

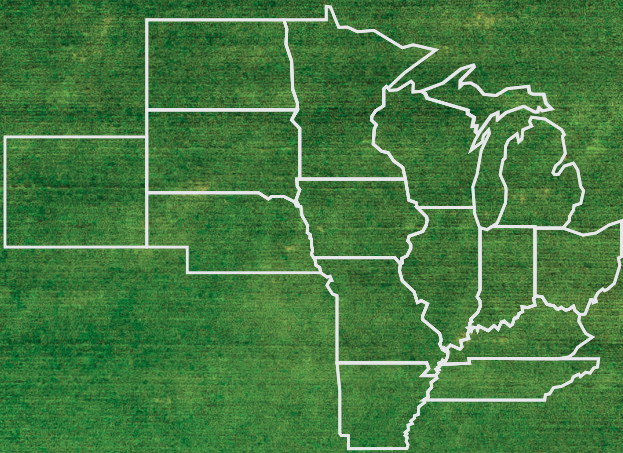
AGRIBANK 2019 ANNUAL REPORT

S T R E N G T H

S T A B I L I T Y

S O L U T I O N S

WHO WE ARE



AgriBank is part of the customer-owned, nationwide Farm Credit System. Under Farm Credit’s cooperative structure, AgriBank is primarily owned by 14 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. The AgriBank District covers a 15-state area stretching from Wyoming to Ohio and Minnesota to Arkansas. For more information, visit www.AgriBank.com.



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 www.FarmCredit.com.

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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 | FinancialReporting@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 year.

DEAR SHAREHOLDERS

Our theme for this AgriBank 2019 Annual Report — *Strength. Stability. Solutions.* — reflects not only our performance over the past year but our timeless commitment to our customers/owners, the 14 Farm Credit Associations in the AgriBank District.

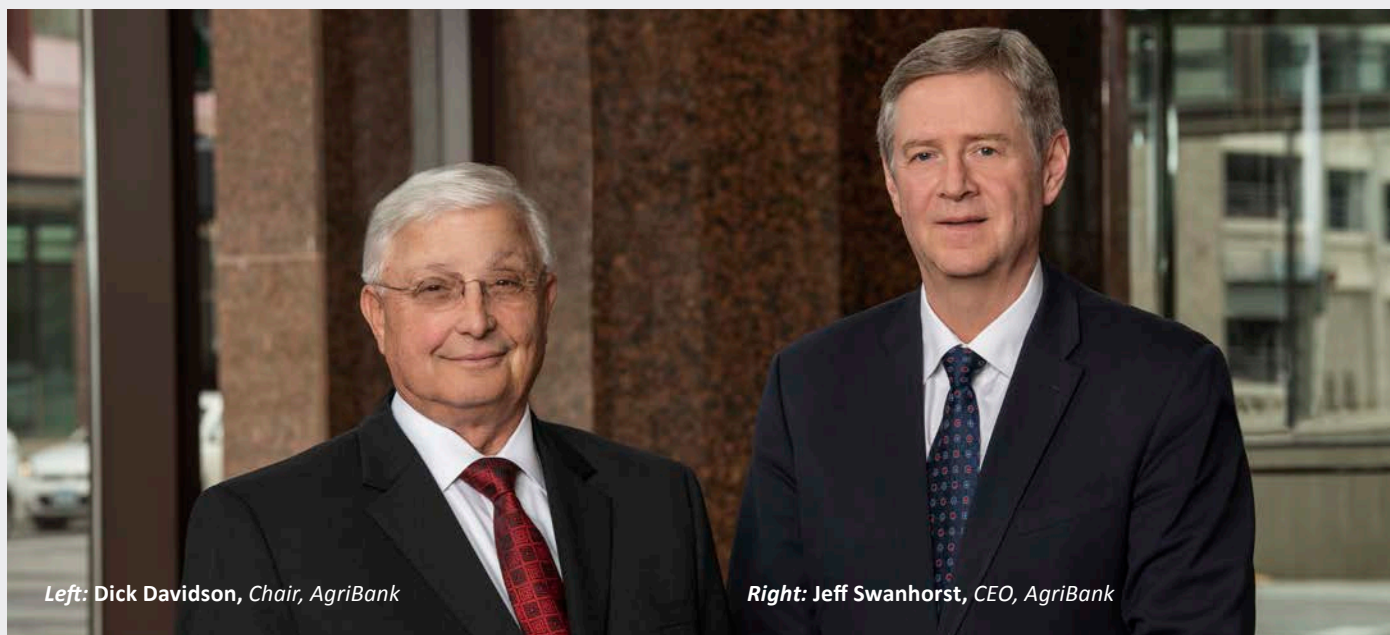
Everything we do is designed to support District Associations so they, in turn, can succeed in helping farmers, ranchers and other borrowers. AgriBank and District Associations focus on our clearly defined roles within the Farm Credit System as wholesale and retail lenders, respectively. Our success is only possible when each Association succeeds. Together with other System partners, we collaborate on fulfilling the Farm Credit mission to support rural communities and agriculture with reliable, consistent credit and financial services, today and tomorrow.

AgriBank continues to be a pillar of *strength* backed by the deeply experienced AgriBank Board of Directors and Executive Leadership Team, and talented employees, as well as highly effective working relationships with District

Associations. Our *stability* stems from our long-term focus on our business model as the Funding Bank to District Associations along with four Areas of Strategic Focus that guide our day-to-day activities: Culture & People, Client Service, Operational Strength, and Capital Efficiency. The *solutions* we deliver revolve around Our Purpose, which is to expertly and reliably obtain funds and prudently provide funding and financial solutions to District Associations.

Financial Results

These are challenging times for American agriculture with considerable economic, political, and operating uncertainty and volatility. Farm Credit was built to help rural America through times like these. AgriBank's financial strength is largely driven by the success of our owners, the 14 District Associations, and it allows those Associations to focus on the Farm Credit borrowers who depend on them. This financial strength instills confidence that AgriBank and District Associations will be here tomorrow.



Left: Dick Davidson, Chair, AgriBank

Right: Jeff Swanhorst, CEO, AgriBank

Our Mission:

Farm Credit supports rural communities and agriculture with reliable, consistent credit and financial services, today and tomorrow.

IN 2019:

- AgriBank returned \$609.6 million in earnings to our owners in the form of cash and stock patronage refunds — \$53.1 million higher than the previous year.
- AgriBank net income increased over the prior year to \$627.6 million, exceeding our targeted return on assets (ROA) of 50 basis points; actual ROA was 56 basis points. District net income increased nearly 2.4 percent to \$2.2 billion, driven by continued strong net interest income. AgriBank net operating rate was 6.0 basis points, reflecting our disciplined approach to operating expenses.
- AgriBank credit quality remained strong, with AgriBank nonadverse loans at 99.5 percent and District nonadverse loans at 95.2 percent, reflecting disciplined underwriting and loan servicing combined with borrower actions taken to adjust their businesses to the current economic environment.
- AgriBank loan volume increased 6.0 percent from the previous year to \$98.3 billion, reflecting growth in wholesale loans to District Associations. District loan volume increased 5.6 percent from the previous year to \$115.2 billion, driven by District Associations fulfilling the Farm Credit mission to support farmers, ranchers and other customers with reliable, consistent credit and financial services, today and tomorrow.

- Shareholders' equity increased 5.0 percent to \$6.2 billion for AgriBank and increased 5.3 percent to \$24.7 billion for the District, positioning the Bank and District Associations to navigate through the current environment.

A variety of external factors, negative and positive, will continue to affect the performance of AgriBank, District Associations and the agriculture industry we serve. In the coming year, we expect to see continued low commodity prices for corn and soybeans, the largest crops in the District; variant and unpredictable growing conditions; and ongoing trade disputes. At the same time, mitigating factors include crop insurance and government direct farm program payments, expected continued low interest rates, and producers' entrepreneurial drive to make changes in their operations to be successful. In addition, some degree of predictability and certainty will result from the United States-Mexico-Canada Agreement and the first phase of a U.S.-China trade agreement, which is expected to increase grain and protein trade. However, uncertainty regarding other highly significant agriculture trade activity continues. Producers who are able to realize cost and marketing efficiencies are most likely to weather the current low price environment. District Associations, backed by the financial strength of AgriBank, stand ready to work with borrowers through these challenging times.



IN MEMORIAM

KERI VOTRUBA

May 8, 1959 – October 22, 2019

In honor of Keri Votruba, late chair of the AgriBank Board of Directors, the board authorized and AgriBank will

make a \$50,000 donation to the Nebraska FFA Foundation. The endowment will fund annual proficiency awards that challenge students to set goals and apply skills to achieve those goals.

Based on Keri's professional interests, the awards will recognize students in the areas of crop and livestock production, as well as beef production. As a young man, Keri served as a state FFA officer.

Keri joined the AgriBank board in 2004 and was elected as chair for the second time in 2019. A long-time Farm Credit member, he also was serving as a director of the Federal Agricultural Mortgage Corporation (Farmer Mac) at the time of his passing. He previously served on the boards of the Region 801 Production Credit Association and Farm Credit Services of America.

From a financial perspective, we fulfill our Funding Bank Model by embracing three simple concepts that enable us to operate efficiently, yet effectively. We:

- **Charge What We Need** — generating income that allows us to balance cost discipline with making necessary investments
- **Keep What We Must** — maintaining capital levels to comply with regulatory minimums and buffers to further ensure our safety and soundness over the long term
- **Return the Rest** — sharing our financial success by paying dividends to our preferred stockholders and then paying patronage to our customers/owners

These concepts provide a framework for maintaining our financial discipline, keeping the cost of funding as low as prudently possible for District Associations.

Strength

Financial performance is just one measure of our strength. Sound governance, experienced leadership, talented employees and healthy relationships with District Associations help drive strong financial results.

AgriBank and the greater Farm Credit family were saddened on October 22, 2019, by the unexpected passing of Keri Votruba, chair of the AgriBank Board of Directors. Keri, a rancher and crop farmer from Hemingford,

Nebraska, devoted many years of service to AgriBank and Farm Credit. He joined the AgriBank board in 2004 and was elected as chair for the second time in 2019. We are grateful for Keri's dedication to our mission and will miss his leadership and friendship. Our succession policies ensured a smooth leadership transition on the board, which elected Dick Davidson as chair. Dick has served on the AgriBank board since 2005 and served as chair from 2011-2013. Stan Claussen, who has served on the board since 2016, continued as vice chair through the transition.

Keri's board seat will be filled through the director election to be held at the AgriBank 2020 Annual Meeting. This election will be the first under AgriBank's enhanced, modernized Board Design Plan, which we developed with considerable input from District Associations and adopted in 2019.

The Board Design Plan addresses board size, structure, and director eligibility and elections. Key elements and benefits of the plan include:

- **Up to 18-member board.** The board will have 15 elected directors and up to three appointed directors. Directors will continue to serve four-year terms with no limit, and alternating terms means that at least three directors will be elected during each election cycle. *The plan provides for a sufficient number of AgriBank directors to ensure safety and soundness, and provides the board with flexibility to evolve in a changing environment.*

Our Purpose:

AgriBank expertly and reliably obtains funds and prudently provides funding and financial solutions to Farm Credit Associations.

- **New AgriBank District zones for director positions.** The board will have three zones comprising five states each, with five elected directors per zone, replacing state-specific and single-Association director positions. Voting stockholders are eligible to serve on the board if they do business with an Association having territory in that zone, and no state-specific or zone residency is required. *The board expects this approach will result in a broader pool of potential candidates for each open position.*

- **New Nominating Committee structure and procedures.** Each District Association may have representation on the Nominating Committee, which identifies and selects board candidates. The committee is responsible for selecting at least two candidates to be placed on the ballot for each open director position, and floor nominations for the AgriBank board will be accepted each January. The committee will apply a robust, merit-based screening process to all candidates for consistent treatment, regardless of zone. The process will start earlier, vet candidates more thoroughly and allow more time for stockholders to review candidates than in the past. *The new approach is designed to yield high-quality board candidates, balanced with cooperative principles that allow any stockholder-Association to nominate a director candidate.*

In addition to an improved board design and long-tenured board leadership, AgriBank benefits from an experienced and talented management team. Jeff Swanhorst, CEO since April 2018, has more than 37 years of experience with Farm Credit. The four other Executive Leadership Team members also bring decades of experience from within and outside the System. In addition, the Bank is committed to a rewarding culture that attracts and retains the best talent.

The AgriBank board and executive leaders remain dedicated to a consistent strategic path that puts District Associations at the center of all we do through our Funding Bank Model. AgriBank's alignment and strong relationships with District Associations are critical to this strategic path. The Associations have built solid capital positions, and continue to generate strong earnings. The Bank enjoys strong client satisfaction that directly reflects the hard work and commitment of every AgriBank employee to support each and every customer/owner. So thanks to AgriBank employees for their efforts to help meet and exceed the expectations of our District Association colleagues. We are confident we will continue to drive client satisfaction by staying focused on serving District Associations.

Areas of Strategic Focus:



Stability

Our relentless focus on the Funding Bank Model provides stability for AgriBank. Under this model, AgriBank operates with three key functional areas.

- *Finance* expertly and reliably obtains and distributes funds on the most competitive terms possible
- *Credit* prudently provides funding and financial solutions to District Associations
- *Support* ensures the funding and lending areas excel in their roles, and that AgriBank and the District remain strong and viable

Finance

Credit

Support

AgriBank has embraced four Areas of Strategic Focus, detailed in our Business Plan, that provide a roadmap for the Funding Bank Model:

CULTURE & PEOPLE

- Intentionally providing a culture where people feel they are key to the success of AgriBank by demonstrating that people matter, purpose matters and our work matters
- Cultivating a work environment characterized by mission, integrity, excellence, support and improvement

CLIENT SERVICE

- Treating relationship management as an enterprise-wide responsibility
- Regularly interacting with Associations to understand their business challenges and strategies to ensure we deliver solutions and services that align with them
- Listening to address Association needs and concerns in a respectful and timely manner, and considering the broader needs of all District Associations

OPERATIONAL STRENGTH

- Achieving well-executed and controlled operations
- Delivering products and services expertly and reliably every day
- Providing balanced credit risk management and regulatory oversight

CAPITAL EFFICIENCY

- Continuing to explore opportunities to optimize capital within the District and System

Everything we do is designed to support District Associations so they, in turn, can succeed in helping farmers, ranchers and other borrowers.

Solutions

Key to the long-term success of the Funding Bank Model is our ability to focus exclusively on activities that help us fulfill our role to expertly and reliably obtain funds and prudently provide funding and financial solutions to District Associations. That's why we're excited and appreciative that the Farm Credit Administration (FCA) recently approved the charter application for SunStream Business Services to become a 4.25 service corporation.

SunStream has been operating as a division of AgriBank since January 1, 2018. It offers technology and other business services outside our core Funding Bank functions to the Bank and District Associations. The long-term strategy of SunStream operating as a separate service entity will fulfill the goals of its owners to better keep pace with technology changes, manage rising costs, and have a shared ownership and governance structure that will position the District for further collaboration and efficiency in business services. These goals include positioning technology and other services for possible future collaboration with other Farm Credit System providers to achieve even greater economies of scale.


Just as AgriBank exists to support District Associations, SunStream exists to support its customers/owners — AgriBank, Compeer Financial, Farm Credit Mid-America and the Centric Technology Collaboration, which includes AgHeritage Farm Credit Services, Delta ACA Farm Credit, FCS Financial, Farm Credit Midsouth, Farm Credit Services of Mandan, Farm Credit Services of North Dakota,

Farm Credit of Western Arkansas, Farm Credit Southeast Missouri and GreenStone Farm Credit Services. AgriBank and SunStream employees continue to collaborate to ensure a smooth transition and successful spin-off.



In addition to the formation of SunStream, a number of other initiatives are underway that both demonstrate and advance our role as a Funding Bank. Key examples include:

- **Capital Relief.** While participating in Systemwide discussions regarding regulatory capital relief, AgriBank has implemented capital relief initiatives at the District level. In 2019, for example, we launched the Adverse Asset Pool Program. Adverse asset pools provide District Associations an opportunity to sell certain adversely classified loans to AgriBank. The program is intended to assist an Association to fulfill its mission of being a reliable lender through the economic cycles affecting agriculture, while compensating AgriBank stockholders for the credit risk being transferred to the Bank. This program is limited in size and has limitations on the types of loans that AgriBank may purchase. The program is available to all District Associations. Additionally, AgriBank continues to work with Associations to expand purchases of certain real estate loans under the traditional asset pool program.



These are challenging times for American agriculture with considerable economic, political and operating uncertainty and volatility. Farm Credit was built to help rural America through times like these.

In the fourth quarter of 2019, AgriBank and other System entities put forth a revised request for relief in the capital measures under the FCA's Financial Institution Rating System (FIRS). We requested the FCA eliminate capital buffers imposed by FIRS beyond those required under the capital regulations. We were also hopeful to avoid a situation where existing capital levels within System institutions overly influenced the ultimate outcome of revisions to the FIRS ratings. In February 2020, the FCA announced it was making modest adjustments to the FIRS capital measures, including removing the "buffer-on-top-of-buffer" impact. This positive action will modestly reduce the amount of capital we must keep and, in the short term, increase cash patronage.

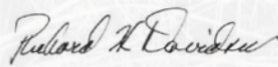
- **System Leadership.** AgriBank is well-represented on the board of directors of the Federal Farm Credit Banks Funding Corporation. The Funding Corporation plays a key role in our success by issuing and marketing debt securities that fund the four Banks of the Farm Credit System and ultimately fund the System's loans, leases and operations. Matt Walther, AgriBank board member, chairs the Funding Corporation board, and CEO Jeff Swanhorst is a board member. In addition, other directors and staff represent AgriBank on various boards, committees and workgroups across the System.
- **Technology Upgrades.** AgriBank, in partnership with SunStream, is investing in new technology to replace dated legacy systems. This includes implementing a new financial system replacing our existing general ledger, accounts payable and fixed asset platforms

across AgriBank and most District Associations; as well as making the necessary plans to replace our loan accounting system. These enhancements will enable the Bank and Associations to operate more efficiently, ultimately for the benefit of farmers, ranchers and other eligible borrowers.

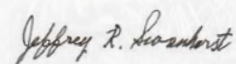
Strength. Stability. Solutions.

No doubt AgriBank, District Associations and those we serve will continue to face headwinds in 2020 and beyond. Uncertainty and volatility always seem to be around the bend. And whether in good times or bad, we appear to be in a prolonged agriculture efficiency cycle for some significant sectors of agriculture, in which producers will continue to make adjustments in their businesses to be successful.

AgriBank remains steadfastly committed to bolstering our *strength*, maintaining our *stability* and generating *solutions* to support District Associations in their efforts to work with customers through challenging conditions and position future generations for continued success. After all, we're part of Farm Credit — here for today and tomorrow.



Richard H. Davidson
Chair, AgriBank, FCB



Jeffrey R. Swanhorst
CEO, AgriBank, FCB

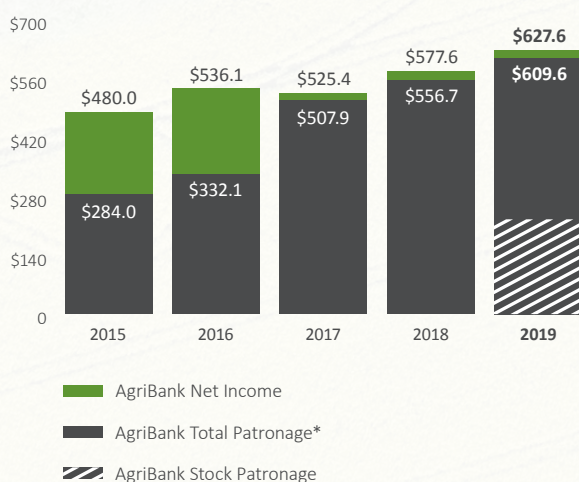
PERFORMANCE HIGHLIGHTS

AgriBank reports strong net income, sound credit quality, and robust liquidity and capital.

