due or delinquency status, policy for placing loans on nonaccrual status, policy for returning loans to accrual status, definition of and policy for identifying impaired loans, description of the methodology used to estimate allowance for loan losses, and policy for charging-off uncollectible amounts.

Refer to Note 3 of the accompanying Financial Statements for amounts of impaired loans with and without related allowance, loans in nonaccrual status and greater than 90 days past due, loans past due greater than 90 days and still accruing, the allowance at the end of each reporting period, charge-offs during the period, and changes in components of our allowance for loan losses.

Refer to Note 4 of the accompanying Financial Statements for a summary of contractual maturity, amortized cost, fair value and weighted average yield of investment securities by type.

Counterparty Credit Risk and Credit Risk Mitigation

Credit Risk Mitigation Related to Derivatives

Refer to the Derivative Financial Instruments section in the Management's Discussion and Analysis and Note 12 of the accompanying Financial Statements for more information on credit risk mitigation related to derivatives.

With the exception of retail customer swaps, to minimize the risk of credit losses, we deal only with bilateral counterparties that have an investment-grade or better credit rating from a rating agency, and we monitor the credit standing and levels of exposure to individual counterparties. Collateral is typically cash and in limited circumstances, securities. The fair value of collateral assets and liabilities related to derivative contracts is their face value plus accrued interest, if applicable. Collateral exchanged is typically cash; therefore, fair value approximates face value.

We have not entered into any credit default swap agreements to mitigate our credit exposure to counterparties. Refer to Note 12 of the accompanying Financial Statements for the gross positive fair value of contracts, collateral held and the net unsecured credit exposure. The derivative portfolio is not covered by guarantees.

Current credit exposure is the greater of \$0 or the fair market value of a single derivative contract. The net current credit exposure is the greater of the net sum of all positive and negative fair market value of the individual derivative contracts subject to the qualifying master netting agreement or \$0. The net current credit exposure is equal to the gross positive fair values as disclosed in Credit Exposures - Derivatives table above.

Credit Risk Mitigation Related to Loans

Refer to the Credit Risk Management section of the Management's Discussion and Analysis for information about credit risk mitigation related to loans including wholesale credit risk management and retail credit risk management.

Loan concentrations exist when there are amounts loaned to multiple borrowers engaged in similar activities or within close proximity, which could cause them to be similarly impacted by economic or other conditions. We assess the outlook for commodities with the largest concentrations in our Districtwide portfolio. These outlooks are for the industry in general, and individual producers may perform better or worse than the industry as a whole. Refer to the Agricultural Conditions and Land Values sections of the Management's Discussion and Analysis in the accompanying Financial Statements for further information.

In certain circumstances, our loan participations may have guarantees from the U.S. government or one of its agencies.

Financial collateral is not used to mitigate credit risk in our loan portfolio. Refer to Note 12 of the accompanying Financial Statements for further information on financial collateral obtained to mitigate credit risk exposure for derivatives.

Loan and Commitment Exposures Covered by Guarantees

(in thousands)	3-month Average Daily	Risk-weighted 3- month Average
As of December 31, 2022	Balance	Daily Balance
Unconditionally guaranteed		
Loans	\$183	\$—
Conditionally guaranteed		
Loans	23,101	4,620
Total	\$23,284	\$4,620

We had no material commitments that were covered by guarantees during the three months ended December 31, 2022.

Credit Risk Mitigation Related to Investments

Refer to the Investment Portfolio and Liquidity section of the Management's Discussion and Analysis for information related to our investment securities credit risk management.

Financial collateral is not used to mitigate credit risk in our investment portfolio.

Investment Exposures Covered by Guarantees

(in thousands)	3-month Average Daily	Risk-weighted 3- month Average	
As of December 31, 2022	Balance	Daily Balance	
Unconditionally guaranteed	\$10,858,812	\$—	
Conditionally guaranteed	1,677,507	335,501	
Total	\$12,536,319	\$335,501	

Securitization

Securitizations are transactions in which:

- The credit risk of the underlying exposure is transferred to third parties, and has been separated into two or more tranches;
- The performance of the securitization depends upon the performance of the underlying exposures or reference assets; and
- All or substantially all of the underlying exposures or reference assets are financial exposures.

Securitizations include on- or off-balance sheet exposures (including credit enhancements) that arise from a securitization or resecuritization transaction; or an exposure that directly or indirectly references a securitization (e.g., credit derivative). A resecuritization is a securitization transaction in which one or more of the underlying exposures that have been securitized is itself a securitization. We do not currently hold re-securitization investments.

The Bank currently only participates in securitizations as an investor through the purchase of mortgage-backed securities (MBS) and asset-backed securities (ABS) as included in its investment portfolio. We do not originate, service, provide credit enhancements or sponsor securitizations. We are not a liquidity provider or swap provider for securitization transactions. We do not hold any off-balance sheet securitization exposures and no securitization exposures have been deducted from capital. We manage exposure to

changes in credit and market risk of securitization exposures under policies established by our Asset/Liability Committee. Further, FCA regulations require us to establish risk limits for eligible investments, including appropriate standards of credit worthiness.

We are subject to liquidity risk with respect to our securitization exposures. In volatile market conditions, it could be difficult to sell such investments, if the need arises, and the discounts from face value would likely be significant. 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 our investments may differ significantly from the values that would have been used had a ready market existed for the investments.

For our current portfolio of non-agency ABS securitization exposures, we have elected to utilize the "Gross Up" risk-based capital approach on an individual security level. Individual securities for which a "Gross Up" calculation cannot be performed (i.e. unavailable inputs) will receive a 1,250 percent risk weight. Refer to Risk-Weighted Assets table herein for additional information related to our securitization exposures. There have been no significant changes to the securitization portfolio since the last reporting period.

Securitization Exposures

(3-month average daily balance in thousands)		Weighted average risk-	Risk-weighted
As of December 31, 2022	Exposure	weight factor	assets
Gross up risk weight bands:			
100%	\$18,668	100%	\$18,668
> 100% and < 1,250%	119,659	207%	247,577
1250%		1250%	—
Total risk-weighted securitization assets	\$138,327	192%	\$266,245

Refer to Note 4 of the accompanying Financial Statements for additional information related to purchases and sales of securitization exposures as well as the amortized cost, unrealized gains/(losses) and fair value of MBS and ABS held in our investment portfolio. However, there were no purchases or sales of securitization exposures during the year ended December 31, 2022. Refer to Note 11 of the accompanying Financial Statements for a description of the methods and assumptions, including any changes as applicable, applied in valuing our purchased interests in securitization exposures.

Equities

We are limited partners in Rural Business Investment Company (RBIC) investments for various relationship and strategic reasons. A RBIC facilitates equity and debt investments in agriculture-related businesses that create growth and job opportunities in rural America. We do not hold any equity investments on which capital gains are expected. These investments are accounted for under the equity method when we are considered to have significant influence; otherwise, it would be accounted for at cost less impairment. These investments are not publicly traded and the book value approximates fair value. There have been no sales or liquidations of these investments during the period. As of December 31, 2022, all RBICs were accounted for under the equity method; therefore, no unrealized gains (losses) exist for the exposure. Further, we do not believe any significant latent revaluation gains (losses) exist for these exposures. No RBIC exposures are included in tier 1 or tier 2 capital.

Equity Investments included in Capital Ratios

(in thousands) As of December 31, 2022	Disclosed in Other Assets	Life-to-Date losses recognized in Retained Earnings ⁽¹⁾	
RBIC	\$26,849	\$4,326	

⁽¹⁾ Retained earnings is included in common equity tier 1, tier 1 and total capital ratios

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates may adversely affect operating results and financial condition. Refer to the Interest Rate Risk Management section of the Management's Discussion and Analysis for information related to interest rate risk.

District Young, Beginning and Small Farmers and Ranchers

As part of the System's commitment to rural America, District Associations have specific programs in place to serve the credit and related needs of young, beginning and small farmers and ranchers in their territories. The definitions of young, beginning and small farmers and ranchers follow:

- Young: A farmer, rancher, or producer or harvester of aquatic products who is age 35 or younger as of the loan transaction date
- **Beginning**: A farmer, rancher, or producer or harvester of aquatic products who has 10 years or less farming or ranching experience as of the loan transaction date
- 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

It is important to note that a farmer/rancher may be included in multiple categories based on meeting specific definitions. A more detailed discussion of each District Association's programs for young, beginning and small farmers and ranchers can be found within their respective Annual Reports.