Strong net income generates record patronage refunds

- AgriBank returned \$609.6 million in earnings to owners in the form of patronage refunds, including \$228.2 million in stock patronage
- Strong AgriBank net income of \$627.6 million was driven by strong net interest income from disciplined funding and liquidity strategies, as well as increased loan volume
- Strong AgriBank net income resulted in a return on assets of 56 basis points, exceeding our target of 50 basis points

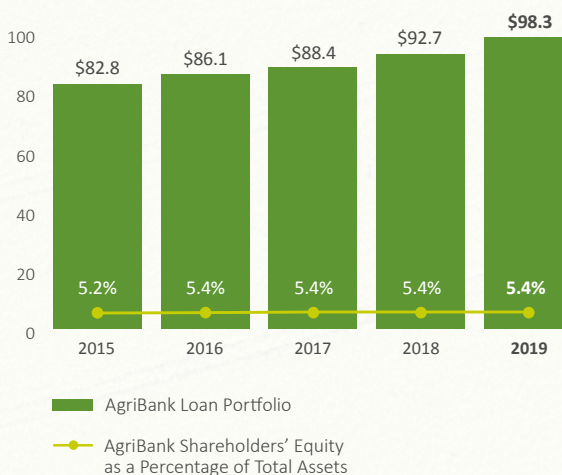
AgriBank Net Income and Patronage
MILLIONS OF DOLLARS



District Association loan growth boosts AgriBank loan portfolio

- AgriBank loan portfolio increased 6.0 percent from the previous year to \$98.3 billion, reflecting growth in wholesale loans to District Associations
- AgriBank shareholders' equity as a percentage of total assets remained stable at 5.4 percent, reflecting continued robust capital levels
- Asset pool programs continued to expand, driven by District Associations fulfilling the Farm Credit mission to provide reliable, consistent credit and financial services

AgriBank Loan Portfolio and Equity Position
BILLIONS OF DOLLARS OR %



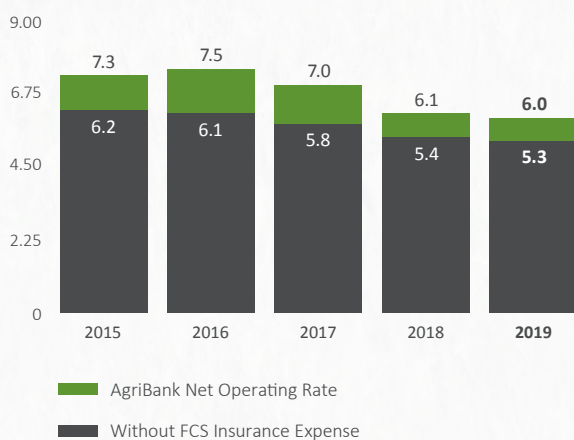
PERFORMANCE HIGHLIGHTS

Disciplined operations help control expenses

- AgriBank net operating rate remained stable compared to the previous year
- Focus on disciplined management of operating expenses was balanced with maintaining excellence in operations and investing in our people

AgriBank Net Operating Rate

BASIS POINTS



Continued District financial strength reflected in strong earnings

- Strong net income for the District was \$2.2 billion, attributable to strong and steady net interest income
- Strategic collaborations across the AgriBank District positioned the District to remain at the forefront of agricultural finance

District Net Income

MILLIONS OF DOLLARS



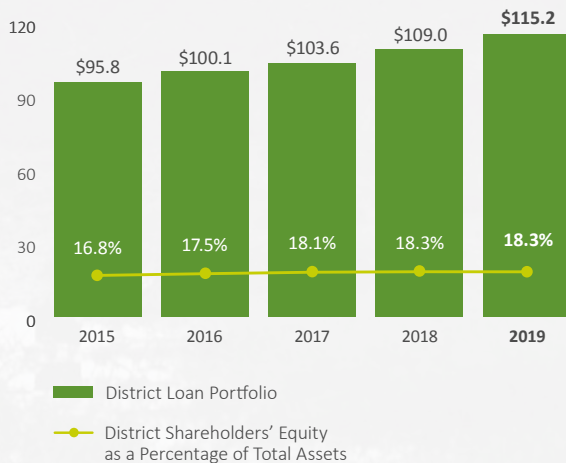
PERFORMANCE HIGHLIGHTS

Customers/owners benefit from prudent leveraging of District capital

- District loan portfolio increased 5.6 percent from the previous year to \$115.2 billion, driven by Associations fulfilling the Farm Credit mission to support farmers, ranchers and other customers with reliable, consistent credit
- District shareholders' equity as a percentage of total assets remained steady compared with the previous year at 18.3 percent, reflecting continued robust capital levels
- District Associations are well-positioned to continue navigating through the current environment

District Loan Portfolio and Equity Position

BILLIONS OF DOLLARS OR %

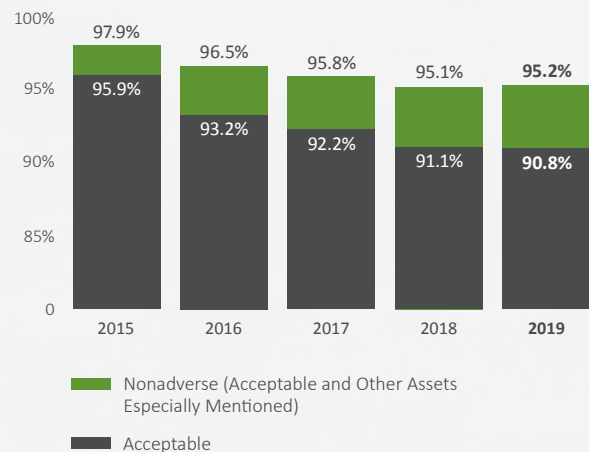


District credit quality has moderated and remains strong

- District portfolio had 95.2 percent nonadverse loans, which represent the highest quality assets (acceptable and OAEM) and improved from 95.1 percent in 2018
- Credit quality remained strong despite uncertain economic and market conditions
- Favorable credit quality of District loan portfolio reflects disciplined underwriting, proactive loan servicing and borrower actions to adjust their operations to the current economic environment

District Credit Quality

NONADVERSE LOANS %



BOARD OF DIRECTORS



Standing, left to right: Joseph M. Busuttil, Natalie Laackman, Matt Walther, Stan Claussen (*Vice Chair*), Dick Davidson (*Chair*), Tony Wilkie, George Stebbins, Ernie Diggs, Brian Peterson, Nick Vande Weerd, Christine Crumbaugh, Dan Shaw, Richard Price

Seated, left to right: Dale Crawford, Rollin Tonneson, John Schmitt, Tim Rowe

EXECUTIVE LEADERSHIP TEAM



Left to right: Jeff Moore, *Chief Financial Officer*; Barbara Stille, *Chief Administrative Officer and General Counsel*; Jim Jones, *Chief Credit Officer*; Jeff Swanhorst, *Chief Executive Officer*; John Grace, *Chief Risk Officer*

DISTRICT ASSOCIATIONS

Farm Credit Associations provide farmers with the capital they need to support their business success.

AgriBank supports the following 14 Farm Credit Associations that serve rural communities and agriculture in 15 states. Under our cooperative structure, the farmers, ranchers and agribusinesses Farm Credit serves own these local Associations, which in turn are the primary customers and owners of AgriBank.



AgCountry Farm Credit Services, ACA
1900 44th St. S.
Fargo, ND 58108
(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



Delta Agricultural Credit Association
118 E. Speedway
Dermott, AR 71638
(870) 538-3258
www.deltaaca.com



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.farmcreditiil.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 North Dakota, ACA
1400 31st Ave. S.W.
Minot, ND 58701
(701) 852-1265
www.farmcreditnd.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

Five-Year Summary of Selected Financial Data

AgriBank, FCB

(in thousands)

As of December 31,

Statement of Condition Data

	2019	2018	2017	2016	2015
Loans	\$98,298,023	\$92,716,701	\$88,374,923	\$86,078,402	\$82,819,652
Allowance for loan losses	32,089	25,571	26,047	21,282	18,076
Net loans	98,265,934	92,691,130	88,348,876	86,057,120	82,801,576
Investment securities	14,368,158	13,997,742	14,386,455	14,897,252	14,262,883
Other assets	2,597,978	3,082,812	1,809,394	1,608,924	2,442,375
Total assets	\$115,232,070	\$109,771,684	\$104,544,725	\$102,563,296	\$99,506,834
Obligations with maturities of one year or less	\$35,027,231	\$33,345,735	\$33,274,235	\$34,735,054	\$31,555,565
Subordinated notes with maturities greater than one year	—	—	—	—	498,283
Other obligations with maturities greater than one year	74,022,446	70,538,184	65,628,608	62,342,139	62,278,870
Total liabilities	109,049,677	103,883,919	98,902,843	97,077,193	94,332,718
Perpetual preferred stock	250,000	250,000	250,000	250,000	250,000
Capital stock and participation certificates	2,871,767	2,551,085	2,345,655	2,183,701	2,063,343
Allocated retained earnings	227	191	—	—	—
Unallocated retained earnings	3,138,311	3,136,359	3,132,653	3,132,432	2,945,638
Accumulated other comprehensive loss	(77,912)	(49,870)	(86,426)	(80,030)	(84,865)
Total shareholders' equity	6,182,393	5,887,765	5,641,882	5,486,103	5,174,116
Total liabilities and shareholders' equity	\$115,232,070	\$109,771,684	\$104,544,725	\$102,563,296	\$99,506,834

For the year ended December 31,

Statement of Income Data

	2019	2018	2017	2016	2015
Net interest income	\$681,545	\$590,726	\$587,884	\$574,475	\$520,002
Provision for loan losses	11,500	5,500	8,500	6,500	7,500
Other expenses, net	42,452	7,587	54,026	31,910	32,529
Net income	\$627,593	\$577,639	\$525,358	\$536,065	\$479,973

Key Financial Ratios

For the Year

Return on average assets	0.56 %	0.55 %	0.51 %	0.53 %	0.51 %
Return on average shareholders' equity	10.36 %	9.94 %	9.32 %	10.12 %	9.52 %
Net interest income as a percentage of average earning assets	0.62 %	0.56 %	0.58 %	0.58 %	0.56 %
Net charge-offs as a percentage of average loans	0.01 %	0.01 %	0.00 %	0.00 %	0.00 %

At Year End

Shareholders' equity as a percentage of total assets	5.37 %	5.36 %	5.40 %	5.35 %	5.20 %
Allowance for loan losses as a percentage of loans	0.03 %	0.03 %	0.03 %	0.02 %	0.02 %
Debt to shareholders' equity (:1)	17.5	17.5	17.4	17.6	18.1

Capital ratios effective beginning January 1, 2017:

Common equity tier 1 capital ratio	17.1 %	17.7 %	18.2 %	n/a	n/a
Tier 1 capital ratio	17.8 %	18.5 %	19.0 %	n/a	n/a
Total capital ratio	17.9 %	18.6 %	19.1 %	n/a	n/a
Tier 1 leverage ratio	5.5 %	5.5 %	5.6 %	n/a	n/a
UREE leverage ratio	3.0 %	3.0 %	3.2 %	n/a	n/a
Permanent capital ratio	17.8 %	18.5 %	19.0 %	n/a	n/a

Capital ratios effective prior to 2017:

Permanent capital ratio	n/a	n/a	n/a	20.6 %	20.8 %
Total surplus	n/a	n/a	n/a	17.2 %	17.9 %
Core surplus	n/a	n/a	n/a	12.6 %	12.1 %
Net collateral ratio	n/a	n/a	n/a	105.5 %	105.8 %

Net Income Distributed

For the Year

Patronage distributions:

Cash	\$381,412	\$556,554	\$507,949	\$332,083	\$283,965
Stock	228,234	—	—	—	—
Allocated retained earnings	148	191	—	—	—
Total patronage distributions	\$609,794	\$556,745	\$507,949	\$332,083	\$283,965
Preferred stock dividends	\$17,188	\$17,188	\$17,188	\$17,188	\$17,188

Management's Discussion and Analysis

AgriBank, FCB

The following commentary reviews 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.

The 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, 2020, 68 independently owned and operated Farm Credit Associations provide services in local communities. Each local Farm Credit Association is a cooperative that is owned by its local 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 \$272 billion in loans and leases, which is more than 40 percent of the credit needed by U.S. agriculture. This capital helps over 500,000 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 also 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 regional Banks, including AgriBank. System entities have specific lending authorities within their chartered territories. Farm Credit's funds are raised by the Federal Farm Credit Banks Funding Corporation (the Funding Corporation). The Funding Corporation issues a variety of Federal Farm Credit Banks Combined Systemwide Debt Securities with broad ranges of maturities and structures on behalf of the System Banks. 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 2019 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 www.farmcreditfunding.com.

AgriBank

AgriBank is part of the customer-owned, nationwide Farm Credit System. Under Farm Credit's cooperative structure, AgriBank is primarily owned by 14 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.

District Associations and AgriBank conducted research related to repositioning many business services offered by AgriBank into a separate entity jointly owned by AgriBank and participating Associations. The long-term strategic objective of this initiative is to increase scale, improve operating efficiency and enhance technology and business services. The FCA recently provided regulatory approval for the formation of the separate service entity, SunStream Business Services (SunStream) under Section 4.25 of the Farm Credit Act. Effective April 1, 2020, SunStream will be owned by AgriBank and 11 District Associations and will provide services to its owners and certain other Farm Credit Institutions. Under Farm Credit's cooperative structure, any SunStream profits will be either held as retained earnings or returned to its owners in the form of patronage. At the effective date, approximately 80 AgriBank employees will become SunStream employees located at the organization's headquarters in St. Paul, Minn. While final valuations are not yet completed, we do not expect the separation to be significant to AgriBank's financial operations. At this time, we expect to provide approximately \$5-10 million of net assets as consideration for our investment in SunStream. Additionally, we expect approximately \$16 million of reduced business services income annually and a reduction in operating expenses of approximately \$15 million annually, resulting in a net income impact of less than \$1 million.

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:

- Credit risk 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.
- Liquidity risk is the risk of loss arising from the inability to timely meet operating and funding needs without incurring excessive costs.
- Operational risk is the risk of loss resulting from inadequate or failed internal processes or systems, errors by employees or external events.

- Reputation risk 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 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. As the first line of defense, management establishes 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 of defense. We maintain an independent internal audit function as the third line of defense 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 apply policies and procedures that mirror the material provisions of the Sarbanes-Oxley Act of 2002, including section 404, *Management Assessment of Internal Control over Financial Reporting*.

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 market rates of interest, and the effect of new legislation or government regulations or directives. Many risks and uncertainties are beyond our control including, but are not limited to:

- Political (including trade policies), legal, regulatory, financial markets and economic conditions and developments in the United States and abroad
- Economic fluctuations in the agricultural, international 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 and the System as a government-sponsored enterprise, as well as investor and rating agency reactions to events involving the U.S. government, other government-sponsored enterprises and other financial institutions
- Actions taken by the Federal Reserve System in implementing monetary policy
- Credit, interest rate and liquidity risk inherent in our lending activities
- Changes in our assumptions for determining the allowance for loan losses, other than temporary impairment and fair value measurements
- Industry outlooks for agricultural conditions
- Price, supply and demand within the gas and oil industry
- Changes in interest rate benchmarks 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 2019. 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 2019 return on assets ratio was 56 basis points, in excess of our 50 basis point target. Net income was \$627.6 million, an increase of 8.6 percent from the prior year.

Net interest income increased 15.4 percent to \$681.5 million, primarily driven by higher interest rates earned on loans and investment securities as well as growth in loan volume. This increase was substantially offset by higher interest rates paid on debt and growth in debt volume.

Non-interest income decreased 18.6 percent to \$97.2 million, primarily attributable to mark-to-market losses recorded on certain economic hedges and decreased mineral income. These economic hedges,

related to our mineral income, were initiated during the fourth quarter of 2018 and gains were recorded when oil prices decreased; however, as oil prices rebounded during 2019, the value decreased resulting in current year losses, partially offsetting the gains recognized in 2018. Partially offsetting these declines was increased fee income primarily due to declining interest rates resulting in a significant increase in loan prepayment and conversion fee income.

Refer to the Results of Operations section for further discussion.

Total loans were \$98.3 billion at December 31, 2019, a 6.0 percent increase from the prior year, primarily attributable to increased wholesale loans and, to a lesser extent, an increase in production and intermediate term loans. Throughout 2019, District Associations experienced loan growth in the real estate mortgage, agribusiness and production and intermediate term sectors. Additionally, seasonal operating line usage increased wholesale volume in December, driven by borrower tax-planning strategies.

Our loan portfolio credit quality remained strong at 97.9 percent acceptable under the FCA's Uniform Classification System at December 31, 2019, compared to 98.0 percent at December 31, 2018. 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. As of December 31, 2019, two of AgriBank's wholesale loans were classified as other assets especially mentioned (special mention), and the remaining wholesale portfolio was classified as acceptable. While remaining strong, the credit quality of our retail loan portfolio (accounting for approximately 10 percent of our total loan portfolio) decreased slightly to 90.1 percent acceptable at December 31, 2019, compared to 90.7 percent acceptable at December 31, 2018.

Refer to the Loan Portfolio section for further discussion.

Total capital remained very strong at \$6.2 billion as of December 31, 2019, an increase of \$294.6 million compared to December 31, 2018. This increase was driven primarily by comprehensive income and purchased stock, which was substantially offset by cash patronage distributions declared. We optimize capital by first retaining what we need to meet our capital targets and distributing the remainder as cash patronage. During 2019, 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 optimizing 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

U.S. economic activity is expected to advance at a moderate pace with forecasted GDP growth of 1.8 percent in 2020 and 1.7 percent in 2021. U.S. economic growth should continue to be driven by consumer and investment spending. Consumer spending has remained strong with the economy at full employment and elevated consumer confidence. Investment spending growth slowed somewhat in 2019, but is expected to maintain a moderate growth rate in 2020. With the first phase of the U.S. and China trade agreement completed and a pause in the escalation of trade tensions, export growth

should recover from weak growth in 2019. The coronavirus outbreak is likely to weigh on growth in the first half of 2020 and is emerging as a risk to the outlook.

The Federal Open Market Committee (FOMC) of the Federal Reserve lowered the federal funds rate a total of 75 basis points (bp) during 2019 to achieve a target range of 1.50 to 1.75 percent. The FOMC is on hold with interest rate changes in the near term, as it assesses incoming economic data. Comments from some FOMC members have shown an openness to lower the federal funds rate further, if the economy weakens and inflation remains subdued. With the lowering of the federal funds rate in 2019, the U.S. Treasury yield curve is no longer inverted (an inverted yield-curve occurs when long-term debts have a lower yield as compared with short-term debts), as it was for much of the year. Economists expect U.S. Treasury bond rates to move slightly higher by the end of 2020 with the 2-year and 10-year rates approximately 1.70 and 2.00 percent, respectively.

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).

Future of LIBOR

In 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced its intention to stop persuading or compelling the group of major banks that sustains LIBOR to submit rate quotations after 2021. As a result, it is uncertain whether LIBOR will continue to be quoted after 2021. We have exposure to LIBOR, including financial instruments that reference LIBOR, that mature after 2021.

Our exposure arises from loans that are made to borrowers and associations, investment securities, Systemwide Debt Securities, preferred stock and our derivative transactions. 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 we hold. The LIBOR transition could result in paying higher interest rates on our current LIBOR-indexed Systemwide Debt Securities, adversely affect the yield on, and fair value of, the instruments we hold that reference LIBOR, and increase the costs of or affect our ability to effectively use derivative instruments to manage interest rate risk. In addition, to the extent that we cannot successfully transition our LIBOR-based financial instruments to an alternative rate based index that is endorsed or supported by regulators and generally accepted by the market as a replacement to LIBOR, there could be other ramifications including those that may arise as a result of the need to redeem or terminate such instruments. We will continue to analyze potential risks associated with the LIBOR transition, including financial, operational, legal, tax, reputational and compliance risks.

At this time, we are unable to predict whether or when LIBOR will cease to be available or if the Secured Overnight Funding Rate, also known as SOFR, will become the benchmark to replace LIBOR. Because we engage in transactions involving financial instruments that reference LIBOR, these developments could have a material impact on us, District Associations, other Farm Credit Institutions, borrowers, investors and counterparties.