Young and Beginning Farmers and Ranchers Served by AgriBank District

As of December 31, 2022	Young	Beginning	Small
As a percentage of total District farm members:			
Number of loans	20.5 %	28.7 %	45.7 %
Loans and commitment volume	12.4 %	18.1 %	18.7 %

Risk Factors

AgriBank, FCB

In the course of conducting our business operations, we are exposed to a variety of risks, some of which are inherent in the financial services industry and others of which are more specific to our own business. The following discussion summarizes some of the more important risk factors that we face. This discussion is not exhaustive and there may be other risk factors we face that are not described below. These risk factors, if realized, could negatively or positively affect our business, financial condition and future results of operations and, among other things, could result in our inability to pay principal and interest on Farm Credit System (the System or Systemwide) Debt Securities on a timely basis.

Our business may be adversely affected by the liquidity (cost and availability) of funding across the capital markets.

Our ability to fund our operations, meet our financial obligations, including unfunded commitments to extend credit, and generate income depends on the System's ability to issue Systemwide Debt Securities in the debt markets on a regular basis. The System's ability to continue to issue Systemwide Debt Securities depends, in part, on the conditions in the capital markets at that time, which may be outside the System's control. Such conditions include, but are not limited to, general disruption in the U.S. and global financial markets, negative views about government-sponsored enterprises (GSEs) or the financial services industry, the willingness of domestic and foreign investors to purchase Systemwide debt and/or a downgrade in Farm Credit institutions', other banks, or AgriBank's credit ratings. As a result, the System cannot make any assurances that it will be able to issue competitively priced debt or issue any debt at all. If the System cannot issue competitively priced debt or cannot access the capital markets, the System's ability to access funding would be negatively impacted. This situation would have a negative effect on our financial condition and results of operations, which could be material.

In addition to issuances of Systemwide Debt Securities, we have accessed other third-party capital, primarily preferred stock, to support our requisite regulatory capital levels and loan growth. These third-party capital sources have supplemented our issuances of Systemwide Debt Securities and enhanced our capital position, but there is no guarantee such third-party capital resources will be available or competitively priced and are subject to approvals required by FCA regulation.

Factors which could have an adverse effect on the System's ability to issue Systemwide Debt Securities at favorable rates and terms.

The System's GSE status has been an important factor in its ability to continually access the debt capital markets. For example, the System's funding costs historically have been below that of similar non-GSEs. Periodically, housing-related GSE status reform has been 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, any change in the System's status as a GSE or investors' general perception of GSE status could have a significant adverse impact on the System's ability to issue debt at favorable rates and terms.

The System is also 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. Such actions could have an adverse effect on the System's ability to issue Systemwide Debt Securities at favorable rates and terms and could trigger additional collateral requirements. 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 GSE status.

Any downgrades in credit ratings and outlook could also result in higher funding costs or disruptions in the System's access to 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 costs of funds, its financial condition and results of operations could be negatively affected.

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

The System issues combined financial statements and assurance of adequate disclosure controls and procedures around internal control over financial reporting. Failure by a System institution to provide required information for financial reporting, or to have adequate disclosure controls or procedures over financial reporting may delay the timely publication of the System's combined

financial statements or cause an error in the accuracy or completeness of the financial statements. Failure to timely issue the System's combined financial statements could disrupt the System's ability to access debt capital markets. Errors in the System's combined financial statements could disrupt trust and may impact our ability to issue at terms and pricing to support our operations, which is discussed further below.

We and the other Banks in the System are liable for Systemwide debt securities.

We, along with the other Banks in the System obtain funds for our lending activities and operations primarily from the Funding Corporation's sale of Systemwide Debt Securities. The Systemwide Debt Securities are not obligations of and are not guaranteed by the United States of America or any agency or instrumentality thereof, other than the System Banks. Under the Farm Credit Act, each Bank is primarily liable for the portion of the Systemwide Debt Securities issued on its behalf. The Banks are also jointly and severally liable for interest payments on certain other debt securities issued individually by other Banks pursuant to Section 4.4(a)(1) of the Farm Credit Act (12 U.S.C. § 2155(a)(1)) (the "Co-Liability Statute"). Additionally, each Bank is jointly and severally liable for the Systemwide Debt Securities issued on its portion of the Systemwide Debt Securities and where the Farm Credit Insurance Fund (Insurance Fund) of the Farm Credit System Insurance Corporation (FCSIC) is insufficient to cure the default. Although the Banks have established a system of mutual covenants and measures that are monitored on a quarterly basis, there is no assurance that these would be sufficient to protect a Bank from liability, should another Bank default and the Insurance Fund be insufficient to cure the default.