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

LIBOR-Indexed Variable Rate Financial Instruments

(in thousands)

As of December 31, 2019

Year of Maturity	2020	2021	2022 and After	Total
Assets				
Loans	\$57,367	\$30,118	\$133,489	\$220,974
Investments	990,064	9	2,724,109	\$3,714,182
Total	<u>\$1,047,431</u>	<u>\$30,127</u>	<u>\$2,857,598</u>	<u>\$3,935,156</u>
Liabilities				
Bonds	\$13,620,217	\$6,878,921	\$—	\$20,499,138
Shareholders' equity				
Preferred stock ⁽¹⁾	\$—	\$—	\$250,000	\$250,000

⁽¹⁾The preferred stock is redeemable in whole or in part, at our option, quarterly beginning January 1, 2024. 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. Refer to Note 6 of the accompanying Financial Statements for additional information about the preferred stock.

(in millions)

Year of Termination	2020	2021	2022 and After	Total
Derivatives (notional amount)	\$1,359	\$1,020	\$3,632	\$6,011

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 are partially funded by LIBOR indexed bonds. LIBOR indexed bonds are also used to fund a portion of our administered variable loans to associations and in turn, their customers.

Variable Rate Bonds by Interest Rate Index

(in thousands)

As of December 31, 2019

LIBOR	\$20,499,138
SOFR	7,255,641
Other ⁽¹⁾	19,349,305
Total	<u>\$47,104,084</u>

⁽¹⁾ Other primarily includes bonds indexed to fed funds effective rate, 3 month T-Bill, or prime rate.

Agricultural Conditions

The U.S. Department of Agriculture's Economic Research Service (USDA-ERS) has initially forecasted 2020 net cash farm income of \$109.6 billion, a decline of \$10.9 billion, or 9.0 percent, from the revised 2019 estimate of \$120.4 billion. The forecasted 2020 net cash farm income, if realized, would mark the first decline since 2016, but would still be \$6.2 billion above the recent 2016 low in inflation-adjusted terms. High net sales from crop inventories significantly boosted 2019 net cash farm income; conversely, lower net sales from inventories and a decline in direct government payments in 2020 are expected to contribute to a decrease in net cash farm income between the two years. Net cash farm income encompasses cash receipts from farming, farm-related income, and government payments minus cash expenses.

In contrast to the net cash farm income decline, 2020 net farm income (a broader measure of profits that includes changes in inventories, economic depreciation and gross imputed rental income of operator dwellings) is forecasted to be \$96.7 billion, an increase of \$3.1 billion or 3.3 percent from 2019. The 2020 forecast would be the fourth-consecutive year-over-year increase and mark the highest inflation-adjusted net farm income since 2014 — just \$2.7 billion shy of the 10-year average. The increase in net farm income for 2020 is driven by an increase in the value of crop production and livestock receipts, which more than offset an expected increase in production expenses, declining government payments, and decreased farm-related income.

The expected increase in crop cash receipts is largely driven by corn, although corn price expectations are forecasted to temper gains in cash receipts for the larger 2020 crop. Soybean cash receipts are forecasted to decline in 2020 with a lower quantity marketed, more than offsetting a modest price increase. Cash receipts for the animal agricultural sector are expected to be boosted by the pork and dairy markets, and to a lesser extent by the cattle and calves markets. USDA-ERS did not factor the phase one trade deal with China signed on January 15, 2020 into the most recent forecast, since no official purchase commitments were made public. USDA-ERS also noted that the coronavirus outbreak, largely concentrated in China, was not factored into the forecast assumptions, due to limited information about the outbreak at the time the report was prepared.

The divergence between the two net income measures is largely caused by how net sales from inventories are treated. Net cash farm income records income in the year the sale occurred, while net farm income counts it in the year the production occurred.

A significant portion of the increase in net farm income, primarily in 2019, has come from Market Facilitation Program (MFP) payments. This program involving direct government payments was put in place to offset the negative impact of trade disputes to farm level commodity prices. These MFP payments were, according to the USDA, \$3.7 billion, \$14.3 billion, and \$5.1 billion, respectively for the calendar years 2020, 2019, and 2018. Further payments under this program are uncertain at this time.

The aggregate 2020 farm balance sheet forecast indicates that U.S. farmers' equity position will increase \$29.8 billion, or 1.1 percent, to \$2.7 trillion in nominal terms compared to 2019. This would be the fifth-consecutive year of improvement in their equity position. Increases in real estate asset values and real estate debt remain the biggest movers on the balance sheet in absolute terms, although USDA projects there will be a 3.1 percent increase in the machinery and vehicle asset category. The 2020 forecasted farm sector working capital is \$52.0 billion, a decrease of \$9.1 billion or 15.0 percent, from 2019. As forecasted, working capital would result in the third-consecutive year of declines in real

terms, and a new low for the USDA-ERS working capital estimate going back to 2009, when the metric was first tracked. This forecasted decrease is sharply impacted by financial assets and net accounts receivable.

The initial USDA-ERS farm income and financial conditions forecast indicates higher net farm income but not at a level that will fully cover all economic costs of farm production. As a result, farm sector working capital is forecast to decline in 2020. Unknowns including weather, production levels and demand will factor into actual 2020 financial results and position for U.S. agriculture. Added uncertainties entering the year include the impact of African Swine Fever (ASF), the coronavirus outbreak and realized economic results from the first phase U.S.-China trade agreement. Producers who are able to realize cost and marketing efficiencies are most likely to weather the normalization of crop prices near the long-run price trends. Optimal input usage, adoption of cost-saving technologies, and effective utilization of hedging and other price risk management strategies are all critical in yielding positive net income for producers.

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. The categories for the outlook are defined as follows:

- Positive - Industry participants are generally profitable with margins above historic norms. Credit quality for borrowers in this segment is expected to improve or remain very strong.
- Positive-to-Neutral - Industry participants are generally profitable with margins at or above historic norms. Credit quality for borrowers in this segment is expected to be maintained with moderate levels of improvement.
- Neutral - Industry participants are generally profitable, but participants may experience additional financial stress if they are highly leveraged, lack economies of scale or fail to manage risk or operate efficiently. Credit quality for borrowers in this segment is generally expected to be maintained.
- Neutral-to-Negative - Industry participants are profitable or operating at break-even levels, but participants may experience additional financial stress if they are highly leveraged, lack economies of scale, or fail to manage risk or operate efficiently. Credit quality for most borrowers in this segment is expected to be maintained; however, a portion will be subject to downgrades.
- Negative - Industry participants are operating at break-even or loss levels, with participants experiencing financial stress if they are highly leveraged, lack economies of scale or fail to manage risk or operate efficiently. Credit quality for many borrowers is expected to be downgraded if negative market conditions persist.

AgriBank Outlook for Commodities in the Next 12 Months

As of December 31,	2019	2018	2017
Corn	Negative	Negative	Negative
Soybeans	Negative	Negative	Neutral
Wheat	Negative	Negative	Negative
Cow-Calf	Neutral	Neutral	Neutral
Cattle Feedlots	Neutral-to-Negative	Neutral	Neutral
Dairy	Neutral-to-Negative	Negative	Neutral-to-Negative
Pork	Neutral	Neutral	Neutral
Timber	Neutral	Positive-to-Neutral	Positive-to-Neutral
Poultry	Neutral	Neutral	Neutral

Corn

The February 2020 USDA World Agricultural Supply and Demand Estimates (WASDE) report projected the 2019 corn crop at 13.7 billion bushels, a 4.5 percent decrease from the most recent 2018 crop estimate. The current projected average corn price for the 2019-2020 marketing year increased nearly 7 percent to \$3.85 per bushel compared to the estimated price for the 2018-2019 marketing year. Early prospects for more U.S. corn acreage and higher production in 2020, paired with ample global corn stocks, are expected to dampen any upside price potential for corn, absent significant weather issues in 2020. The outlook for row crops remains negative based on current futures prices and the assumption that a Market Facilitation Program (MFP) has not been approved for 2020.

Soybeans

The February 2020 WASDE projects a 2019 soybean crop of 3.6 billion bushels, a decrease of 19.6 percent from the estimated record 2018 crop of 4.4 billion bushels. The 2019-2020 average soybean price is projected to increase approximately 3 percent to \$8.75 per bushel compared to the 2018-2019 marketing year. Soybean demand is projected to slightly increase based on fractionally higher crush and modestly increased exports, primarily to China. Ending soybean stocks for the 2019-2020 marketing year are projected to decrease over 10 percent compared to the 2018-2019 estimate. Two consecutive years of MFP payments and high 2018 soybean yields have helped soybean growers weather lower prices. While the phase-one trade deal may support the soybean market, questions over Chinese soybean demand given ASF and the coronavirus as well as no current commitment to a third year of MFP payments could stress soybean margins over the next year.

Wheat

The February 2020 WASDE projects a 2019 total wheat crop of 1.9 billion bushels, an increase of approximately 2 percent from the estimated 2018 crop. However, the wet fall and early snowfall have created concern for wheat harvest and quality. These conditions have resulted in increased pre-harvest sprouting, which reduces quality and price potential for wheat. In some cases, poor crop quality will relegate supplies to lower paying feed grade product. As a result, the projected 2019-2020 average wheat price has decreased nearly 12 percent to \$4.55 per bushel compared to the most recent estimate for 2018-2019.

Cow-Calf

The January 2020 USDA Cattle Inventory report estimate for the U.S. beef cow herd decreased approximately 3 percent compared to the prior year. Additionally, the calf crop is estimated to

decrease slightly at 1 percent compared to the prior year, resulting in continued stabilization of inventory. The cow-calf industry is supported by ongoing demand from the beef feedlot and packing industries. Demand and pricing levels will vary geographically due to factors such as pasture conditions, weather conditions at the time of calving and weaning, and feed availability.

Cattle Feedlots

The February 2020 WASDE reports slightly increasing beef production from 2018 through 2020 projections. While exports decreased slightly from 2018 to 2019, exports are expected to increase in 2020, stabilizing the average steer price around \$117.00/cwt. Margins continue to be pressed as operators experience higher feed costs related to increased corn prices.

Dairy

The February 2020 WASDE reports projects 2020 production of 222.0 billion pounds and midpoint average price of \$16.95/cwt. Production increases, both domestically and internationally, will continue to place pressure on milk and milk-product prices. United States, Mexico, Canada Agreement (USMCA) is not expected to materially impact exports. World demand is still growing, but global economic uncertainty continues to be a concern. Many in the industry operated at breakeven or had slight profits in 2019. Margins for 2020 are expected to improve slightly based on current futures prices.

Pork

The February 2020 WASDE projects 2020 production of 28.9 billion pounds, an increase of 4.5 percent compared to 2019 production estimates as a result of ongoing improvement in production practices, genetics and expansion. ASF has adversely impacted Chinese and other Asian countries' pork production and caused an increase in export demand for U.S. pork products. The U.S. Pork industry exports over 20 percent of its product annually, and the increased demand has supported a projected price increase in 2020 of 2 percent to \$49.00/cwt in 2020 compared to the prior year. The pork industry remains adversely affected by trade disruption; however, the new trade agreements are expected to help the U.S. compete in the largest pork markets for the U.S., most notably Mexico, Japan and China. Many producers maintain a strong financial profile, with strong working capital. Producers' use of risk management (particularly hedging) is prevalent across the industry and may affect individual producers' profit. Additionally, individual producer margins can be materially affected by production issues experienced at the farm level.

Timber

Mills and timber processors should see positive margins the next 12 months, as there is strong demand for forest fiber, and log prices have declined from the record highs in 2018. The U.S. Census Bureau reported December 2019 seasonally adjusted housing starts up 40.8 percent compared to December 2018. Conventional 30-year mortgage rates declined in 2019 and have stayed below 5 percent since May 2010, potentially providing support for increased home sales in the next year. Headwinds to the housing industry include labor and lot shortages, which have increased average home prices and are expected to limit further growth in housing starts in the next 12 months. Timberland owners experienced more modest profits in 2019 compared to 2018 due to an increase in US timber inventories and a resulting reduction in prices. The US lumber market is expected to remain oversupplied in the next 12 months, pointing to limited profit growth opportunities for timberland owners. These factors combined warrant a Neutral outlook for the industry.

Poultry

The broiler industry is expected to remain modestly profitable in 2020 as feed costs are expected to remain stable. Exports are projected to increase further in 2020, in part due to China lifting its ban on U.S. poultry imports that was implemented in 2015 following the Highly Pathogenic Avian Influenza outbreak in the U.S. The February 2020 WASDE projects the 2020 average egg price to increase nearly 6 percent to 99.5 cents/dozen compared to the most recent estimates for the 2019 prices; however, this price is 27.7 percent lower than the average price observed in 2018. The supply of eggs is slowly shifting to reach 70 percent cage-free by 2025 to meet pledged purchases by retailers and food service companies. Average production costs for many producers have increased as a result from this shift to cage-free. Despite continued strong domestic demand, record production levels resulted in weak prices, with brief periods of price improvements during holiday seasons. Losses are expected in the next 12 months for industry participants relying on market prices (rather than cost-plus or grain-based contracts).

The February 2020 WASDE projected a price increase of 12.7 percent to 100.5 cents per pound for turkeys and a slight decrease of 1.8 percent to 87.0 cents/pound for broilers. The pricing increase for turkeys is attributable to the industry's efforts to reduce production in 2019 as well as a modest increase in exports expected in 2020.

Land Values

The AgriBank District continues to monitor agricultural land values. We conduct an annual Benchmark Survey, completed by licensed real estate appraisers, of a sample of benchmark farms selected to represent the lending footprint of District Associations. The District's most recent real estate market value survey, based on the 12-month period ending June 30, 2019, indicated that the District real estate value changes ranged from a negative 5.1 percent to positive 9.8 percent. Land values in the District are expected to remain stable over the next year due to continued low interest rates, improved net farm income, and continued real estate demand outpacing supply. Some areas within the District have seen an increase in properties for sale but these do not appear to have negatively impacted the market overall. The majority of buyers in the market continue to be farmers and ranchers, and there is still interest from investors, providing additional support for land price stability.

The USDA land value survey, is conducted annually and is based on a survey of agricultural producers across the United States. Results of the 2019 survey specific to the AgriBank District indicated increases of 0.8 percent and 0.5 percent in overall farm real estate values and overall cropland values, respectively.

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 FCA regulations allow real estate mortgage loans of up to 85 percent of appraised value, AgriBank's underwriting guidance generally limit lending to no more than 65 percent at origination. Many Associations have implemented risk management practices that incorporate loan-to-appraised value thresholds below the 65 percent level. In addition, many District lenders impose lending caps per acre based on the land's sustainable income-producing capacity. 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.

Loan Portfolio

Components of Loans

(in thousands)

As of December 31,	2019	2018	2017	2016	2015
Accrual loans:					
Wholesale loans	\$89,068,140	\$83,806,569	\$79,960,907	\$78,300,557	\$74,697,131
Retail loans:					
Real estate mortgage	3,112,079	3,491,298	3,910,060	3,436,953	3,832,879
Production and intermediate-term	5,257,970	4,676,849	3,710,514	3,600,231	3,425,439
Loans to other financing institutions (OFIs)	631,037	549,113	593,677	577,505	685,083
Other	171,025	138,725	146,727	109,305	135,726
Total retail loans	9,172,111	8,855,985	8,360,978	7,723,994	8,079,127
Nonaccrual loans	57,772	54,147	53,038	53,851	43,394
Total loans	\$98,298,023	\$92,716,701	\$88,374,923	\$86,078,402	\$82,819,652

The Other category was primarily comprised of agribusiness, communications and rural residential real estate loans.

Our lending to District Associations accounts for 90.6 percent of our loan portfolio at December 31, 2019. Wholesale loans directly reflect the retail marketplace activities at District Associations, which are funded through their wholesale lines of credit with AgriBank. Loan growth at District Associations was primarily in the real estate mortgage, agribusiness and production and intermediate term sectors.

Similar to prior years, wholesale loans increased temporarily in December; however the corresponding repayment activity in January has been slower than recent experience. Typically, the temporary increases in our wholesale loans are driven by District Associations' borrowers increased drawing on their operating lines to purchase the next year's production inputs, primarily for tax-planning strategies. Additionally, 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 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 experience growth in real estate mortgage, agribusiness and part-time farmer loans.

From time to time during the normal course of business, AgriBank purchases 50 to 100 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 are high-quality real estate loans, consumer mortgage loans, production and intermediate-term loans financing the purchase of crop inputs, and, to a lesser extent, adverse quality real estate loans. We purchased pool program loan participations of \$212.6 million, \$1.3 billion and \$1.0 billion during 2019, 2018 and 2017. We had \$3.9 billion, \$4.1 billion and \$3.4 billion of these participation interests outstanding at December 31, 2019, 2018 and 2017, respectively.

We also participate in the AgDirect program where we purchase a 100 percent participation interest in agricultural equipment financing transactions. At December 31, 2019, eight District Associations and several Farm Credit Institutions across the System participated in this program. We had \$3.9 billion, \$3.5 billion and \$3.5 billion of these participation interests outstanding at December 31, 2019, 2018 and 2017, respectively.

Our retail portfolio also includes loan participations primarily purchased from District Associations in support of their portfolio management, generally related to District Associations' borrower concentration limits.

Refer to the Shareholders' Equity - AgriBank Patronage Programs and Dividend Distributions section for discussion related to patronage programs and Note 6 of the accompanying Financial Statements for information related to stock investment requirements.

Portfolio Diversification

The wholesale loans are used by District Associations 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 \$115.2 billion loan portfolio as of December 31, 2019.

District Portfolio			
Commodity Distribution		Geographic Distribution	
Crops	43 %	Iowa	11 %
Cattle	9 %	Illinois	9 %
Dairy	7 %	Minnesota	8 %
Investor real estate	6 %	Nebraska	8 %
Food products	6 %	Indiana	6 %
Other	29 %	Michigan	6 %
Total	100 %	Wisconsin	6 %
		South Dakota	5 %
		Ohio	5 %
		Other	36 %
		Total	100 %

Other commodities consist primarily of loans in the pork, timber, poultry, rural residential real estate, and grain marketing and farm supply sectors, none of which represented more than 5 percent of the District loan portfolio. Other states consist primarily of loans in North Dakota, Tennessee, Arkansas and Kentucky, 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 the District has concentrations in crops, these crops 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, the concentration in crops is geographically diverse, with multiple states being significant producers of these important commodities. 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.

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.

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 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. During 2019, certain grain, livestock and dairy producers across the District continued to experience financial headwinds due to sustained low commodity prices in some sectors as well as a drop in demand due to tariffs and global trade actions in certain sectors. Government support in the form of MFP payments provided material mitigation to the negative impact of trade actions and targeted disaster payments partially offset weather related impacts in some areas of the District. We expect commodity prices to remain consistent with recent history and global trade actions to be somewhat uncertain, which will require producers to closely manage costs to be profitable.

The table below illustrates commodity and geographic diversification of our \$9.2 billion retail portfolio as of December 31, 2019.

AgriBank Retail Portfolio			
Commodity Distribution		Geographic Distribution	
Crops	60 %	Illinois	14 %
Cattle	9 %	Minnesota	13 %
Dairy	7 %	Wisconsin	8 %
Loans to OFIs	7 %	Iowa	8 %
Investor real estate	3 %	Nebraska	8 %
Other	14 %	Michigan	4 %
Total	100 %	Other	45 %
		Total	100 %

Other commodities consist primarily of loans in the pork, timber, poultry, rural residential real estate and food products sectors, none of which represented more than 5 percent of AgriBank's retail loan portfolio. Other states consist primarily of loans in Indiana, South Dakota, Ohio, Missouri, California,

North Dakota and Arkansas, none of which represented more than 5 percent of AgriBank's retail loan portfolio. The commodity and geographic concentrations have not changed materially from prior years.

Portfolio Maturities

As of December 31, 2019, all wholesale loan agreements mature in 36 months or less. Wholesale loan pricing terms are generally matched to District Associations' retail portfolios, a significant portion of which have both maturities and repricing terms longer than the loans in the wholesale portfolio. We do not anticipate we would not renew any wholesale loans.

Contractual Maturities of Loans

(in thousands)

As of December 31, 2019	One Year or Less	Over One through Five Years	Over Five Years	Total
Wholesale loans	\$591,906	\$88,476,234	\$—	\$89,068,140
Retail loans:				
Real estate mortgage	\$475,352	\$1,265,890	\$1,386,259	\$3,127,501
Production and intermediate-term	2,429,134	2,754,692	116,434	5,300,260
Loans to OFIs	308,274	296,901	25,862	631,037
Other	95,136	46,659	29,290	171,085
Total retail loans	3,307,896	4,364,142	1,557,845	9,229,883
Total loans	\$3,899,802	\$92,840,376	\$1,557,845	\$98,298,023
Total of loans due after one year with:				
Fixed interest rates				\$4,272,432
Variable and adjustable interest rates				\$90,125,789

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 97.9 percent of our portfolio in the acceptable category at December 31, 2019, compared to 98.0 and 99.5 percent at December 31, 2018 and 2017, respectively. Acceptable loans represent the highest quality and are expected to be fully collectible. As most of our loans are wholesale loans, we expect our credit quality will remain very strong, even when District Associations experience declines in their retail credit quality. While these are individually large credits, numerous individual credits comprise District Associations' underlying portfolios. District Associations each have 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 special mention at 94.4 percent. Substandard and doubtful loans, collectively called adverse loans, are loans identified as showing some credit weakness outside our credit standards. We have seen retail credit quality decline from 2018, with both special mention and adverse retail loan volume increasing primarily due to pool programs; however, the pace of decline slowed in 2019. The credit quality of the asset pool portfolios shows a higher level of special mention and adversely classified loans due to continued stress in the crop sector and, to a lesser extent, the purchase of certain adverse real estate mortgage loans during 2019. While the credit classification reflects the likelihood that these loans will experience stress or other credit weakness, many of these loans are well collateralized or include significant credit enhancements including guarantees with third parties that generally have strong financial positions. We believe these credit enhancements significantly mitigate our potential losses on these loans. Refer to the Risk Assets and Retail Credit Risk Management sections for further discussion.

Percentage of Adverse Loans by Commodity in the District Retail Portfolio

As of December 31,	2019	2018	2017
Dairy	7.4 %	7.5 %	5.0 %
Cattle	6.4 %	7.1 %	6.2 %
Crops	6.2 %	6.2 %	5.3 %
Other	3.0 %	2.9 %	2.7 %
Total	4.8 %	4.9 %	4.3 %

Percentage of Adverse Loans by Commodity in the AgriBank Retail Portfolio

As of December 31,	2019	2018	2017
Crops	6.6 %	6.5 %	2.6 %
Cattle	5.6 %	3.8 %	3.1 %
Dairy	4.0 %	3.4 %	2.4 %
Other	3.9 %	2.9 %	2.5 %
Total	5.6 %	5.2 %	2.6 %

Overall, we expect District credit quality to remain at acceptable levels in 2020. Adverse credit quality moderated in 2019 after gradually increasing the previous three years. Net farm income levels remained below the 10-year average from 2015 through 2018, but rebounded to near the 10-year average in 2019. The net farm income trends were primarily driven by low commodity prices which were influenced by elevated ending corn and soybean inventories resulting from combination of strong production (except in 2019) and impact of trade policy the past two years. Weak earnings in certain protein industry segments also contributed to stress in the sector. However, in 2018 and 2019, MFP payments provided a positive impact to earnings for some farmers which help offset lost income from trade disputes. Furthermore, crop insurance helped offset a portion of lost income due to wet weather conditions during the 2019 growing season. As a result, adverse credit quality did not increase as anticipated during 2019. The final tranche of the 2019 MFP was paid in early 2020. Further payments under this program are uncertain at this time. With commodity prices expected to remain at relatively low levels, grower margins will likely be negatively impacted in 2020 which may result in moderate increases to adverse credit quality and related provision for loan losses.

A substantial portion of the retail 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. Some District Associations have risk management practices that incorporate loan-to-appraised value limits below these thresholds. In addition, most District lenders impose lending caps per acre based on the land's sustainable income-producing capacity. 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)	Wholesale Loan Amount	% of Wholesale Portfolio	Total Assets	Total Allowance and Capital	Total Regulatory Capital Ratio	Risk Loans ⁽¹⁾ as a % of Total Loans	Return on Assets
As of December 31, 2019							
Farm Credit Services of America	\$24,780,930	27.8 %	\$31,268,565	\$6,075,179	17.2 %	0.9 %	2.2 %
Farm Credit Mid-America	19,634,081	22.1 %	25,003,283	5,019,456	21.2 %	1.3 %	1.8 %
Compeer Financial ⁽²⁾	17,940,024	20.2 %	22,183,933	3,885,914	16.0 %	0.8 %	1.9 %
GreenStone Farm Credit Services	7,748,606	8.7 %	9,728,263	1,874,166	17.6 %	0.8 %	2.2 %
AgCountry Farm Credit Services ⁽²⁾	6,248,820	7.0 %	8,181,525	1,826,798	18.9 %	0.3 %	2.0 %
FCS Financial	3,577,406	4.0 %	4,562,212	930,616	18.4 %	0.3 %	1.9 %
Farm Credit Illinois	3,441,433	3.9 %	4,521,527	1,026,913	20.2 %	0.2 %	1.7 %
AgHeritage Farm Credit Services	1,181,941	1.3 %	1,525,315	331,664	18.4 %	0.7 %	2.0 %
Farm Credit Services of Western Arkansas	1,146,921	1.3 %	1,490,409	307,469	20.2 %	0.9 %	1.9 %
Farm Credit Services of North Dakota	1,017,166	1.1 %	1,350,450	324,633	20.1 %	0.6 %	2.0 %
Farm Credit Services of Mandan	1,016,564	1.1 %	1,310,132	279,874	17.8 %	0.2 %	2.1 %
Farm Credit Midsouth	742,342	0.8 %	990,889	235,696	20.2 %	0.1 %	2.0 %
Farm Credit Southeast Missouri	557,241	0.6 %	732,634	162,411	20.9 %	0.1 %	2.3 %
Delta Agricultural Credit Association	34,665	0.1 %	45,029	9,987	25.1 %	0.7 %	0.8 %
Total	\$89,068,140	100.0 %	\$112,894,166	\$22,290,776			
District Association weighted average ratios					18.3 %	0.9 %	2.0 %

⁽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.

The previous chart illustrates that wholesale credit risk is concentrated in a number of individually large loans to District Associations. 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. As of December 31, 2019, AgriBank has not received or approved any formal request for structure changes from existing 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, 2019, two of AgriBank's wholesale loans were classified as other assets especially mentioned (special mention), and the remaining wholesale portfolio was classified as acceptable. Both wholesale loans classified as special mention are based upon certain weaknesses at the Associations. Repayment is not deemed at risk, as credit quality, capital and earnings remain strong and above regulatory and General Financing Agreement (GFA) covenants.

AgriBank's wholesale credit risk mitigation is primarily through the GFAs, 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.

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 calculation was revised, effective January 1, 2019, to more closely align 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 should the loan go 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. The criteria to be considered in determining whether credit and credit administration are satisfactory are set out in the AUG.

One Association with a \$34.7 million outstanding wholesale loan as of December 31, 2019, defaulted on the General Financing Agreement with AgriBank during October 2019 due to certain lending limit violations and failure to create sufficient controls to prevent such violations. The default was cured the same month as a result of actions taken by the Association as prescribed in the notice of default. Collection of the full wholesale loan amount due is expected in accordance with the contractual terms and no allowance has been recorded for the loan. As of December 31, 2019, no District Association was declared in default of any GFA covenants. One District Association paid a risk premium in 2018 and 2017. This risk premium did not have a material impact on our financial statements. No District Association paid a risk premium in 2019. Effective January 1, 2020, no District Association is paying a risk premium.

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.

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 four primary programs:

- 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.
- In 2019, we added an adverse pool designed to help Associations manage portfolio risk. The adverse pool is composed of unimproved agriculture real estate loans with loan to value ratios of less than 50 percent to minimize risk of loss. As of December 31, 2019, we do not plan to purchase additional adverse loans into this pool.
- The AgDirect 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.

The remainder of the credits in our portfolio, primarily comprised of participations purchased from Associations, tend to be large (the majority are greater than \$5 million) and complex; we do not use standardized credit scoring on these 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, 2019 (excluding OFIs) totaled \$300.2 million. All of these 10 largest customers' loans were in accrual status and all were classified as acceptable.

10 Largest Retail Customers

As of December 31, 2019

% of total retail loans	3.3 %
% of total loans	0.3 %
Concentration by commodity:	
Dairy	30.1 %
Timber	24.5 %
Poultry	22.2 %
Pork	18.3 %
Other	4.9 %

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,	2019	2018	2017	2016	2015
Nonaccrual loans	\$57,772	\$54,147	\$53,038	\$53,851	\$43,394
Accruing restructured loans	3,969	3,819	4,588	3,800	4,429
Accruing loans 90 days or more past due	2,951	863	8	378	1,240
Total risk loans	64,692	58,829	57,634	58,029	49,063
Other property owned	437	566	78	349	565
Total risk assets	\$65,129	\$59,395	\$57,712	\$58,378	\$49,628
As a percent of retail loans					
Risk loans	0.69 %	0.65 %	0.68 %	0.75 %	0.60 %
Nonaccrual loans	0.62 %	0.60 %	0.63 %	0.69 %	0.53 %
Delinquencies	1.06 %	0.82 %	0.56 %	0.63 %	0.78 %
As a percent of total loans					
Risk loans	0.07 %	0.06 %	0.07 %	0.07 %	0.06 %
Nonaccrual loans	0.06 %	0.06 %	0.06 %	0.06 %	0.05 %
Delinquencies	0.10 %	0.08 %	0.05 %	0.06 %	0.08 %

Note: Accruing loans include accrued interest receivable.

Due to the low level of risk assets, movement of a single loan or borrower impacts the volatility of risk assets year-over-year. Risk assets over the past five years have primarily been concentrated in the production and intermediate-term and real estate mortgage sectors. The prolonged downturn in the current environment has impacted working capital for some producers. Further stress in the agriculture sector or broader economy could further increase risk assets in future years.

Total risk loans as a percentage of total loans remains well within our established risk management guidelines. At December 31, 2019, 56.0 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, 2019.

Allowance for Loan Losses by Loan Category

(in thousands)	2019		2018		2017		2016		2015	
As of December 31,	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Real estate mortgage	\$1,992	6.2 %	\$2,093	8.2 %	\$2,298	8.8 %	\$1,874	8.8 %	\$1,928	10.7 %
Production and intermediate term	29,187	91.0 %	22,724	88.9 %	22,711	87.2 %	18,930	89.0 %	15,381	85.0 %
Loans to OFIs	404	1.3 %	474	1.9 %	425	1.7 %	220	1.0 %	278	1.5 %
Other	506	1.5 %	280	1.0 %	613	2.3 %	258	1.2 %	489	2.8 %
Total allowance for loan losses	\$32,089	100.0 %	\$25,571	100.0 %	\$26,047	100.0 %	\$21,282	100.0 %	\$18,076	100.0 %

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 risk loans and wholesale loans 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 and other System entities. 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.

Allowance Coverage Ratios

As of December 31,	2019	2018	2017
Allowance as a percentage of:			
Loans	0.03 %	0.03 %	0.03 %
Retail loans	0.35 %	0.28 %	0.31 %
Nonaccrual loans	55.54 %	47.23 %	49.11 %
Total risk loans	49.60 %	43.47 %	45.19 %
Adverse assets to capital and allowance for loan losses	8.51 %	7.90 %	3.90 %

Allowance for Loan Losses Activity

(in thousands)

For the year ended December 31,	2019	2018	2017	2016	2015
Balance at beginning of year	\$25,571	\$26,047	\$21,282	\$18,076	\$12,520
Charge-offs:					
Real estate mortgage	(22)	(118)	(1,104)	(881)	(155)
Production and intermediate term	(6,751)	(6,992)	(3,874)	(3,430)	(3,846)
Other	(2)	(2)	(10)	(57)	(1)
Total charge-offs	(6,775)	(7,112)	(4,988)	(4,368)	(4,002)
Recoveries:					
Real estate mortgage	211	667	13	227	131
Production and intermediate term	1,576	452	1,231	839	1,919
Other	6	17	9	8	8
Total recoveries	1,793	1,136	1,253	1,074	2,058
Net charge-offs	(4,982)	(5,976)	(3,735)	(3,294)	(1,944)
Provision for loan losses	11,500	5,500	8,500	6,500	7,500
Balance at end of year	\$32,089	\$25,571	\$26,047	\$21,282	\$18,076
Net charge-offs as a % of average loans	0.01 %	0.01 %	0.00 %	0.00 %	0.00 %

Refer to the Results of Operations - Provision for Loan 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, 2019, investor demand for System-wide Debt Securities remained favorable.

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 \$500 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, 2019, 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 2019, we had a liquidity operating target between 135 and 185 days. As of December 31, 2019, we had sufficient liquidity to fund all debt maturing within 166 days. At December 31, 2019, we held qualifying assets in excess of each incremental level to meet the liquidity coverage intervals.

Cumulative Debt Maturities

(in thousands)

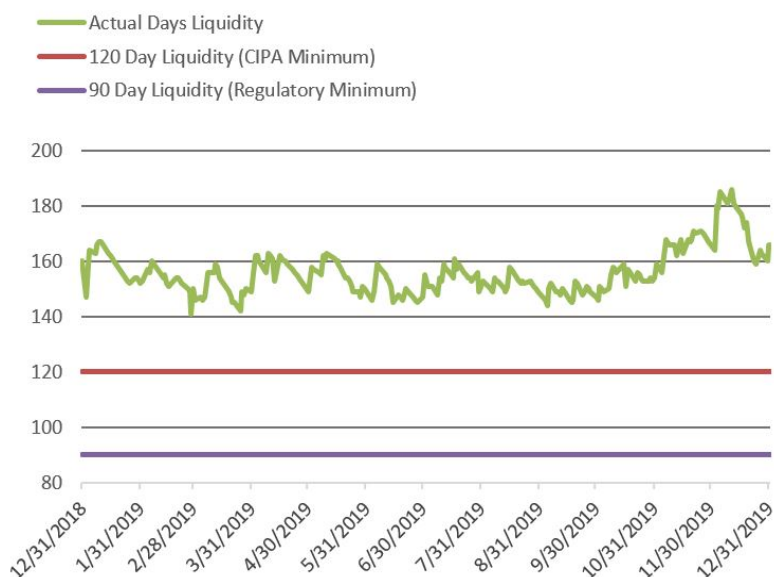
As of December 31, 2019

**Bonds and
Notes Amount**

Maturing in:

15 days	\$2,864,447
45 days	6,312,816
90 days	9,881,299
120 days	12,328,802
One year	34,304,386
One to five years	88,565,806
Five to ten years	100,795,622
More than ten years	108,326,832

Twelve Month Liquidity History



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 \$500 million buffer. In addition, 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. Further, the Insurance Corporation has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to the Insurance Corporation. Under its existing statutory authority, the Insurance Corporation may use these funds to provide assistance to the System banks in exigent market circumstances that threaten the banks' ability to pay maturing debt obligations. The 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,	2019	2018	2017
Mortgage-backed securities:			
Government collateralized mortgage obligations	\$3,117,601	\$3,293,195	\$3,251,868
Agency collateralized mortgage obligations	1,876,543	2,244,712	2,677,128
Agency pass through	50,316	70,205	92,139
Total mortgage-backed securities	5,044,460	5,608,112	6,021,135
Commercial paper and other	5,850,142	5,342,171	5,220,678
U.S. Treasury securities	2,816,200	2,822,639	2,917,400
Asset-backed securities:			
Automobile	566,210	202,921	191,250
Equipment	91,146	21,899	35,992
Total asset-backed securities	657,356	224,820	227,242
Total	\$14,368,158	\$13,997,742	\$14,386,455

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. All securities must meet eligibility requirements as permitted by FCA regulations. Prior to 2019, this included certain credit ratings as assigned by one or more Nationally Recognized Statistical Rating Organizations at time of purchase. Refer to the Investments Securities Eligibility section for additional information regarding the investment regulation effective January 1, 2019.

Fair Value of Eligible Investment Securities by Credit Rating

(in thousands)		Eligible		
As of December 31, 2019	AAA/Aaa	A1/P1/F1	Split Rated ⁽¹⁾	Total
Mortgage-backed securities	\$—	\$—	\$5,044,460	\$5,044,460
Commercial paper and other	—	4,228,769	1,621,373	5,850,142
U.S. Treasury securities	—	—	2,816,200	2,816,200
Asset-backed securities	657,356	—	—	657,356
Total	\$657,356	\$4,228,769	\$9,482,033	\$14,368,158

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

Holdings of split-rated securities are related to U.S. government securities. At December 31, 2019, we held no ineligible securities. During January 2020, investments in certain commercial paper with an exposure of \$78.0 million were downgraded to ineligible as regulatorily prescribed. We expect full payment of these investments by March 2020.

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. As a result of our evaluations, we did not hold any OTTI investment securities at December 31, 2019, 2018 or 2017, and we did not record any impairment losses during these periods.

Refer to Note 4 of the accompanying Financial Statements for further discussion on impairment losses.

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 \$6.2 billion, \$5.9 billion and \$5.6 billion at December 31, 2019, 2018 and 2017, respectively. Total shareholders' equity increased \$294.6 million in 2019, primarily attributable to comprehensive income and purchased stock, which was substantially offset by cash patronage distributions declared.

Select Capital Ratios

As of December 31,	Regulatory minimum and buffer	2019	2018	2017
Shareholders' equity to assets		5.4 %	5.4 %	5.4 %
Retained earnings and allowance to risk loans (:1)		49.0	53.8	54.8
Retained earnings to total shareholders' equity		50.8 %	53.3 %	55.5 %
Tier 1 capital ratio	8.5 %	17.8 %	18.5 %	19.0 %
Tier 1 leverage ratio	5.0 %	5.5 %	5.5 %	5.6 %

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 2019, 2018 and 2017, 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. 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.

2020 Business Plan - Capital Ratio Targets

	Target	Regulatory Minimum	Regulatory Minimum plus buffer
Tier 1 leverage ratio	5.5% with at least 2.0% in UREE	4.0% with 1.5% UREE	5.0% with 1.5% UREE
Common equity tier 1 capital ratio	No lower than 7.5%	4.5%	7.0%*
Tier 1 capital ratio	No lower than 9.0%	6.0%	8.5%*
Total capital ratio	No lower than 11.0%	8.0%	10.5%*
Permanent capital ratio	No lower than 10.0%	7.0%	n/a

*The 2.5% capital conservation buffer over risk-adjusted ratio minimums was phased in over three years under the FCA capital requirements. The phase in period ended on December 31, 2019.

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 in the form of stock on the earnings we retain. Patronage was paid in cash for the years ended December 31, 2018 and 2017 and in cash and stock for the year ended December 31, 2019. Patronage was primarily cash or stock distributions of our earnings to our District Associations and OFIs. Additionally, patronage was cash distributions of earnings on our various pool programs to participating pool program participants.

Patronage Distributions

(in thousands)

For the year end December 31,	2019	2018	2017
Wholesale patronage	\$491,925	\$455,670	\$422,882
Pool program patronage	117,869	101,075	85,067
Total patronage	\$609,794	\$556,745	\$507,949
Wholesale patronage in basis points	55.9	54.1	52.1

In 2019, 2018 and 2017 the wholesale bank earnings patronage rate was targeted to equal 100 percent of net income after preferred stock dividends and pool patronage, subject to the capital needs of AgriBank.

Beginning in 2018, we may declare patronage on certain patronage pools 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.

In addition to patronage to our members, our board declared perpetual preferred stock dividends of \$17.2 million during each of 2019, 2018 and 2017 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 decreasing interest rates during 2019, the value of certain cash flow derivatives decreased, resulting in \$112.5 million of other comprehensive losses for the year ended December 31, 2019.

Comparatively, increasing interest rates during 2018 and 2017 resulted in comprehensive income of \$44.1 million and \$7.0 million, respectively.

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, 2019, 2018 and 2017.

Other comprehensive gains on AFS investment securities totaled \$84.9 million for the year ended December 31, 2019, primarily driven by decreasing interest rates. Other comprehensive losses on AFS investment securities of \$7.7 million and \$12.3 million for the years ended December 31, 2018 and 2017, respectively, primarily resulted from increases in interest rates. The value of our fixed-rate AFS investment securities have an inverse relationship with interest rates.

Results of Operations

Return on average assets ratio of 56 basis points in 2019 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. Net income increased \$50.0 million, or 8.6 percent, for the year ended December 31, 2019 primarily driven by net interest income.