The Insurance Fund is available from the FCSIC to ensure the timely payment by each Bank of its primary obligations on the Systemwide Debt Securities, and can also be used by the FCSIC for its operating expenses and for other mandatory and permissive purposes. Under the Farm Credit Act, before joint and several liability can be invoked, available amounts in the Insurance Fund would be utilized to make the payment on such obligations. There is no assurance, however, that the Insurance Fund will have sufficient resources to fund a Bank's defaulted payment of principal and interest on its portion of the Systemwide Debt Securities. If the Insurance Fund is insufficient, then the non-defaulting Banks must pay the default amount in proportion to their respective available collateral positions. "Available collateral" is collateral in excess of the aggregate of each Bank's "collateralized" obligations and is approximately equal to AgriBank's capital. The FCSIC does not insure any payments on the Series A Preferred Stock, any class of our common stock, preferred stock or Farm Cash Management investment bond product.

To the extent we must fund our allocated portion of another Bank's portion of the Systemwide Debt Securities as a result of its default on those securities, our earnings and capital would be reduced, possibly materially.

We are subject to regulation under the Farm Credit Act.

System institutions, including AgriBank, are created and extensively subject to federal statutes and regulated by the Farm Credit Administration (FCA). Any change in the laws or regulations that govern the Bank's business could have a material impact on the Bank and its operations. Laws and regulations may change from time to time and the interpretations of the relevant laws and regulations also are subject to change. We are subject to regulatory oversight, supervision and examination by the FCA, including compliance 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. Furthermore, noncompliance with these standards could also adversely affect its financial performance.

We are exposed to credit risk.

In the course of our lending and investment activities, we are exposed to credit risk directly and indirectly through District Association retail lending. Credit risk is the risk that arises from the unwillingness or inability of borrowers, debt issuers or counterparties, including guarantors and third-party providers of other credit enhancements (such as bond insurers), to meet their contractual obligations to us.

Factors that can influence credit risk exposure include, but are not limited to:

- A general slowdown in the global economy and the relationship of demand for, and supply of, U.S. agricultural commodities in a global marketplace
- Political or regulatory changes that disrupt or modify an established market
- Length and severity of an epidemic or pandemic
- Major international events, including a downturn in the world economy, military or other armed conflicts, political disruptions, civil unrest or tariffs and embargoes or sanctions which negatively impact trade agreements. These events can affect the price of commodities or products used or sold by our borrowers and their access to markets.
- Fluctuations in prices of agricultural commodities
- The failure of one or more financial institutions could lead to market-wide disruptions and increased credit risk
- Changes in the general U.S. economy that may impact the availability of off-farm sources of income and prices of real estate
- Changes in farmland values

- Extreme adverse seasonal or weather conditions (such as flooding or drought) or market-related risks that significantly affect agricultural production and commodity prices
- Changes in technology, regulations or shifts in demographics which affect the competitiveness of our borrowers
- Changes in production expenses (such as feed, fuel and fertilizer)
- Availability and cost of agricultural workers
- Availability and cost of processing facilities
- An outbreak of a widespread disease in livestock/poultry populations, or in humans attributable to agricultural production
- Federal support for agriculture that may be reduced or eliminated, including the federal crop insurance program
- Development of alternative uses and market for agricultural commodities, or the cessation thereof, including ethanol and other biofuel production
- Environmental conditions or regulations and policies impacting our lending and business activities or the activities of Farm Credit borrowers
- Changes in U.S. tax laws modifying deductions taken by Farm Credit System borrowers
- Impact of movements in interest rates

We and District Associations employ many standards and tools to manage credit risk exposures. While we believe these standards and tools are appropriate to manage our credit risk, there is no assurance that significant deterioration in credit quality will not occur, which would reduce our earnings, possibly materially.

We face the risk that our derivatives counterparties may not meet their payment and other obligations in hedging transactions. We also face the risk of operational failure of any of the clearing members, exchanges, clearinghouses, or other financial intermediaries used to facilitate such hedging transactions. If a clearing member or clearinghouse were to fail, we could experience losses related to any collateral we had posted with such clearing member or clearinghouse to cover initial or variation margin. 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.