Profitability Information

(in thousands)

For the year ended December 31,	2019	2018	2017
Net income	\$627,593	\$577,639	\$525,358
Return on average assets	0.56 %	0.55 %	0.51 %
Return on average shareholders' equity	10.36 %	9.94 %	9.32 %

Changes in Significant Components of Net Income

(in thousands)

For the year ended December 31,	2019	2018	2017	Increase (decrease) in Net Income	Prior Year Increase in Net Income
Net interest income	\$681,545	\$590,726	\$587,884	\$90,819	\$2,842
Provision for loan losses	11,500	5,500	8,500	(6,000)	3,000
Non-interest income	97,185	119,313	73,640	(22,128)	45,673
Non-interest expense	139,637	126,900	127,666	(12,737)	766
Net income	\$627,593	\$577,639	\$525,358	\$49,954	\$52,281

Net Interest Income

Changes in Net Interest Income

(in thousands)

For the year ended December 31,	2019 vs 2018			2018 vs 2017		
	Volume	Rate	Total	Volume	Rate	Total
Increase (decrease) due to:						
Interest income:						
Loans	\$143,000	\$257,651	\$400,651	\$69,820	\$406,238	\$476,058
Investments	6,738	53,486	60,224	5,348	112,864	118,212
Total interest income	149,738	311,137	460,875	75,168	519,102	594,270
Interest expense:						
Systemwide debt securities and other	(115,086)	(254,970)	(370,056)	(54,841)	(536,587)	(591,428)
Net change in net interest income	\$34,652	\$56,167	\$90,819	\$20,327	\$(17,485)	\$2,842

The increase in interest income during the year ended December 31, 2019 compared to the prior year was attributable to higher interest rates earned on loans and investments as well as growth in loan volume. This increase was substantially offset by increased interest expense due to both higher interest expense paid on Systemwide debt and, to a lesser degree, growth in volume of Systemwide debt. 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,	2019		
	ADB	Rate	NII
Interest earning assets:			
Wholesale loans	\$85,492,259	2.75 %	\$2,347,979
Retail accrual loans	8,714,048	4.64 %	404,595
Retail nonaccrual loans	60,293	16.98 %	10,235
Investment securities and federal funds	16,016,385	2.37 %	380,298
Total earning assets	110,282,985	2.85 %	3,143,107
Interest bearing liabilities	104,725,115	2.35 %	2,461,562
Interest rate spread	\$5,557,870	0.50 %	
Impact of equity financing		0.12 %	
Net interest margin		0.62 %	
Net interest income			\$681,545

(in thousands)

For the year ended December 31,

2018

	ADB	Rate	NII
Interest earning assets:			
Wholesale loans	\$81,152,468	2.49 %	\$2,019,619
Retail accrual loans	8,018,395	4.21 %	337,970
Retail nonaccrual loans	54,844	8.33 %	4,569
Investment securities and federal funds	15,692,005	2.04 %	320,074
Total earning assets	\$104,917,712	2.56 %	\$2,682,232
Interest bearing liabilities	99,452,963	2.10 %	2,091,506
Interest rate spread	<u>\$5,464,749</u>	0.46 %	
Impact of equity financing		0.10 %	
Net interest margin		<u>0.56 %</u>	
Net interest income			<u>\$590,726</u>

(in thousands)

For the year ended December 31,

2017

	ADB	Rate	NII
Interest earning assets:			
Wholesale loans	\$78,139,934	2.02 %	\$1,580,159
Retail accrual loans	7,875,648	3.84 %	302,141
Retail nonaccrual loans	53,958	7.04 %	3,800
Investment securities and federal funds	15,249,477	1.32 %	201,862
Total earning assets	\$101,319,017	2.06 %	\$2,087,962
Interest bearing liabilities	96,066,906	1.56 %	1,500,078
Interest rate spread	<u>\$5,252,111</u>	0.50 %	
Impact of equity financing		0.08 %	
Net interest margin		<u>0.58 %</u>	
Net interest income			<u>\$587,884</u>

Net interest margin for the year ended December 31, 2019 increased 6 basis points compared to the prior year. Equity financing represents the benefit of non-interest bearing funding increased compared to the prior year due to higher equity volume and higher interest rates. The benefit of equity financing is greater when interest rates are higher as this equity funds assets earning a higher interest rate rather than being funded by debt. Interest rate spread increased 4 basis points for the year ended December 31, 2019 compared to the prior year. Overall funding benefit declined slightly compared to the same period of the prior year primarily due to increased debt expense relative to loan income. Interest rates on liabilities and earning assets were generally higher year-over-year in 2019; however, there was a substantial decline in market interest rates through the last three quarters of 2019, along with flattening and periodic inversions of the yield curve. While call activity did increase during the third and fourth quarters, the shape of the yield curve, particularly early in the year, loan refinancing and other funding actions partially offset the impact of these activities, resulting in an overall funding benefit decline year-over-year. We estimate funding actions contributed 12 basis points to the interest rate spread in 2019, compared to 13 and 16 basis points in 2018 and 2017, respectively.

Changes in loans are further discussed in the Loan Portfolio section of this report.

Provision for Loan Losses

The year-over-year volatility in provision for loan losses can be impacted by a single loan or borrower. As our retail portfolio has grown and credit quality has declined, we have seen corresponding provision for loan losses. The provision for loan losses in 2019 primarily reflected the credit quality within the production and intermediate term sector.

Refer to the discussion of the allowance for loan losses in the Loan Portfolio - Allowance for Loan Losses section of this report.

Non-interest Income

Components of Non-Interest Income

(in thousands)

For the year ended December 31,	2019	2018	2017
Mineral income	\$53,638	\$67,185	\$45,795
Business services income	22,441	22,187	19,647
Loan prepayment and fee income	26,390	11,318	7,907
Allocated Insurance Reserve Accounts income	2,391	9,302	—
Miscellaneous income and other (losses) gains, net	(7,675)	9,321	291
Total	\$97,185	\$119,313	\$73,640

Mineral income was earned primarily from royalties received on mineral rights, predominantly in the Williston Basin in western North Dakota. Decreased oil and gas prices resulted in lower mineral income during 2019 compared to 2018. We implemented the use of derivatives as a risk management tool for our mineral income during 2018. The fair value of these commodity put options generated gains of \$9.5 million (classified as “Miscellaneous income and other non-interest (losses) gains, net”) due to falling oil prices during the fourth quarter of 2018. As oil prices subsequently rose, changes in the fair value of these contracts for the year ended December 31, 2019 resulted in losses of \$8.1 million, partially offsetting gains recorded in the prior year.

Business services income was primarily from SunStream Business Services which operated as a division of AgriBank for all periods presented. As of April 1, 2020, SunStream will spin-off from AgriBank and continue operations as a separate organization. As such, we expect business services income will be significantly lower in future years. For additional information refer to discussion in the AgriBank section above.

Loan prepayment and fee income reflects prepayment and conversion fees recognized as a result of refinancing 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. Decreasing interest rates during the later part of 2019 helped stimulate prepayment and conversion activity and was the primary driver of the increase in related fee income compared to the prior year.

Interest rates increased throughout 2018 and 2017, resulting in slower prepayment and conversion activity in District Associations' retail portfolios.

The Allocated Insurance Reserve Accounts (AIRAs) were established by the FCSIC when premiums collected increased the level of the insurance fund beyond the required secured base amount of 2 percent of insured debt. The FCSIC distributed funds during 2019 and 2018 related to these excess insurance funds. No similar distribution was received during 2017.

Miscellaneous income and other non-interest (losses) gains, net during 2019 and 2018 were primarily due to changes in fair value of commodity options as noted earlier with mineral income.

Non-interest Expense

Components of Non-interest Expense

(in thousands)

For the year ended December 31,	2019	2018	2017
Salaries and employee benefits	\$36,302	\$37,113	\$40,206
Other operating expenses:			
Purchased services	11,629	10,790	9,750
Occupancy and equipment	14,805	12,879	12,437
Examination expense	6,244	6,207	5,663
Other	12,038	11,931	10,025
Loan servicing and other fees paid to District Associations	50,329	40,376	37,226
Farm Credit System insurance expense	8,290	7,604	12,359
Total non-interest expense	\$139,637	\$126,900	\$127,666

A portion of non-interest expense was related to SunStream Business Services which operated as a division of AgriBank for all periods presented. As of April 1, 2020, SunStream will spin-off from AgriBank and continue operations as a separate organization. As such, we expect a reduction in non-interest expense related to this divestiture beginning in 2020. For additional information refer to discussion in the AgriBank section.

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 9 basis points in both 2019 and 2018 compared to 15 basis points in 2017. The Insurance Corporation has announced premiums will be 8 basis points in 2020. The Insurance Corporation Board meets periodically throughout the year to review premium rates and has the ability to change these rates at any time.

Select Quarterly Financial Information

(in thousands)

2019	First	Second	Third	Fourth	Total
Net interest income	\$158,988	\$163,615	\$173,846	\$185,096	\$681,545
Provision for loan losses	2,500	2,500	3,000	3,500	11,500
Other expense, net	19,234	11,288	5,024	6,906	42,452
Net income	\$137,254	\$149,827	\$165,822	\$174,690	\$627,593

2018	First	Second	Third	Fourth	Total
Net interest income	\$144,748	\$153,657	\$145,246	\$147,075	\$590,726
Provision for loan losses	—	1,000	1,500	3,000	5,500
Other (income) expense, net	(1,249)	7,669	433	734	7,587
Net income	\$145,997	\$144,988	\$143,313	\$143,341	\$577,639

The AIRAs distribution received from the FCSIC during the first quarter 2018 resulted in other income, net for the quarter.

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 issue a significant amount of callable debt. We also use derivatives to manage interest rate risk and reduce our funding costs.

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:

- Interest rate gap analysis, which compares the amount of interest-sensitive assets to interest-sensitive liabilities repricing in selected time periods under various interest rate and prepayment assumptions.
- Net interest income sensitivity analysis, which projects net interest income in each of the next three years given various rate scenarios.
- Economic value of equity sensitivity analysis, 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, and the active role of asset and liability management.

Interest Rate Gap Position

(in millions)

As of December 31, 2019	Repricing Intervals						Total
	Year 1	Year 2	Year 3	Year 4	Year 5	Over 5 Years	
Earning assets:							
Prepayable loans	\$52,511	\$9,819	\$6,643	\$4,541	\$3,907	\$16,240	\$93,661
Other loans	385	431	801	724	325	1,970	4,636
Investments and federal funds	11,829	1,736	876	413	203	362	15,419
Total earning assets	\$64,725	\$11,986	\$8,320	\$5,678	\$4,435	\$18,572	\$113,716
Callable debt	\$14,937	\$5,175	\$3,045	\$1,547	\$1,688	\$12,638	\$39,030
Other debt	55,032	5,745	2,949	2,285	1,395	1,891	69,297
Effect of interest rate swaps and other derivatives	(1,748)	(80)	170	280	160	1,218	—
Total rate-sensitive liabilities	\$68,221	\$10,840	\$6,164	\$4,112	\$3,243	\$15,747	\$108,327
Interest rate sensitivity gap	\$(3,496)	\$1,146	\$2,156	\$1,566	\$1,192	\$2,825	\$5,389
Cumulative gap	\$(3,496)	\$(2,350)	\$(194)	\$1,372	\$2,564	\$5,389	
Cumulative gap as a % of earning assets	(5.4)%	(3.1)%	(0.2)%	1.5 %	2.7 %	4.7 %	

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 yield curves 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). We also 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 low interest rates at December 31, 2019, the down scenario was limited to a down 78 basis point change.

NII Sensitivity Analysis

As of December 31, 2019	Basis Point Interest Rate Change		
	Down 78	Up 100	Up 200
Immediate Change (Shock):			
NII sensitivity	4.0 %	2.2 %	0.0 %
Board policy	(15.0)%		(15.0)%
Gradual Change (Ramp):			
NII sensitivity		1.3 %	1.2 %

EVE Sensitivity Analysis

As of December 31, 2019	Basis Point Interest Rate Change		
	Down 78	Up 100	Up 200
Immediate Change (Shock):			
EVE sensitivity	0.7 %	(4.1)%	(8.1)%
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. 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.

In the fourth quarter of 2018, we purchased commodity derivative instruments (put options on the price of oil) to mitigate a decline in mineral income in certain circumstances. These instruments matured in November 2019. We held no outstanding commodity derivative instruments as of December 31, 2019 or 2017.

By using derivative instruments, we are subject to credit loss exposure. 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; however, there is a risk of our nonperformance under the terms of the derivative transaction.

Derivative Credit Loss Exposure by Credit Rating

(in thousands) As of December 31, 2019	Years to Maturity			Maturity Distribution Netting	Exposure	Collateral Pledged	Exposure Net of Collateral
	Less Than One Year	One to Five Years	Over Five Years				
Moody's Credit Rating:							
Aa3	\$—	\$—	\$1,052	\$(656)	\$396	\$—	\$396
Cleared derivatives	218	—	—	(218)	—	—	—
Total	\$218	\$—	\$1,052	\$(874)	\$396	\$—	\$396

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)

As of December 31, 2019	2020	2021	2022	2023	2024	2025 and thereafter	Total	Fair Value
Bonds and Notes:								
Fixed rate	\$11,327	\$9,410	\$8,503	\$6,175	\$5,039	\$19,761	\$60,215	\$60,660
Average interest rate	1.9 %	2.1 %	2.1 %	2.2 %	2.2 %	2.9 %	2.3 %	
Variable rate	22,977	21,887	3,248	—	—	—	48,112	48,173
Average interest rate	2.3 %	2.2 %	2.2 %	— %	— %	— %	2.2 %	
Total bonds and notes	<u>\$34,304</u>	<u>\$31,297</u>	<u>\$11,751</u>	<u>\$6,175</u>	<u>\$5,039</u>	<u>\$19,761</u>	<u>\$108,327</u>	<u>\$108,833</u>
Derivative Instruments:								
Receive-fixed swaps								
Notional value	\$951	\$250	\$50	\$—	\$—	\$—	\$1,251	\$3
Weighted average receive rate	1.7 %	2.6 %	2.0 %	— %	— %	— %	1.9 %	
Weighted average pay rate	1.6 %	1.5 %	1.5 %	— %	— %	— %	1.6 %	
Pay-fixed swaps								
Notional value	104	170	240	280	160	1,350	2,304	(72)
Weighted average receive rate	1.7 %	1.6 %	1.6 %	1.6 %	1.6 %	1.7 %	1.7 %	
Weighted average pay rate	3.3 %	2.5 %	1.7 %	2.7 %	2.1 %	2.2 %	2.3 %	
Floating for floating swaps								
Notional value	300	600	200	650	—	550	2,300	(4)
Weighted average receive rate	1.6 %	1.5 %	1.5 %	1.5 %	— %	1.6 %	1.5 %	
Weighted average pay rate	1.6 %	1.5 %	1.5 %	1.5 %	— %	1.7 %	1.6 %	
Customer swaps								
Notional value	4	—	20	—	—	132	156	1
Weighted average receive rate	1.2 %	— %	2.2 %	— %	— %	1.8 %	1.8 %	
Weighted average pay rate	1.6 %	— %	1.6 %	— %	— %	1.6 %	1.6 %	
Credit valuation adjustment								—
Variation margin settlement								27
Total derivative instruments	<u>\$1,359</u>	<u>\$1,020</u>	<u>\$510</u>	<u>\$930</u>	<u>\$160</u>	<u>\$2,032</u>	<u>\$6,011</u>	<u>\$(45)</u>
Total weighted average rates on swaps:								
Receive rate	1.7 %	1.8 %	1.6 %	1.5 %	1.6 %	1.7 %	1.7 %	
Pay rate	1.7 %	1.7 %	1.6 %	1.9 %	2.1 %	2.0 %	1.8 %	

The table was prepared based on implied forward variable interest rates as of December 31, 2019 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, 2019 implied forward rates. Many of our derivative instruments include a reference rate tied to LIBOR. Refer to the Future of LIBOR section for further discussion about our derivatives impacted by LIBOR. Derivative instruments are also discussed further in Notes 2, 11 and 12 to the accompanying Financial Statements.

Other Risks

Operational Risk

Operational risk represents the risk of loss resulting from our operations. 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 service organization control reports to determine if mitigating controls are needed. We have developed and regularly update comprehensive business continuity and disaster recovery plans and routinely test plans with the goal of ensuring ongoing operations under a variety of adverse scenarios. We maintain sound security infrastructure, which we periodically test. We also provide privacy and cybersecurity awareness training to staff.

We document, test and evaluate internal controls over financial reporting (ICFR) to support both the AgriBank and the Farm Credit System-level attestations for ICFR consistent with the requirements of Sarbanes-Oxley Section 404. This effort supports 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.

Reputation Risk

Reputation 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 Farm Credit Act established the Insurance Corporation 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:

- Allowance for Loan Losses - 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.
- Fair Value Measurements - 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, repayment rates, cash flows, default rates, loss severity rates and third-party prices. The use of different assumptions could produce significantly different results.

Investment Securities Eligibility

The new FCA regulation governing the eligibility of investment securities for System Banks and Associations went into effect on January 1, 2019. The new regulation is intended to strengthen the eligibility criteria for investments that System Banks purchase and hold. Further, it removes references to and requirements for credit ratings and substitutes other appropriate standards of credit worthiness in compliance with section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act. We have updated our policies, procedures and other documentation to ensure compliance with this new regulation. All of the investment securities we held at December 31, 2019 were allowed to be held pursuant to this new regulation.

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.

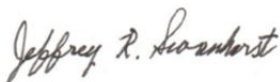
To meet our responsibility for reliable financial information, we depend on accounting and internal control systems designed to provide reasonable but not absolute assurance that assets are safeguarded and transactions are properly authorized and recorded. Costs must be reasonable in relation to the 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 auditors have audited our internal control over financial reporting as of December 31, 2019. 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 auditors have 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, 2019 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. The FCA has authorized AgriBank to replace the regulatory required inclusion of condensed, unaudited district-wide statements of condition and statements of income in the footnotes to the financial statements with a separate document containing the same district-wide financial information.



Richard H. Davidson
Chair of the Board
AgriBank, FCB



Jeffrey R. Swanhorst
Chief Executive Officer
AgriBank, FCB



Jeffrey L. Moore
Chief Financial Officer
AgriBank, FCB

February 28, 2020

Report on Internal Control over Financial Reporting

AgriBank, FCB

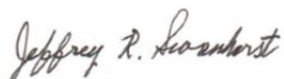
AgriBank, FCB's (AgriBank) principal executives and principal financial officers or persons performing similar functions are responsible for establishing and maintaining adequate internal control over financial reporting. For purposes of this report, "internal control over financial reporting" is defined 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, 2019. 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, 2019, the internal control over financial reporting was effective based upon the COSO criteria.

AgriBank's internal control over financial reporting as of December 31, 2019 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, 2019.



Jeffrey R. Swanhorst
Chief Executive Officer
AgriBank, FCB



Jeffrey L. Moore
Chief Financial Officer
AgriBank, FCB

February 28, 2020

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, 2019, 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 that the board of directors include the audited Financial Statements in the Annual Report for the year ended December 31, 2019.



Joseph M. Busuttil
Audit Committee Chair
AgriBank, FCB

Stan Claussen
Richard Price
George Stebbins
Matt Walther

February 28, 2020



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, 2019, 2018, and 2017, and the related statements of comprehensive income, of changes in shareholders’ equity and of cash flows for each of the three years in the period ended December 31, 2019, 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, 2019, 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, 2019, 2018, and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 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, 2019, 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, assessing the risk that a material



weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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.

A handwritten signature in dark ink, which appears to read "PricewaterhouseCoopers LLP".

February 28, 2020

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

Statements of Condition

AgriBank, FCB

(in thousands)

As of December 31,	2019	2018	2017
Assets			
Loans	\$98,298,023	\$92,716,701	\$88,374,923
Allowance for loan losses	32,089	25,571	26,047
Net loans	98,265,934	92,691,130	88,348,876
Investment securities	14,368,158	13,997,742	14,386,455
Cash	675,780	545,875	469,599
Federal funds	1,050,000	1,698,100	676,300
Accrued interest receivable	727,636	707,036	498,826
Derivative assets	2,768	29,981	8,956
Allocated prepaid pension costs	48,455	42,796	38,834
Cash collateral posted with counterparties	48,488	24,198	29,730
Other assets	44,851	34,826	87,149
Total assets	\$115,232,070	\$109,771,684	\$104,544,725
Liabilities			
Bonds and notes	\$108,326,832	\$103,123,344	\$98,313,944
Accrued interest payable	407,865	405,784	288,978
Derivative liabilities	48,583	14,584	34,562
Cash collateral posted by counterparties	—	5,231	—
Patronage payable and other payables	241,776	316,543	246,388
Other liabilities	24,621	18,433	18,971
Total liabilities	109,049,677	103,883,919	98,902,843
Commitments and contingencies (Note 9)			
Shareholders' equity			
Perpetual preferred stock	250,000	250,000	250,000
Capital stock and participation certificates	2,871,767	2,551,085	2,345,655
Allocated retained earnings	227	191	—
Unallocated retained earnings	3,138,311	3,136,359	3,132,653
Accumulated other comprehensive loss	(77,912)	(49,870)	(86,426)
Total shareholders' equity	6,182,393	5,887,765	5,641,882
Total liabilities and shareholders' equity	\$115,232,070	\$109,771,684	\$104,544,725

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

Statements of Comprehensive Income

AgriBank, FCB

(in thousands)

For the year ended December 31,	2019	2018	2017
Interest income			
Loans	\$2,762,809	\$2,362,158	\$1,886,100
Investment securities	380,298	320,074	201,862
Total interest income	3,143,107	2,682,232	2,087,962
Interest expense	2,461,562	2,091,506	1,500,078
Net interest income	681,545	590,726	587,884
Provision for loan losses	11,500	5,500	8,500
Net interest income after provision for loan losses	670,045	585,226	579,384
Non-interest income			
Mineral income	53,638	67,185	45,795
Business services income	22,441	22,187	19,647
Loan prepayment and fee income	26,390	11,318	7,907
Allocated Insurance Reserve Accounts income	2,391	9,302	—
Miscellaneous income and other non-interest (losses) gains, net	(7,675)	9,321	291
Total non-interest income	97,185	119,313	73,640
Non-interest expense			
Salaries and employee benefits	36,302	37,113	40,206
Other operating expenses	44,716	41,807	37,875
Loan servicing and other expenses	50,329	40,376	37,226
Farm Credit System insurance expense	8,290	7,604	12,359
Total non-interest expense	139,637	126,900	127,666
Net income	\$627,593	\$577,639	\$525,358
Other comprehensive (loss) income			
Not-other-than-temporarily-impaired investments	\$84,867	\$(7,673)	\$(12,311)
Derivatives and hedging activity	(112,525)	44,124	7,038
Employee benefit plan activity	(384)	105	—
Total other comprehensive (loss) income	(28,042)	36,556	(5,273)
Comprehensive income	\$599,551	\$614,195	\$520,085

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

Statements of Changes in Shareholders' Equity

AgriBank, FCB

(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, 2016	\$250,000	\$2,183,701	\$—	\$3,132,432	\$(80,030)	\$5,486,103
Net income				525,358		525,358
Other comprehensive loss and other					(6,396)	(6,396)
Patronage				(507,949)		(507,949)
Perpetual preferred stock dividends				(17,188)		(17,188)
Capital stock/participation certificates issued		161,954				161,954
Balance at December 31, 2017	\$250,000	\$2,345,655	\$—	\$3,132,653	\$(86,426)	\$5,641,882
Net income				577,639		577,639
Other comprehensive income					36,556	36,556
Patronage				(556,554)		(556,554)
Retained earnings allocated under patronage program			191	(191)		—
Perpetual preferred stock dividends				(17,188)		(17,188)
Capital stock/participation certificates issued		219,262				219,262
Capital stock/participation certificates retired		(13,832)				(13,832)
Balance at December 31, 2018	\$250,000	\$2,551,085	\$191	\$3,136,359	\$(49,870)	\$5,887,765
Cumulative effect of change in accounting principle				1,341		1,341
Net income				627,593		627,593
Other comprehensive loss					(28,042)	(28,042)
Redemption of retained earnings allocated under patronage program			(112)			(112)
Cash patronage				(381,412)		(381,412)
Stock patronage issued as capital stock		228,234		(228,234)		—
Retained earnings allocated under patronage program			148	(148)		—
Perpetual preferred stock dividends				(17,188)		(17,188)
Capital stock/participation certificates issued		92,448				92,448
Balance at December 31, 2019	\$250,000	\$2,871,767	\$227	\$3,138,311	\$(77,912)	\$6,182,393

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

Statements of Cash Flows

AgriBank, FCB

(in thousands)

For the year ended December 31,	2019	2018	2017
Cash flows from operating activities			
Net income	\$627,593	\$577,639	\$525,358
Adjustments to reconcile net income to cash flows from operating activities:			
Depreciation on premises and equipment	4,079	3,108	3,556
Provision for loan losses	11,500	5,500	8,500
Amortization of discounts on investments, net	(130,045)	(99,527)	(34,218)
Amortization of discounts on debt and deferred debt issuance costs, net	82,410	71,561	80,400
Loss (gain) on derivative activities, net	6,335	(7,740)	(1,908)
Insurance refund related to FCS Financial Assistance Corporation stock	—	(3,376)	—
Changes in operating assets and liabilities:			
Increase in accrued interest receivable	(2,359,425)	(2,083,830)	(1,582,638)
(Increase) decrease in other assets	(12,882)	48,855	(43,479)
Increase in accrued interest payable	2,081	116,806	65,955
Increase (decrease) in other liabilities	4,390	(1,224)	(4,204)
Net cash used in operating activities	(1,763,964)	(1,372,228)	(982,678)
Cash flows from investing activities			
Increase in loans, net	(3,247,614)	(2,472,642)	(796,857)
Proceeds from sales of other property owned	367	31	1,509
Purchases of investment securities	(4,483,454)	(3,084,420)	(3,023,890)
Proceeds from maturing investment securities	4,327,950	3,565,023	3,556,708
Purchases of premises and equipment, net	(3,339)	(3,917)	(3,895)
Proceeds from insurance refund related to FCS Financial Assistance Corporation	—	3,376	—
Net cash used in investing activities	(3,406,090)	(1,992,549)	(266,425)
Cash flows from financing activities			
Bonds and notes issued	214,344,783	207,573,959	187,595,517
Bonds and notes retired	(209,244,850)	(202,838,464)	(185,979,892)
(Increase) decrease in cash collateral posted with counterparties, net	(22,714)	5,532	8,076
(Decrease) increase in cash collateral posted by counterparties, net	(1,970)	1,970	—
Variation margin (paid) received on cleared derivatives, net	(43,773)	17,350	(8,920)
Patronage distributions paid	(454,877)	(485,736)	(425,841)
Preferred stock dividends paid	(17,188)	(17,188)	(17,188)
Capital stock/participation certificates issued, net	92,448	205,430	161,954
Net cash provided by financing activities	4,651,859	4,462,853	1,333,706
Net (decrease) increase in cash and federal funds	(518,195)	1,098,076	84,603
Cash and federal funds at beginning of period	2,243,975	1,145,899	1,061,296
Cash and federal funds at end of period	\$1,725,780	\$2,243,975	\$1,145,899

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

Supplemental Statements of Cash Flows Information

AgriBank, FCB

(in thousands)

For the year ended December 31,	2019	2018	2017
Supplemental non-cash investing and financing activities			
Increase (decrease) in shareholders' equity from investment securities	\$84,867	\$(7,673)	\$(12,311)
Interest capitalized to loan principal	2,338,825	1,875,620	1,504,482
Patronage and preferred stock dividends accrued	206,467	279,820	209,002
Stock patronage issued	228,234	—	—
Supplemental non-cash fair value changes related to hedging activities			
Decrease (increase) in derivative assets and liabilities, net	\$97,715	\$(54,208)	\$6,566
Increase (decrease) in bonds from derivative activity	21,145	2,344	(15,512)
(Decrease) increase in shareholders' equity from cash flow derivatives	(112,525)	44,124	7,038
Supplemental Information			
Interest paid	\$2,377,071	\$1,093,139	\$1,353,723

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

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 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. The System specializes in providing financing and related services to qualified borrowers for agricultural and rural purposes.

At January 1, 2020, the System was composed of 3 Farm Credit Banks, 1 Agricultural Credit Bank and 68 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 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).

At January 1, 2020, the District had 14 ACA parent Associations, each of which has wholly owned FLCA and PCA subsidiaries. AgriBank is primarily owned by these 14 Farm Credit Associations. 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 multi-peril 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 Act established the Farm Credit System Insurance Corporation (Insurance Corporation) to administer the Farm Credit Insurance Fund (Insurance Fund). The Insurance Fund is used for:

- Insuring the timely payment of principal and interest on Farm Credit Systemwide debt obligations
- Insuring the retirement of protected borrower capital at par or stated value
- 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 additional services to the Associations, including financial, technology, insurance and internal audit services. The revenue received for these services is included in "Business services income," a component of non-interest income, on our Statements of Comprehensive Income.

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

Refer to Note 14 for additional information regarding the formation of SunStream Business Services, a service entity, effective April 1, 2020.

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.

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.

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 well secured and in the process of collection) or circumstances indicate that full collection is not expected. When a loan is placed in nonaccrual status, we reverse current year accrued interest to the extent principal plus accrued interest before the transfer exceeds the net realizable value of the collateral. Any unpaid interest accrued in a prior year is capitalized to the recorded investment in the loan, unless the net realizable value is less than the recorded investment in the loan, then it is charged-off against 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 the loan does not have any unrecovered prior charge-offs. 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, prior charge-offs have been recovered, the ability of the borrower to fulfill the contractual repayment terms is fully expected, the borrower has demonstrated payment performance, and the loan is not classified as doubtful or loss.

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).

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 analyzed 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 analyzing 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 loan 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 may not necessarily be held to maturity and, accordingly, 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) income", 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) income". 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 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. Term federal funds would be a similar investment held for a period longer than overnight.

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. AgriBank's portion of the service cost component of net periodic benefit cost related to these plans is included in "Salaries and employee benefits" on our Statements of Comprehensive Income. For the Pension Restoration Plan, AgriBank's portion of the components of net periodic benefit cost, other than the service cost component, is included in "Other operating expenses" 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 refunds throughout the year. We pay cash refunds 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 "Accounts 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 “Accounts 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 on the Statements of Condition as assets or liabilities, measured at fair value and netted by counterparties pursuant to the provisions of master netting agreements.

Changes in the fair values of derivatives are recorded as gains or losses through earnings or as a component of other comprehensive (loss) income, 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. 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) income” 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) income, until earnings are impacted by the variability of the cash flows of the hedged item. 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 “Miscellaneous income and other non-interest (losses) gains, 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 or de-designated as a hedge
- It is no longer probable that the forecasted transaction will occur
- A hedged firm commitment no longer meets the definition of a firm commitment
- Management determines that designating the derivative as a hedging instrument is no longer appropriate

When we discontinue hedge accounting for cash flow hedges, any remaining accumulated other comprehensive income or loss is amortized into earnings over the remaining life of the original hedged item. 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 also enter into two types of economic hedges. 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 “Miscellaneous income and other non-interest (losses) gains, net” on the Statements of Comprehensive Income. Refer to further discussion in Note 12.

Off-Balance Sheet Credit Exposures: Commitments to extend credit are agreements to lend to customer/owners, generally having 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 disbursement 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. However, no such reserve was considered necessary as of December 31, 2019, 2018, or 2017.

Statements of Cash Flows: For purposes of reporting cash flows, cash includes cash and 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:

- Market Approach uses prices and other relevant information generated by market transactions involving identical or comparable assets to derive a fair value amount
- Income Approach 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 use net asset value per share as a practical expedient.

Refer to Note 11 for further discussion 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 February 2016, the FASB issued ASU 2016-02 "Leases." In July 2018, the FASB issued ASU 2018-11 "Leases (Topic 842): Targeted Improvements." The guidance was effective for our first quarter of 2019.	The guidance modifies the recognition and accounting for lessees and lessors and requires expanded disclosures regarding assumptions used to recognize revenue and expenses related to leases. Upon adoption, a liability for lease obligations and a corresponding right-of-use asset is recognized on the Statements of Condition for all lease arrangements spanning more than 12 months. The guidance includes an optional transition method where an entity is permitted to apply the guidance as of the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings.	We adopted this guidance on January 1, 2019. The adoption of this guidance did not have a material impact on our financial condition, results of operations, and financial statement disclosures, and had no impact on our cash flows.
In August 2017, the FASB issued ASU 2017-12 "Targeted Improvements to Accounting for Hedging Activities." This guidance was effective for our first quarter of 2019.	The guidance better aligns an entity's risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The amendments in this guidance require an entity to present the earnings effect of the hedging instrument in the same income statement line item in which the earnings effect of the hedged item is reported. This guidance also addresses the timing of effectiveness testing, qualitative and quantitative effectiveness testing and components that can be excluded from effectiveness testing.	We adopted this guidance on January 1, 2019. The adoption of this guidance did not have a material impact to our results of operations as all derivative gains and losses, for which hedge accounting is applied, are now recognized in interest expense on the Statements of Comprehensive Income. We modified certain derivative-related financial statement disclosures. The adoption of this guidance did not impact our financial condition or cash flows.

Standard and effective date	Description	Adoption status and financial statement impact
In October 2018, the FASB issued ASU 2018-16 "Derivatives and Hedging (Topic 815)." This guidance was effective for our first quarter of 2019.	The amendments in this update permit the Overnight Index Swap (OIS) rate based on Secured Overnight Financing Rate (SOFR) as a U.S. benchmark interest rate. Including the OIS rate based on SOFR as an eligible benchmark interest rate during the early stages of the marketplace transition will facilitate the London Inter-Bank Offered Rate (LIBOR) to SOFR transition and provide sufficient time for entities to prepare for changes to interest rate risk management and hedge accounting purposes.	Based on our review and analysis, this updated guidance is likely to impact our interest rate derivative contracts as future contracts will likely utilize the OIS rate based on SOFR. Further, existing contracts with expiration dates after the LIBOR phase-out date may be impacted by this updated guidance. We are currently unable to estimate the impact on our financial statements.
In August 2018, the FASB issued ASU 2018-13 "Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement." This guidance is effective for public business entities for our first quarter of 2020 and early adoption is permitted.	The guidance removes, adds and modifies certain disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement.	Based on our review and analysis, we have, and expect to, modify certain fair value related disclosures. We adopted a portion of this guidance and removed certain fair value disclosures as permitted by the guidance. The remaining changes will be adopted for reporting as of March 31, 2020.
In August 2018, the FASB issued ASU 2018-15 "Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract." This guidance is effective for public business entities for our first quarter of 2020 and early adoption is permitted.	The guidance clarifies that implementation costs incurred in a hosting arrangement that is a service contract should be accounted for in the same manner as implementation costs incurred to develop or obtain internal-use software.	We adopted this guidance on January 1, 2020. Based on our analysis, this new guidance did not have a material impact on our financial condition, results of operations, cash flows and financial statement disclosures.
In August 2018, the FASB issued ASU 2018-14 "Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans. This guidance is effective for public business entities for year end 2020 and early adoption is permitted.	The guidance removes and adds certain disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans.	We are in the process of reviewing the accounting standard. Based on our preliminary review and analysis, we expect to modify certain employee benefit plan related disclosures. We have no plans to early adopt this guidance.

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 qualify 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 are evaluating the deferral and have not yet determined if we will early adopt the standard. We have reviewed the accounting standard, selected and substantially completed development and testing of our system, and are in the process of drafting disclosures. Significant implementation matters yet to be addressed include drafting of accounting policies and designing processes and controls. We are currently unable to estimate the impact on our financial statements.
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 on Topic 825 shares the effective dates and transition requirements in Update 2016-13.	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.	We are in the process of reviewing the accounting standard relative to our financial statements. Based on our preliminary review and analysis, certain parts of the update related to ASU 2016-13 may have an immaterial impact on our financial statements. We intend to adopt the portion of the guidance relevant to us concurrent with adoption of ASU 2016-13.

NOTE 3

Loans and Allowance for Loan Losses

Loans by Type

(in thousands)	2019		2018		2017	
As of December 31,	Amount	%	Amount	%	Amount	%
Wholesale loans	\$89,068,140	90.6 %	\$83,806,569	90.4 %	\$79,960,907	90.6 %
Retail loans:						
Real estate mortgage	3,127,501	3.2 %	3,507,591	3.8 %	3,928,551	4.4 %
Production and intermediate-term	5,300,260	5.5 %	4,714,668	5.1 %	3,744,997	4.2 %
Loans to other financing institutions (OFIs)	631,037	0.6 %	549,113	0.6 %	593,677	0.7 %
Other	171,085	0.1 %	138,760	0.1 %	146,791	0.1 %
Total retail loans	9,229,883	9.4 %	8,910,132	9.6 %	8,414,016	9.4 %
Total loans	\$98,298,023	100.0 %	\$92,716,701	100.0 %	\$88,374,923	100.0 %

The Other category is comprised of agribusiness, communications 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, 2019, 2018 or 2017. We did not have any participation interests sold as of December 31, 2019, 2018 or 2017.

Retail Loan Participations Purchased

(in thousands)	2019	2018	2017
As of December 31,			
Real estate mortgage	\$3,127,441	\$3,507,474	\$3,928,341
Production and intermediate-term	5,300,260	4,714,668	3,744,997
Other	171,085	138,760	146,791
Total loans	\$8,598,786	\$8,360,902	\$7,820,129

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 are composed of 14 loans ranging in size from \$34.7 million to \$24.8 billion. At December 31, 2019, the three largest District Associations represented 70.0 percent of wholesale loans and 63.4 percent of total loans. No other wholesale loan was greater than 10 percent of total loans. The loans of our 10 largest retail customers (excluding OFIs) at December 31, 2019 totaled \$300.2 million, or 3.3% percent of our retail portfolio and 0.3% percent of our total portfolio.

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:

- Acceptable - 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.
- Other Assets Especially Mentioned (Special Mention) - 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
- Doubtful - 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, 2019	Acceptable		Special mention		Substandard/Doubtful		Total	
Wholesale loans	\$88,445,340	98.7 %	\$1,189,927	1.3 %	\$—	— %	\$89,635,267	100.0 %
Retail loans:								
Real estate mortgage	2,810,434	88.7 %	136,260	4.3 %	222,573	7.0 %	3,169,267	100.0 %
Production and intermediate-term	4,879,008	90.5 %	210,817	3.9 %	301,125	5.6 %	5,390,950	100.0 %
Loans to OFIs	580,093	91.4 %	54,624	8.6 %	—	— %	634,717	100.0 %
Other	166,591	96.9 %	613	0.4 %	4,611	2.7 %	171,815	100.0 %
Total retail loans	8,436,126	90.1 %	402,314	4.3 %	528,309	5.6 %	9,366,749	100.0 %
Total loans	\$96,881,466	97.9 %	\$1,592,241	1.6 %	\$528,309	0.5 %	\$99,002,016	100.0 %

(in thousands)

As of December 31, 2018	Acceptable		Special mention		Substandard/Doubtful		Total	
Wholesale loans	\$83,296,237	98.7 %	\$1,068,364	1.3 %	\$—	— %	\$84,364,601	100.0 %
Retail loans:								
Real estate mortgage	3,295,294	92.8 %	124,113	3.5 %	130,336	3.7 %	3,549,743	100.0 %
Production and intermediate-term	4,313,582	90.0 %	149,625	3.1 %	331,225	6.9 %	4,794,432	100.0 %
Loans to OFIs	453,415	82.0 %	99,318	18.0 %	—	— %	552,733	100.0 %
Other	134,131	96.4 %	275	0.2 %	4,774	3.4 %	139,180	100.0 %
Total retail loans	8,196,422	90.7 %	373,331	4.1 %	466,335	5.2 %	9,036,088	100.0 %
Total loans	\$91,492,659	98.0 %	\$1,441,695	1.5 %	\$466,335	0.5 %	\$93,400,689	100.0 %

(in thousands)

As of December 31, 2017	Acceptable		Special mention		Substandard/Doubtful		Total	
Wholesale loans	\$80,374,997	100.0 %	\$—	— %	\$—	— %	\$80,374,997	100.0 %
Retail loans:								
Real estate mortgage	3,752,062	94.5 %	110,032	2.7 %	110,385	2.8 %	3,972,479	100.0 %
Production and intermediate-term	3,574,347	95.0 %	82,960	2.2 %	105,227	2.8 %	3,762,534	100.0 %
Loans to OFIs	596,520	100.0 %	—	— %	—	— %	596,520	100.0 %
Other	141,723	96.2 %	543	0.4 %	5,090	3.4 %	147,356	100.0 %
Total retail loans	8,064,652	95.1 %	193,535	2.3 %	220,702	2.6 %	8,478,889	100.0 %
Total loans	\$88,439,649	99.5 %	\$193,535	0.2 %	\$220,702	0.3 %	\$88,853,886	100.0 %

Note: Accruing loans include accrued interest receivable.