We rely on information furnished by or on behalf of customers, including Association customers, and counterparties, including financial information. We may also rely on representations of those customers and counterparties as to the accuracy and completeness of that information. If the financial or other information provided to us is incorrect, we could suffer credit losses or other consequences.

We are exposed to concentration risks associated with the agricultural industry and commodity prices.

We are chartered to make loans to District Associations and other financing institutions (OFIs), as provided in the Farm Credit Act. Due to these statutory provisions, we have a significant concentration of lending to agricultural concerns. Our loan portfolio consists of wholesale loans to District Associations, OFIs and participations with other lenders in loans to eligible borrowers. Our earnings, loan growth and the credit quality of our lending portfolio can be impacted significantly by the general state of the agricultural economy. Production agriculture remains a cyclical business that is heavily influenced by the demand for U.S. agricultural products, which in turn impacts the demand for loans and financial services offered by us and District Associations and our ability to make payments on Systemwide Debt Securities. Factors that could affect demand for or supply of U.S. agricultural products include:

- Changes to trade and environmental policies
- General economic conditions, both in rural areas and globally
- Changes to the U.S. dollar's value relative to foreign currencies
- Weather and extreme seasonal conditions
- Commodity prices
- Availability of agricultural workers and processing facilities
- Changes in value of farmland and rural real estate values
- Changes in production expenses, particularly feed, fuel and fertilizer
- Disease outbreak affecting supply and/or demand for livestock products
- Changes in consumer preferences and/or government support for certain industries

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

The U.S. agricultural sector has historically received significant financial support from the U.S. government through payments authorized under federal legislation, including USDA-sponsored crop insurance programs and certain other temporary support programs. While U.S. government support for agriculture has historically remained consistent, congressional efforts to decrease the U.S. budget deficit may result in continued pressure to reduce federal spending.

Fluctuations in both commodity prices and production expenses (including interest rates and inflation), may have an adverse impact on the cash flow and profitability of certain District Association borrowers, which, in turn, may negatively affect their ability to repay their loans. While certain borrowers may be negatively impacted by these conditions, other borrowers may benefit. For example, decreased prices for grains will result in lower risk profiles for livestock producers, processors and marketers of grains and oilseeds, and borrowers that purchase corn or other grains for use in their products. However, grain farmers may be negatively impacted by lower prices. Fluctuations in the agricultural commodities market and the cost of farm inputs may adversely impact the credit quality of our loan portfolio and, as a result, negatively affect operating results.

The volatility and prices for both crude oil and gasoline, diesel fuel and other refined petroleum products fluctuate widely and can have an adverse impact on the cash flow of District Association borrowers, as well as other System loan participation partners. Additionally, the level of mineral income generated from mineral rights we own is a function of oil prices. Various factors beyond our control influence these prices, including, but not limited to: levels of worldwide and domestic supplies, the ability of the members of the Organization of Petroleum Exporting Countries (OPEC) to agree to and maintain oil price and production controls, the price and level of foreign imports and exports, disruption in supply, the level of consumer demand, the price and availability of alternative fuels, the availability of pipeline capacity, unrest or instability of large foreign producers, and domestic and foreign governmental regulations and taxes. Our mineral income is predominantly derived from royalties received from the extraction of crude oil. Should extraction slow, stop entirely or the supply chain be disrupted, our mineral income could be severely and adversely impacted. While we may, under certain circumstances, strive to manage this risk through the use of commodity derivative instruments, there is no guarantee this risk management strategy will be effective.

We and District 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, we and District 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, we are subject to certain geographic lending restrictions. As a result, we do not have as much flexibility in attempting to diversify our loan portfolios as compared to commercial banks and other financial institutions. This concentration may limit our ability to offset adverse performance in one sector against positive performance in another sector like most diversified financial institutions.

We and District Associations face intense competition from competitors, many of whom are substantially larger and have more capital and other resources.

We and District Associations face intense competition, primarily from mortgage banking companies, commercial banks, thrift institutions, insurance companies, finance companies, and other non-traditional sources of funding. Many of these competitors in the financial services business are substantially larger and have more capital and other resources. Our and District Associations' future results may become increasingly sensitive to fluctuations in the volume and cost of their retail lending activities resulting from competition from other lenders and purchasers of loans. There can be no assurance that we and District Associations will be able to continue to compete successfully in the markets served.