We had no loans categorized as Loss at December 31, 2019, 2018 or 2017.

Aging Analysis of Loans

(in thousands)	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
As of December 31, 2019											
Wholesale loans	\$—		\$—		\$—		\$89,635,267		\$89,635,267		\$—
Retail loans:											
Real estate mortgage	16,636		6,584		23,220		3,146,047		3,169,267		—
Production and intermediate-term	58,582		17,128		75,710		5,315,240		5,390,950		2,951
Loans to OFIs	—		—		—		634,717		634,717		—
Other	495		29		524		171,291		171,815		—
Total retail loans	75,713		23,741		99,454		9,267,295		9,366,749		2,951
Total loans	\$75,713		\$23,741		\$99,454		\$98,902,562		\$99,002,016		\$2,951

(in thousands)	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
As of December 31, 2018											
Wholesale loans	\$—		\$—		\$—		\$84,364,601		\$84,364,601		\$—
Retail loans:											
Real estate mortgage	9,847		6,229		16,076		3,533,667		3,549,743		—
Production and intermediate-term	42,741		15,191		57,932		4,736,500		4,794,432		863
Loans to OFIs	—		—		—		552,733		552,733		—
Other	362		—		362		138,818		139,180		—
Total retail loans	52,950		21,420		74,370		8,961,718		9,036,088		863
Total loans	\$52,950		\$21,420		\$74,370		\$93,326,319		\$93,400,689		\$863

(in thousands)						
As of December 31, 2017	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	\$—	\$—	\$—	\$80,374,997	\$80,374,997	\$—
Retail loans:						
Real estate mortgage	7,482	6,046	13,528	3,958,951	3,972,479	—
Production and intermediate-term	21,953	10,718	32,671	3,729,863	3,762,534	8
Loans to OFIs	—	—	—	596,520	596,520	—
Other	597	26	623	146,733	147,356	—
Total retail loans	30,032	16,790	46,822	8,432,067	8,478,889	8
Total loans	\$30,032	\$16,790	\$46,822	\$88,807,064	\$88,853,886	\$8

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,	2019	2018	2017
Nonaccrual loans:			
Current as to principal and interest	\$32,364	\$28,033	\$32,455
Past due	25,408	26,114	20,583
Total nonaccrual loans	57,772	54,147	53,038
Accruing restructured loans	3,969	3,819	4,588
Accruing loans 90 days or more past due	2,951	863	8
Total risk loans	\$64,692	\$58,829	\$57,634
Volume with specific reserves	\$33,756	\$32,648	\$30,075
Volume without specific reserves	30,936	26,181	27,559
Total risk loans	\$64,692	\$58,829	\$57,634
Specific reserves	\$5,065	\$6,911	\$5,052

Note: Accruing loans include accrued interest receivable.

For the year ended December 31,	2019	2018	2017
Income on accrual risk loans	\$1,183	\$242	\$267
Income on nonaccrual loans	10,235	4,569	3,800
Total income on risk loans	\$11,418	\$4,811	\$4,067
Average risk loans	\$78,090	\$60,227	\$58,958

Risk Loans by Type

(in thousands)

As of December 31,	2019	2018	2017
Nonaccrual loans:			
Real estate mortgage	\$15,421	\$16,293	\$18,491
Production and intermediate-term	42,291	37,819	34,483
Other	60	35	64
Total nonaccrual loans	\$57,772	\$54,147	\$53,038
Accruing restructured loans:			
Real estate mortgage	\$3,927	\$3,819	\$4,588
Production and intermediate-term	42	—	—
Total accruing restructured loans	\$3,969	\$3,819	\$4,588
Accruing loans 90 days or more past due:			
Production and intermediate-term	\$2,951	\$863	\$8
Total accruing loans 90 days or more past due	\$2,951	\$863	\$8
Total risk loans	\$64,692	\$58,829	\$57,634

Note: Accruing loans include accrued interest receivable.

Nonaccrual loans represented 0.1 percent of total loans at December 31, 2019, of which 56 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, 2019, 2018 or 2017.

All risk loans are considered to be impaired loans.

Additional Impaired Loan Information by Loan Type

(in thousands)	As of December 31, 2019			For the year ended December 31, 2019	
	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	\$2,410	\$2,953	\$851	\$2,551	\$—
Production and intermediate-term	31,314	33,551	4,201	30,804	—
Other	32	40	13	32	—
Total	\$33,756	\$36,544	\$5,065	\$33,387	\$—
Impaired loans with no related allowance for loan losses:					
Real estate mortgage	\$16,938	\$27,067	\$—	\$17,932	\$7,117
Production and intermediate-term	13,970	33,139	—	26,752	4,301
Other	28	124	—	19	—
Total	\$30,936	\$60,330	\$—	\$44,703	\$11,418
Total impaired loans:					
Real estate mortgage	\$19,348	\$30,020	\$851	\$20,483	\$7,117
Production and intermediate-term	45,284	66,690	4,201	57,556	4,301
Other	60	164	13	51	—
Total	\$64,692	\$96,874	\$5,065	\$78,090	\$11,418

(in thousands)	As of December 31, 2018			For the year ended December 31, 2018	
	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	\$2,740	\$3,101	\$743	\$3,085	\$—
Production and intermediate-term	29,873	31,634	6,152	28,972	—
Other	35	41	16	51	—
Total	\$32,648	\$34,776	\$6,911	\$32,108	\$—
Impaired loans with no related allowance for loan losses:					
Real estate mortgage	\$17,372	\$28,148	\$—	\$19,561	\$3,624
Production and intermediate-term	8,809	27,220	—	8,543	1,186
Other	—	177	—	15	1
Total	\$26,181	\$55,545	\$—	\$28,119	\$4,811
Total impaired loans:					
Real estate mortgage	\$20,112	\$31,249	\$743	\$22,646	\$3,624
Production and intermediate-term	38,682	58,854	6,152	37,515	1,186
Other	35	218	16	66	1
Total	\$58,829	\$90,321	\$6,911	\$60,227	\$4,811

(in thousands)	As of December 31, 2017			For the year ended December 31, 2017	
	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	\$2,752	\$3,193	\$747	\$3,167	\$—
Production and intermediate-term	27,285	28,298	4,286	25,401	—
Other	38	42	19	40	—
Total	<u>\$30,075</u>	<u>\$31,533</u>	<u>\$5,052</u>	<u>\$28,608</u>	<u>\$—</u>
Impaired loans with no related allowance for loan losses:					
Real estate mortgage	\$20,327	\$36,221	\$—	\$23,399	\$2,918
Production and intermediate-term	7,206	7,093	—	6,709	1,149
Other	26	214	—	242	—
Total	<u>\$27,559</u>	<u>43,528</u>	<u>\$—</u>	<u>\$30,350</u>	<u>\$4,067</u>
Total impaired loans:					
Real estate mortgage	\$23,079	\$39,414	\$747	\$26,566	\$2,918
Production and intermediate-term	34,491	35,391	4,286	32,110	1,149
Other	64	256	19	282	—
Total	<u>\$57,634</u>	<u>\$75,061</u>	<u>\$5,052</u>	<u>\$58,958</u>	<u>\$4,067</u>

⁽¹⁾The recorded investment in the receivable is the face amount increased or decreased by applicable accrued interest and unamortized premium, discount, finance charges and acquisition costs and may also reflect a previous direct write-down of the investment. The recorded investment may be less than the unpaid principal balance as payments on non-cash basis nonaccrual loans reduce the recorded 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, 2019.

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, 2019, 2018 or 2017. We did not have material loan commitments to lend additional money to borrowers whose loans have been modified in a TDR at December 31, 2019.

Allowance for Loan Losses

Changes in Allowance for Loan Losses

(in thousands)

For the year ended December 31,	2019	2018	2017
Balance at beginning of period	\$25,571	\$26,047	\$21,282
Provision for loan losses	11,500	5,500	8,500
Charge-offs	(6,775)	(7,112)	(4,988)
Recoveries	1,793	1,136	1,253
Balance at end of period	\$32,089	\$25,571	\$26,047

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

(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, 2018	\$—	\$2,093	\$22,724	\$474	\$280	\$25,571
Provision for (reversal of) loan losses	—	(290)	11,638	(70)	222	11,500
Charge-offs	—	(22)	(6,751)	—	(2)	(6,775)
Recoveries	—	211	1,576	—	6	1,793
Balance as of December 31, 2019	\$—	\$1,992	\$29,187	\$404	\$506	\$32,089
As of December 31, 2019						
Ending balance: individually evaluated for impairment	\$—	\$851	\$4,201	\$—	\$13	\$5,065
Ending balance: collectively evaluated for impairment	\$—	\$1,141	\$24,986	\$404	\$493	\$27,024
Recorded investments in loans outstanding:						
Ending balance as of December 31, 2019	\$89,635,267	\$3,169,267	\$5,390,950	\$634,717	\$171,815	\$99,002,016
Ending balance for loans individually evaluated for impairment	\$89,635,267	\$19,348	\$45,284	\$—	\$60	\$89,699,959
Ending balance for loans collectively evaluated for impairment	\$—	\$3,149,919	\$5,345,666	\$634,717	\$171,755	\$9,302,057

(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, 2017	\$—	\$2,298	\$22,711	\$425	\$613	\$26,047
Provision for (reversal of) loan losses	—	(754)	6,553	49	(348)	5,500
Charge-offs	—	(118)	(6,992)	—	(2)	(7,112)
Recoveries	—	667	452	—	17	1,136
Balance as of December 31, 2018	\$—	\$2,093	\$22,724	\$474	\$280	\$25,571
As of December 31, 2018						
Ending balance: individually evaluated for impairment	\$—	\$743	\$6,152	\$—	\$16	\$6,911
Ending balance: collectively evaluated for impairment	\$—	\$1,350	\$16,572	\$474	\$264	\$18,660
Recorded investments in loans outstanding:						
Ending balance as of December 31, 2018	\$84,364,601	\$3,549,743	\$4,794,432	\$552,733	\$139,180	\$93,400,689
Ending balance for loans individually evaluated for impairment	\$84,364,601	\$20,112	\$38,682	\$—	\$35	\$84,423,430
Ending balance for loans collectively evaluated for impairment	\$—	\$3,529,631	\$4,755,750	\$552,733	\$139,145	\$8,977,259

(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, 2016	\$—	\$1,874	\$18,930	\$220	\$258	\$21,282
Provision for (reversal of) loan losses	—	1,515	6,424	205	356	8,500
Charge-offs	—	(1,104)	(3,874)	—	(10)	(4,988)
Recoveries	—	13	1,231	—	9	1,253
Balance as of December 31, 2017	\$—	\$2,298	\$22,711	\$425	\$613	\$26,047
At December 31, 2017						
Ending balance: individually evaluated for impairment	\$—	\$747	\$4,286	\$—	\$19	\$5,052
Ending balance: collectively evaluated for impairment	\$—	\$1,551	\$18,425	\$425	\$594	\$20,995
Recorded investments in loans outstanding:						
Ending balance at December 31, 2017	\$80,374,997	\$3,972,479	\$3,762,534	\$596,520	\$147,356	\$88,853,886
Ending balance for loans individually evaluated for impairment	\$80,374,997	\$23,079	\$34,491	\$—	\$64	\$80,432,631
Ending balance for loans collectively evaluated for impairment	\$—	\$3,949,400	\$3,728,043	\$596,520	\$147,292	\$8,421,255

Note: Accruing loans include accrued interest receivable.

NOTE 4

Investment Securities

All investment securities are classified as AFS.

AFS Investment Securities

(in thousands)

As of December 31, 2019	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Weighted Average Yield
Mortgage-backed securities	\$5,063,806	\$9,162	\$28,508	\$5,044,460	2.4%
Commercial paper and other	5,849,521	660	39	5,850,142	1.9%
U.S. Treasury securities	2,800,780	16,833	1,413	2,816,200	2.3%
Asset-backed securities	652,041	5,493	178	657,356	2.9%
Total	<u>\$14,366,148</u>	<u>\$32,148</u>	<u>\$30,138</u>	<u>\$14,368,158</u>	2.3%

(in thousands)

As of December 31, 2018	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Weighted Average Yield
Mortgage-backed securities	\$5,680,151	\$7,596	\$79,635	\$5,608,112	2.2%
Commercial paper and other	5,342,331	289	449	5,342,171	2.7%
U.S. Treasury securities	2,834,099	1,014	12,474	2,822,639	1.5%
Asset-backed securities	224,021	840	41	224,820	3.1%
Total	<u>\$14,080,602</u>	<u>\$9,739</u>	<u>\$92,599</u>	<u>\$13,997,742</u>	2.2%

(in thousands)

As of December 31, 2017	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Weighted Average Yield
Mortgage-backed securities	\$6,077,973	\$8,670	\$65,508	\$6,021,135	1.6%
Commercial paper and other	5,221,146	169	637	5,220,678	1.6%
U.S. Treasury securities	2,934,886	3	17,489	2,917,400	1.2%
Asset-backed securities	227,636	—	394	227,242	1.3%
Total	<u>\$14,461,641</u>	<u>\$8,842</u>	<u>\$84,028</u>	<u>\$14,386,455</u>	1.5%

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

As of December 31, 2019, 2018 and 2017, we had no investment securities or federal funds pledged as collateral.

Contractual Maturities of AFS Investment Securities

(in thousands)	Year of Maturity				Total
	One Year or Less	One to Five Years	Five to Ten Years	More Than Ten Years	
As of December 31, 2019					
Mortgage-backed securities	\$6	\$28,172	\$764,807	\$4,251,475	\$5,044,460
Commercial paper and other	5,850,142	—	—	—	5,850,142
U.S. Treasury securities	1,266,954	1,549,246	—	—	2,816,200
Asset-backed securities	—	657,356	—	—	657,356
Total	\$7,117,102	\$2,234,774	\$764,807	\$4,251,475	\$14,368,158
Weighted average yield	2.2 %	2.4 %	2.0 %	2.4 %	2.3 %

Expected maturities differ from contractual maturities because borrowers may have the right to prepay these obligations. The remaining expected average life is 1.4 years for asset-backed securities (ABS) and 3.2 years for mortgage-backed securities (MBS) at December 31, 2019.

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:

(in thousands)	Less than 12 months		More than 12 months	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
As of December 31, 2019				
Mortgage-backed securities	\$1,566,035	\$6,190	\$2,417,078	\$22,318
Commercial paper and other	1,121,444	39	—	—
U.S. Treasury securities	259,634	1,352	115,095	61
Asset-backed securities	137,660	178	—	—
Total	\$3,084,773	\$7,759	\$2,532,173	\$22,379

(in thousands)	Less than 12 months		More than 12 months	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
As of December 31, 2018				
Mortgage-backed securities	\$977,756	\$2,424	\$3,199,680	\$77,211
Commercial paper and other	3,040,106	449	—	—
U.S. Treasury securities	562,322	1,386	1,689,148	11,088
Asset-backed securities	17,969	31	9,035	10
Total	\$4,598,153	\$4,290	\$4,897,863	\$88,309

(in thousands)	Less than 12 months		More than 12 months	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
As of December 31, 2017				
Mortgage-backed securities	\$1,654,394	\$13,301	\$2,615,875	\$52,207
Commercial paper and other	3,589,901	637	—	—
U.S. Treasury securities	725,349	3,524	2,167,019	13,965
Asset-backed securities	166,823	313	60,418	81
Total	\$6,136,467	\$17,775	\$4,843,312	\$66,253

AgriBank sold no AFS investment securities during the years ended December 31, 2019, 2018 and 2017.

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, 2019, 2018 or 2017. There was no OTTI activity during the years ended December 31, 2019, 2018 and 2017. 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 discussion).

AgriBank's Participation in Systemwide Bonds and Notes

(in thousands)

As of December 31,	2019	2018	2017
Systemwide obligations:			
Bonds	\$105,088,542	\$99,921,783	\$95,179,771
Discount notes	2,030,416	2,259,381	2,114,210
Member investment bonds	1,207,874	942,180	1,019,963
Total	<u>\$108,326,832</u>	<u>\$103,123,344</u>	<u>\$98,313,944</u>

Maturities and Weighted Average Interest Rate of Bonds and Notes

(in thousands)

As of December 31, 2019	Systemwide Obligations				Member Investment Bonds		Total	
	Bonds		Discount Notes					
Year of maturity	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate
2020	\$31,066,096	2.1 %	\$2,030,416	1.9 %	\$1,207,874	1.0 %	\$34,304,386	2.1 %
2021	31,296,322	2.1 %	—	— %	—	— %	31,296,322	2.1 %
2022	11,751,265	2.1 %	—	— %	—	— %	11,751,265	2.1 %
2023	6,175,257	2.2 %	—	— %	—	— %	6,175,257	2.2 %
2024	5,038,576	2.2 %	—	— %	—	— %	5,038,576	2.2 %
2025 and thereafter	19,761,026	3.1 %	—	— %	—	— %	19,761,026	3.1 %
Total	<u>\$105,088,542</u>	2.3 %	<u>\$2,030,416</u>	1.9 %	<u>\$1,207,874</u>	1.0 %	<u>\$108,326,832</u>	2.3 %

Discount notes are issued with maturities ranging from one to 365 days. The average maturity of discount notes at December 31, 2019 was 103 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)		
As of December 31, 2019	Maturing Amount	Callable Amount
Year of maturity / next call:		
2020	\$4,357	\$33,905
2021	3,665	2,092
2022	5,557	1,152
2023	3,933	699
2024	3,646	1,182
2025	1,703	—
2026	2,143	—
Thereafter	14,026	—
Total	\$39,030	\$39,030

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, 2019, 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, 2019, the assets of the Insurance Fund were \$5.2 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

(in thousands)	2019		2018		2017	
	Amount	Weighted average interest rate	Amount	Weighted average interest rate	Amount	Weighted average interest rate
Systemwide discount notes:						
Outstanding as of December 31	\$2,030,416	1.9 %	\$2,259,381	2.3 %	\$2,114,210	1.2 %
Average during year	2,284,259	2.3 %	2,246,455	1.8 %	4,010,399	0.9 %
Maximum month-end balance during the year	3,009,897		2,819,647		5,915,833	
Systemwide bonds ⁽¹⁾ :						
Outstanding as of December 31	1,021,329	2.6 %	318,214	1.7 %	112,944	1.6 %
Average during year	821,985	2.6 %	194,508	1.5 %	748,120	1.0 %
Maximum month-end balance during the year	1,044,007		318,214		1,494,637	

⁽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) As of December 31,	Number of Shares Outstanding		
	2019	2018	2017
Series A Preferred Stock	2,500,000	2,500,000	2,500,000
Class F Common Stock	34,177,692	6,346,492	1,887,920
Class P Common Stock	534,274,397	498,395,518	461,505,087
Series A Participation Certificates	5,865,306	5,438,802	5,701,896
Protected Series C Participation Certificates	36,100	36,100	36,100

Perpetual Preferred Stock

We have an authorized class of preferred stock that may be issued to investors in accordance with applicable rules of offering. This stock is non-voting and may bear dividends. There are 8 million shares authorized at \$100 per share. Our board has approved the issuance of up to \$400 million of preferred stock, for which we also received approval from District Associations, OFIs and the FCA.

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. If LIBOR is not readily available at this time, a new three-month rate will be determined as outlined in the preferred stock documentation.

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 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, 2019, 2018 or 2017.

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 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, 2019, 2018 or 2017.

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 \$181 thousand as of December 31, 2019, 2018 and 2017 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

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) with an additional amount required on association growth in excess of a targeted growth rate, if the District is also growing above a targeted growth rate. The 2019 requirements were 2.25 percent on average loan balances/commitments, plus an additional 3.00 percent on increases in loans/commitments that exceeded 7.5 percent, if the District is growing at a rate above 5.5 percent. Additionally, pool programs are typically capitalized at a higher rate that is mutually agreed upon in the pool agreements. The 2020 requirements are 2.50 percent on average loan balances/commitments, plus an additional 3.00 percent on increases in loans/commitments that exceed 7.83 percent, if the District is growing at a rate above 5.83 percent.