We are exposed to political risk.

Political risk is the risk that adverse consequences through domestic and foreign governmental policies, regulations or other actions could affect our viability or create instability in agriculture, impacting the viability of District borrowers. We, as a GSE, are directly at risk of changing legislation. Legislative change could inhibit our ability to fulfill the Farm Credit mission of reliably extending credit to agricultural producers and rural communities.

Agricultural production and trade flows can be impacted by domestic and foreign governmental policies, regulations and other actions, such as taxes, tariffs, duties, subsidies, immigration, crop insurance, and import and export restrictions on agricultural commodities and commodity products. In addition, international trade disputes can adversely affect agricultural commodity trade flows by limiting or disrupting trade between countries or regions. Geopolitical risk associated with wars, terrorist acts and tensions between parties, including international trade wars, could adversely can 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 could adversely affect the supply of, demand for and prices of commodities and agricultural products, impact or restrict the ability of the District'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 ours and the District's financial condition and results of operations.

We are exposed to climate change risk.

Climate change poses both short- and long-term risks globally, including to the agricultural and financial sectors. Climate change arises from physical (acute or chronic risks to the physical effects of climate change) and transition risk (risks related to societal risks,

including regulatory, legal, market or reputational changes). Overall, climate change risks may result in increased compliance costs, lower profitability for us and District Associations, as well as many of their borrowers. Additionally, climate change impacts could negatively affect the credit quality of our and District Associations' loan portfolios.

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 decreased yields, failure or quality issues for crops. Additionally, livestock and dairy production can be negatively impacted by weather extremes as well, due to impact on feed and other input costs or reduced production.

Transition risks may result in changes in regulations and in market preferences, which in turn could have a negative impact on the asset values and results of operations of agricultural producers. In addition, market perceptions could change impacting both our reputation as well as the reputation of District Associations and their borrowers.

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

We are exempt from federal and other taxes as provided in the Farm Credit Act. If we were to lose this exemption, or if it were to be otherwise modified, our financial results could be negatively impacted. Changes to U.S. tax laws could affect our business, District Associations and customers. The impacts could include, but are not limited to, modifications to deductions surrounding interest expense and equipment purchases, tax incentives related to renewable energy initiatives and the overall changes in the competitive environment impacting financial institutions.

We are exposed to operational risk.

The structure and organization we have implemented to carry out our business activities may include risks including, but not limited to:

- Business Model Risk Changes to the business model do not meet expectations of its owners or loses viability in the judgment of regulators, the financial markets, or other influencers.
- Corporate Governance The Board of Directors members, on a collective basis, do not maintain sufficient expertise and training to provide effective strategic guidance to management, influence System and District direction, or hire and retain a high-quality CEO to lead the organization. The Executive Leadership Team does not maintain sufficient expertise and training to lead the organization or fails to develop and train talent within AgriBank to promote and sustain the culture and operational success of the organization.
- External Reporting Risk Our reports produced to satisfy regulatory agencies, investors, borrowers or in connection with the business service are incomplete (including disclosures), inaccurate, or untimely, causing damage to reputation and exposing AgriBank to fines, penalties or sanctions.
- Data and Model integrity The quality, completeness, and accuracy of our data as it is entered into, processed by, and reported on by various systems and models AgriBank deploys. Models used to analyze or interpret risks are insufficient, flawed or inappropriately used.

We may be subject to information technology system failures, network disruptions or breaches in data security, including failures of critical vendors and other third parties.

We rely to a large extent upon information technology systems and infrastructure to operate our business. The size and complexity of our computer systems make them potentially vulnerable to breakdown, malicious intrusion and random attack. While our systems are primarily centralized within the AgriBank District, there is de-centralization of systems across the Farm Credit System resulting in increased complexity in the technology infrastructure. Additionally, we and District Associations utilize vendors and third-party systems to perform certain critical services. 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, our business operations could be constrained, disrupted, or otherwise negatively affected. Data privacy breaches by employees and others with permitted access to our systems may pose a risk that sensitive data may be exposed to unauthorized persons or to the public. While we have invested in protection of data and information technology, there can be no assurance that our efforts will prevent breakdowns or breaches in our systems that could adversely affect our business.

We are developing and implementing significant information technology system conversion projects. During system conversion projects, we are exposed to risks including those involved with data migration, user acceptance and understanding of new systems, and disruptions in processes that depend on these systems. We implement project planning and testing processes in order to minimize these risks, but there can be no assurance that business disruptions or system failures will not occur.

We are subject to cyber security risks.

Information security risks for large institutions such as ours 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. To date, we have not experienced any material losses relating to cyberattacks or other information security breaches, but we could suffer such losses in the future. If one or more of such events occur, this potentially could jeopardize confidential and other information, including nonpublic personal information and sensitive business data, processed and stored in, and transmitted through, our computer systems and networks, or otherwise cause interruptions or malfunctions in our operations or the operations of our customers or counterparties. This could result in significant losses, reputational damage, litigation, regulatory fines or penalties, or otherwise adversely affect our business, financial condition or results of operations. We maintain insurance coverage relating to cyber security risks, and we may still be required to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities or other exposures. Despite having insurance coverage, we may be subject to litigation and financial losses. Additionally, third parties with which we do business may also be sources of cyber security or other technological risks.

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

We regularly review and update our internal controls, disclosure controls and procedures, and corporate governance policies and procedures. 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. 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 our controls and procedures or failure to comply with regulations related to controls and procedures could have an adverse effect on our business, results of operations and financial condition.

Our ability to attract and retain qualified board members and employees is critical to successfully fulfilling our mission.

Our continued success depends in large part on the efforts and abilities of board members and employees throughout the organization. The competition for board members and employees who possess the requisite knowledge of the banking, agricultural, finance and other relevant industries is intense. Our ability to attract, develop and retain highly qualified board members and employees to execute the appropriate business operations and strategies will impact our future performance, including the successful execution of internal controls.

We are exposed to interest rate risk.

In the course of our borrowing, lending and investing activities, we are subject to interest rate risk, which is defined as the sensitivity of an institution's earnings, economic value of equity and retail market competition (rate and product) to changes in interest rates. Sensitivity to interest rates may arise from re-pricing risk, yield curve risk, basis risk and option risk. The Board of Governors of the Federal Reserve System establishes policies that influence our cost of funds and the return we earn on loans and investments, which impacts our net interest margin, and can materially affect the value of the debt, loans and investments we hold. Changes in Federal Reserve Board policies and other market events are beyond our control and are difficult to predict or anticipate.

Interest rate risk arises from differences in timing between the contractual maturity, repricing characteristics and prepayments of our assets and the contractual maturity and repricing characteristics of the financing obtained to fund these assets. The risk can also arise from differences between the interest rate indices used to price our assets and the indices used to fund those assets. It is expected that we will from time to time incur interest rate risk in the form of a "gap" in the interest rate sensitivities of our assets and liabilities, meaning that either our interest-bearing liabilities will be more sensitive to changes in market interest rates than our interest earning assets, or vice versa. In either event, if market interest rates should move contrary to our position, the "gap" will adversely affect earnings and the net present value of our interest-sensitive assets and liabilities.

We have asset/liability management policies, including risk limits, and strategies to actively manage our interest rate risk, including an Asset/Liability Committee comprised of a cross-functional group of senior leaders. However, there can be no assurance that our interest rate risk management procedures will be effective or that changes in interest rates will not adversely impact our earnings and capital.

We indirectly fund real estate mortgage loans and purchase mortgage-backed and asset-backed securities that are impacted by changes in interest rates. Changes in interest rates can significantly impact the prepayment patterns of these assets and, thus, affect our earnings. We strive to manage or reduce this risk by funding and maintaining a blend of debt securities and interest-rate derivative transactions designed to achieve an interest rate risk profile consistent with our risk guidelines. Our inability to issue or maintain the appropriate blend of debt securities to longer-term assets may increase the prepayment risks.

We use derivative financial instruments to minimize the financial effects of changes in interest rates and must determine the extent of these hedging transactions. The effectiveness of the hedging transactions depends upon our ability to determine the appropriate hedging position, taking into consideration our assets, liabilities and prevailing and anticipated market conditions. In addition, the usefulness of the hedging strategy depends on the availability of cost-effective hedging instruments and the ability to enter into hedging transactions with high quality counterparties. If we are unable to manage our hedging position properly, it will negatively impact our financial condition and results of operations.

Changes in LIBOR could adversely affect our operations and cash flows and the value of certain Systemwide Debt Securities.

ICE Benchmark Administration (the entity responsible for calculating LIBOR) ceased the publication of the one-week and two-month USD LIBOR settings immediately following the LIBOR publication on December 31, 2021, and has announced it intends to cease publication of the remaining USD LIBOR settings immediately following the LIBOR publication on June 30, 2023. AgriBank and District Associations have exposure to LIBOR, including in financial instruments that reference LIBOR that mature after June 2023. AgriBank's exposure arises from loans to customers, investment securities, Systemwide Debt Securities that are issued by the Funding Corporation, preferred stock and derivative transactions. The Secured Overnight Financing Rate (SOFR) published by the CME group or other 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 instruments held by AgriBank.

The discontinuance of LIBOR could result in disputes and litigation with counterparties and borrowers surrounding the implementation of alternative reference rates in our financial instruments that reference LIBOR. Financial instruments indexed to LIBOR could experience disparate outcomes based on their contractual terms, ability to amend those terms, 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 dictate what happens when all LIBOR tenors cease to be published.

We are exposed to liquidity risk associated with our investments.

We are subject to liquidity risk in the course of our investing activities. We purchase only high credit quality investments to best position our investment portfolio to be readily marketable and available to serve as a source of funding in the event of disruption of our normal funding mechanisms. However, if the market for our 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. 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 our 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.

We maintain a liquidity plan covering certain contingencies in the event our access to normal funding mechanisms is not available, but there is no guarantee that such mechanisms will be successful.

The majority of our investment portfolio consists of securities issued or guaranteed by the U.S. government, its agencies or government sponsored enterprises, which remain liquid. The remainder of our investment portfolio represents investments in commercial paper, federal funds, certificates of deposit, reverse repo and asset-backed securities. In further support of our liquidity, we have cash on deposit at the Federal Reserve Bank and correspondent banks.

We are subject to legal proceedings and legal compliance risks.

We are subject to a variety of legal proceedings and legal compliance risks. We are regularly reviewed by the FCA and other governmental authorities, which could lead to enforcement actions, fines and penalties or the assertion of private litigation claims and damages. While we believe we have adopted appropriate risk management and compliance programs, legal and compliance risks will continue to exist and additional legal proceedings and other contingencies, the outcome of which cannot be predicted with certainty, will arise from time to time.

We are subject to reputational risk.

Reputational risk arising from negative public opinion could adversely affect our ability to obtain financing, impede our ability to hire and retain qualified personnel or expose us to greater regulatory scrutiny or adverse regulatory or legislative changes. Such risk encompasses the loss of confidence, trust and esteem among investors, retail borrowers, partners, policymakers, shareholders and other key stakeholders. Like all businesses, we are subject to a wide variety of reputational risks both within and outside our control, including credit difficulties with individual customers or industries, business disputes, lawsuits, credit market disruptions, regulatory events and public allegations of misconduct against associates. As a member of the System, we could also be indirectly impacted by events that damage the reputation of another System entity.

We face risks from catastrophic events.

We are exposed to the risk that a catastrophic event, such as a terrorist event, severe damage to our workplace due to fire or a similar event, or natural disaster, could result in a significant business disruption and an inability to access funding or process transactions through normal business processes. Any measures we take to mitigate this risk may not be sufficient to respond to the full range of catastrophic events that may occur and we may not have sufficient insurance coverage for catastrophic events. Our borrowers and District Association 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 borrowers and the overall economy may also adversely affect our financial condition and results of operations.

Our accounting policies, methodologies, assumptions and estimates have a significant impact on our financial condition, results of operations and disclosures.

We must exercise judgment in selecting and applying various accounting policies, methodologies, assumptions and estimates so that they not only comply with generally accepted accounting principles in the U.S. and reflect best practices, but also reflect our judgment as to the most appropriate manner in which to record and report the financial condition and results of operations. These policies, methods, assumptions and estimates impact key financial statement items including, but not limited to, our allowance for credit losses and the fair value of certain assets and liabilities. The misapplication of accounting policies, methods, assumptions, or estimates could adversely affect the financial condition, results of operations or financial statement disclosures.

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

Our risk management framework may not be effective.

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