Certain District Associations entered into contractual agreements with AgriBank whereby their required investments in AgriBank were reduced and, in return, these District Associations agreed to pay an additional spread on a portion of their wholesale loan equal to the reduction in their required investment. The additional spread compensated us for the cost of third-party capital, including issuance costs. These contracts were effective from January 2014 through June 2017.

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, 2019.

Regulatory Capital Requirements and Ratios

As of December 31,	2019	2018	2017	Regulatory Minimums	Capital Conservation Buffer ⁽¹⁾	Total
Risk-adjusted:						
Common equity tier 1 capital ratio	17.1 %	17.7 %	18.2 %	4.5 %	2.5 %	7.0 %
Tier 1 capital ratio	17.8 %	18.5 %	19.0 %	6.0 %	2.5 %	8.5 %
Total capital ratio	17.9 %	18.6 %	19.1 %	8.0 %	2.5 %	10.5 %
Permanent capital ratio	17.8 %	18.5 %	19.0 %	7.0 %	0.0 %	7.0 %
Non-risk-adjusted:						
Tier 1 leverage ratio	5.5 %	5.5 %	5.6 %	4.0 %	1.0 %	5.0 %
UREE ⁽²⁾ leverage ratio	3.0 %	3.0 %	3.2 %	1.5 %	0.0 %	1.5 %

⁽¹⁾ The 2.5% capital conservation buffer over risk-adjusted ratio minimums was phased in over three years under the FCA capital requirements. The phase in period ended on December 31, 2019.

⁽²⁾ 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 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 7 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 risk-adjusted 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 ratio 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.

FCA regulations require System Banks and Associations to agree upon a plan for allocating the Associations' investments in System Banks for calculation of the permanent capital ratio. Our agreement with District Associations is, generally, each District Association would count in its permanent capital ratio any excess allocated investment over that required by AgriBank unless there is a specific agreement to count the investment differently. With the exception of the permanent capital ratio, there are no allotment agreements allowed for regulatory capital ratios; therefore, the capital was counted by the institution where the capital stock resides.

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 \$381.4 million, \$556.6 million and \$507.9 million for the years ended December 31, 2019, 2018 and 2017, respectively. Stock patronage totaled \$228.2 million for the year ended December 31, 2019. No stock patronage was issued during the years ended December 31, 2018 or 2017. We declare 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 \$148 thousand and \$191 thousand for the years ended

December 31, 2019 and 2018, respectively. No patronage was declared as allocated retained earnings for the year ended December 31, 2017.

We declared \$17.2 million of non-cumulative perpetual preferred stock dividends during each year ended December 31, 2019, 2018 and 2017. 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. 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.

AgriBank District Retirement Plan Information

(in thousands)

As of December 31,	2019	2018	2017
Unfunded liability	\$220,794	\$274,450	\$352,515
Projected benefit obligation	1,421,126	1,272,063	1,371,012
Fair value of plan assets	1,200,332	997,613	1,018,497
Accumulated benefit obligation	1,298,942	1,125,682	1,184,550
For the year ended December 31,	2019	2018	2017
Total plan expense	\$36,636	\$51,900	\$44,706
Our allocated share of plan expenses	2,960	4,312	3,734
Contributions by participating employers	90,000	90,000	90,000
Our allocated share of contributions	8,619	8,274	8,584

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 \$68.8 million in 2019. 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 2020 is \$90.0 million. Our allocated share of these pension contributions is expected to be \$7.3 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.

AgriBank District Pension Restoration Plan Information

(in thousands)

As of December 31,	2019	2018	2017
Our unfunded liability	\$3,416	\$3,171	\$3,432
For the year ended December 31,	2019	2018	2017
Our allocated share of plan expenses	\$183	\$242	\$644
Our cash contributions	250	398	1,438

The amount of the pension benefits funding status is subject to many variables, including 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 participants in the plan. Our allocated share of the components of net periodic benefit cost other than the service cost component, are included in the line item “Other operating expenses” on the Statements of Comprehensive Income. Service costs related to the plan are included in the line item “Salaries and employee benefits” on the Statements of Comprehensive Income. The Pension Restoration Plan is unfunded, and we make annual contributions to fund benefits paid to our retirees covered by the plan. Our cash contributions were equal to the benefits paid.

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. Net periodic benefit cost is included in the line item “Salaries and employee benefits” on the Statements of Comprehensive Income. 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 contribution 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.

AgriBank District Obligations and Funded Status

(in thousands)

As of December 31,	Pension Benefits			Other Benefits		
	2019	2018	2017	2019	2018	2017
Change in benefit obligation:						
Benefit obligation at beginning of year	\$1,313,267	\$1,408,202	\$1,298,139	\$20,600	\$21,044	\$29,697
Service cost	25,169	30,278	28,460	217	265	434
Interest cost	51,724	46,429	46,938	783	672	1,025
Plan amendments	—	—	965	—	—	—
Actuarial loss (gain)	149,052	(99,430)	140,048	1,666	174	(8,674)
Benefits paid	(73,071)	(72,212)	(109,135)	(1,434)	(1,555)	(1,438)
Special termination benefits	—	—	2,787	—	—	—
Benefit obligation at end of year	\$1,466,141	\$1,313,267	\$1,408,202	\$21,832	\$20,600	\$21,044
Change in plan assets:						
Fair value of plan assets at beginning of year	\$997,613	\$1,018,497	\$895,321	\$—	\$—	\$—
Actual return on plan assets	181,471	(42,287)	136,898	—	—	—
Employer contributions	94,319	93,615	95,413	1,434	1,555	1,438
Benefits, premiums and expenses paid	(73,071)	(72,212)	(109,135)	(1,434)	(1,555)	(1,438)
Fair value of plan assets at end of year	\$1,200,332	\$997,613	\$1,018,497	\$—	\$—	\$—
Unfunded liability	\$(265,809)	\$(315,654)	\$(389,705)	\$(21,832)	\$(20,600)	\$(21,044)
Accumulated benefit obligation	\$1,337,665	\$1,158,897	\$1,214,394	n/a	n/a	n/a

(in thousands)

As of December 31,	Pension Benefits			Other Benefits		
	2019	2018	2017	2019	2018	2017
Amounts recognized in the District Statements of Condition consist of:						
Pension liabilities	\$265,809	\$315,654	\$389,705	\$21,832	\$20,600	\$21,044
Net loss (gain)	\$507,887	\$508,289	\$549,140	\$(10,299)	\$(13,483)	\$(15,368)
Prior service credit	(19,008)	(21,905)	(25,521)	—	—	—
Total recognized in accumulated other comprehensive loss (income)	\$488,879	\$486,384	\$523,619	\$(10,299)	\$(13,483)	\$(15,368)
Weighted-average assumptions used to determine benefit obligations:						
Discount rate	3.26 %	4.38 %	3.70 %	3.21 %	4.34 %	3.68 %
Rate of compensation increase ⁽¹⁾	6.75 %	5.25 %	5.25 %	n/a	n/a	n/a

⁽¹⁾ Beginning in 2019, the rate of compensation increase for the pension benefits was modified to an age-based scale beginning at 6.75%, decreasing ultimately to 3.50%

District Components of Net Periodic Benefit Cost

(in thousands)

For the year ended December 31,	Pension Benefits			Other Benefits		
	2019	2018	2017	2019	2018	2017
Net periodic benefit cost:						
Service cost	\$25,169	\$30,278	\$28,460	\$217	\$265	\$434
Interest cost	51,724	46,429	46,938	783	672	1,025
Expected return on plan assets	(68,672)	(65,659)	(61,943)	—	—	—
Amortization of prior service credit	(2,897)	(3,616)	(2,924)	—	—	(384)
Amortization of net loss (gain)	36,654	49,367	39,297	(1,518)	(1,711)	(536)
Settlements and termination benefits	—	—	3,238	—	—	—
Net periodic benefit cost	\$41,978	\$56,799	\$53,066	\$(518)	\$(774)	\$539
Other changes in plan assets and benefit obligations recognized in other comprehensive income:						
Net loss (gain)	\$36,252	\$8,516	\$65,090	\$1,666	\$174	\$(8,701)
Prior service cost	—	—	965	—	—	—
Amortization of prior service credit	2,897	3,616	2,924	—	—	384
Amortization of net (loss) gain	(36,654)	(49,367)	(39,748)	1,518	1,711	536
Total recognized in other comprehensive income	\$2,495	\$(37,235)	\$29,231	\$3,184	\$1,885	\$(7,781)
Total recognized in net periodic benefit cost and other comprehensive income	\$44,473	\$19,564	\$82,297	\$2,666	\$1,111	\$(7,242)
Weighted-average assumptions used to determine net costs:						
Discount rate:						
Projected benefit obligation	4.38 %	3.70 %	4.25 %	4.34 %	3.68 %	4.24 %
Service cost	4.47 %	3.78 %	4.40 %	4.56 %	3.86 %	4.55 %
Interest cost	4.08 %	3.40 %	3.72 %	3.95 %	3.29 %	3.57 %
Expected return on plan assets	6.50 %	6.75 %	6.75 %	n/a	n/a	n/a
Rate of compensation increase	5.25 %	5.25 %	5.25 %	n/a	n/a	n/a

The estimated net loss and prior service credit for the Pension Benefits plans that will be amortized from District accumulated other comprehensive income into net periodic benefit cost over the next year is an expense of \$47.8 million. The estimated net gain for the Other Benefits plans that will be amortized from District accumulated other comprehensive income into net periodic benefit cost over the next year is income of \$1.2 million.

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 period 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, 2019.

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 2019. The assumption updates made as a result of the study did not have a material impact on the District pension plans.

The expected long-term rate of return 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-percentage-point 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 2020 is \$95.0 million for Pension Benefits and \$1.5 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)		
As of December 31, 2019	Pension Benefits	Other Benefits
Year:		
2020	\$83,130	\$1,455
2021	95,480	1,463
2022	87,160	1,456
2023	88,580	1,443
2024	89,880	1,426
2025 to 2029	453,440	6,693

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:

- A return-seeking portfolio that is invested in a diversified set of assets designed to deliver performance in excess of the underlying liability growth rate coupled with diversification controls regarding the level of risk. Equity exposures are expected to be the primary drivers of excess returns, but also introduce the greatest level of volatility of returns. Accordingly, the return-seeking 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 in both passively and actively managed strategies. 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:

- Multi-asset credit: fixed income portfolio of securities below investment grade including up to 30 percent of the portfolio in non-U.S. issuers; also invested in emerging market debt and bank loans
- Global real estate: portfolio of diversified real estate investment trusts and private direct real estate
- Hedge fund of funds: multi-manager strategy that employs non-directional hedge funds that have low correlation to public equity movements
- Private credit: multi-manager strategy of private debt managers
- Insurance-linked securities: investment structures that fund insurance companies for catastrophic losses

These portfolios combine income generation and capital appreciation opportunities from developed markets globally. Other investment strategies may be employed to gain certain market exposures, reduce portfolio risk and to further diversify portfolio assets.

- A liability hedging portfolio that is primarily invested in intermediate-term and long-term investment grade corporate bonds in actively managed strategies that are intended to hedge interest rate risk. The portfolio will progressively increase in size as the plan's funded ratio improves. The use of selected portfolio strategies incorporating derivatives may be employed to improve the liability hedging characteristics or reduce risk. Finally, there is a managed liquidity portfolio that is composed of short-term assets intended to pay periodic plan benefits and expenses.

Portfolios are measured and monitored daily to ensure compliance with the investment policy. Tactical tilts will be employed based on medium term views and capital market assumptions, but will remain within stated policy ranges. For 2020, the asset allocation policy of the pension plan provides a target of 63 percent of assets in return seeking investments and 37 percent of assets in liability hedging investments, but may be adjusted as plan funded status improves. Return seeking assets will decline and liability hedging assets increase. Return seeking investments include: global equity securities, global real estate investment trust securities, hedge funds, and high-yield bonds; and liability-hedging investments include high quality credit debt securities.

AgriBank District Fair Value of Pension Plan Assets

(in thousands)

As of December 31, 2019	Fair Value Measurements			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash and cash equivalents	\$15,830	\$—	\$—	\$15,830
Mutual funds:				
International funds	—	268,989	—	268,989
Fixed income funds	—	439,705	—	439,705
Domestic funds	—	162,084	—	162,084
Bond funds	—	82,707	—	82,707
Other funds	—	—	47,701	47,701
Real estate equity funds	—	17,322	3,520	20,842
Investment insurance contracts	—	—	5,155	5,155
Total	\$15,830	\$970,807	\$56,376	\$1,043,013
Investments measured at net asset value ⁽¹⁾				157,319
Total assets at fair value				\$1,200,332

(in thousands)

As of December 31, 2018	Fair Value Measurements			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash and cash equivalents	\$36,754	\$—	\$—	\$36,754
Mutual funds:				
International funds	—	227,489	—	227,489
Fixed income funds	—	306,734	—	306,734
Domestic funds	—	139,099	—	139,099
Bond funds	—	75,869	—	75,869
Other funds	—	—	36,394	36,394
Real estate equity funds	—	16,733	1,762	18,495
Investment insurance contracts	—	—	5,346	5,346
Total	\$36,754	\$765,924	\$43,502	\$846,180
Investments measured at net asset value ⁽¹⁾				151,433
Total assets at fair value				\$997,613

(in thousands) As of December 31, 2017	Fair Value Measurements			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash and cash equivalents	\$84,554	\$—	\$—	\$84,554
Mutual funds:				
International funds	—	279,832	—	279,832
Fixed income funds	—	221,846	—	221,846
Domestic funds	—	167,106	—	167,106
Bond funds	—	80,520	—	80,520
Real estate equity funds	—	26,503	2,165	28,668
Investment insurance contracts	—	—	5,593	5,593
Total	\$84,554	\$775,807	\$7,758	\$868,119
Investments measured at net asset value ⁽¹⁾				150,378
Total assets at fair value				\$1,018,497

⁽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.

Fair Value Measurements using Level 3

	Other Funds	Investment Insurance Contracts	Real Estate Equity Funds
As of December 31, 2016	\$—	\$5,917	\$—
Actual return on plan assets:			
Still held at the reporting date	—	95	491
Purchases	—	—	1,674
Sales	—	(419)	—
As of December 31, 2017	\$—	\$5,593	\$2,165
Actual return on plan assets:			
Still held at the reporting date	(3,025)	90	(1,490)
Purchases	43,579	—	1,087
Sales	(4,160)	(337)	—
As of December 31, 2018	\$36,394	\$5,346	\$1,762
Actual return on plan assets:			
Still held at the reporting date	(3,930)	87	(218)
Purchases	15,237	—	1,976
Sales	—	(278)	—
As of December 31, 2019	\$47,701	\$5,155	\$3,520

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 Note 11 for a complete description of fair value measurements.

NOTE 8

Related Party Transactions

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

We also purchase participations from District entities. At December 31, 2019, we had \$8.4 billion of such loan participations purchased.

We pay compensation within the District for servicing loans and loan participations. We paid \$50.1 million, \$40.4 million and \$37.2 million in 2019, 2018 and 2017, respectively, to District Associations and related entities.

Interest income recognized on District Associations' wholesale loans was \$2.3 billion, \$2.0 billion and \$1.6 billion during 2019, 2018 and 2017, respectively. In addition, we recorded fees of \$24.9 million, \$9.6 million and \$6.1 million during 2019, 2018 and 2017, respectively, representing fees assessed on funding District Associations' wholesale loans.

We provide certain services to District entities, which may include financial, technology, insurance and internal audit services. Total business services income recorded from District Associations totaled \$22.2 million, \$21.9 million and \$19.2 million during 2019, 2018 and 2017, respectively.

We, along with other System entities, collectively own Foundations. Our investment in Foundations was \$25.0 thousand at December 31, 2019, 2018 and 2017, respectively. We purchase human resource information systems, benefit, payroll, and workforce management services from Foundations. Foundations subleases office space and purchases various business services from us.

Refer to Note 14 for additional information regarding the formation of SunStream Business Services, a service entity, effective April 1, 2020.

Elected members of our board are District Association borrowers. We have no direct lending relationships with any of our board of directors or senior officers. 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 and senior officers at December 31, 2019, 2018, or 2017. 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.

On November 11, 2016, Diverse Partners, LP (“Diverse”) served AgriBank with an alleged class action lawsuit (“Lawsuit”). Diverse purported to be the beneficial owner of some of the previously issued and redeemed 9.125% Subordinated Notes (“Notes”). The Lawsuit was filed in New York state court. AgriBank removed the Lawsuit to federal court in the Southern District of New York. Diverse asserted a breach of contract claim and a breach of an implied covenant of good faith and fair dealing alleging that AgriBank impermissibly redeemed the Notes. Diverse requested damages in an amount to be determined at trial, reasonable attorneys’ fees, and other relief. On July 31, 2018, Diverse filed a second amended complaint adding Troy Bank & Trust (“Troy”) as a second named plaintiff (Diverse and Troy collectively “Plaintiffs”). Troy alleged the same claims against AgriBank as Diverse. On August 30, 2018, AgriBank filed an answer to the amended complaint. On February 1, 2019, Plaintiffs filed a motion to certify the class and appoint Plaintiffs as co-class representatives. On March 18, 2019, AgriBank filed a motion opposing Plaintiffs’ motion for class certification and appointment as class representatives. On September 11, 2019, the court issued an order denying Plaintiffs’ joint motion to certify a class action on behalf of all purchasers of the Notes and to appoint them as co-class representatives. On November 13, 2019, the court issued a scheduling order for a bench trial to start on June 1, 2020. We intend to vigorously defend against these allegations. As of the date of this report, the likelihood of any outcome of the Lawsuit cannot be determined.

Additionally, from time to time we may be named as defendants in certain 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, 2019 were \$293.5 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, 2019.

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, 2019.

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 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 as long as they are in compliance with conditions established in the contract. At December 31, 2019, AgriBank had various commitments, primarily to extend credit, totaling \$21.6 billion, of which \$19.2 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, 2019, we had issued standby letters of credit of \$92.0 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 discussion of 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:

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

	Source	Valuation Technique	Inputs
Federal Funds	Counterparty report	Cost approach	Principal plus accrued interest
Mortgage-backed securities	Third-party pricing service	Market approach	Benchmark yield curves Volatilities Market spreads Prepayment speeds Quoted prices
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
Asset-backed securities	Third-party pricing service	Market approach	Benchmark yield curves Volatilities Market spreads Prepayment speeds Quoted prices
U.S. Agencies	Third-party pricing service	Income approach	Benchmark yield curves Quoted prices Bid prices Trade prices, yields, spreads Other observable market information
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	LIBOR swap curves Volatilities Quoted prices
Derivative liabilities	Internally developed	Market approach	LIBOR swap curves Volatilities Quoted prices

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

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 matrix pricing. Level 2 inputs and assumptions related to third-party market valuation services are typically observable in the marketplace. Level 3 inputs are based on the relatively illiquid marketplace for some investments and the lack of marketplace information available for significant inputs and assumptions to the valuation process.

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.

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.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

(in thousands)	Fair Value Measurement Using			Total Fair
As of December 31, 2019	Level 1	Level 2	Level 3	Value
Assets:				
Federal funds	\$—	\$1,050,000	\$—	\$1,050,000
Investments available-for-sale:				
Mortgage-backed securities	—	5,044,460	—	5,044,460
Commercial paper and other	—	5,850,142	—	5,850,142
U.S. Treasury securities	—	2,816,200	—	2,816,200
Asset-backed securities	—	657,356	—	657,356
Total investments available-for-sale	—	14,368,158	—	14,368,158
Cash collateral posted with counterparties	48,488	—	—	48,488
Derivative assets	—	2,768	—	2,768
Total assets	\$48,488	\$15,420,926	\$—	\$15,469,414
Liabilities:				
Derivative liabilities	\$—	\$48,583	\$—	\$48,583
Total liabilities	\$—	\$48,583	\$—	\$48,583

(in thousands)	Fair Value Measurement Using			Total Fair
As of December 31, 2018	Level 1	Level 2	Level 3	Value
Assets:				
Federal funds	\$—	\$1,698,100	\$—	\$1,698,100
AgriBank investments available-for-sale:				
Mortgage-backed securities	—	5,608,112	—	5,608,112
Commercial paper and other	—	5,342,171	—	5,342,171
U.S. Treasury securities	—	2,822,639	—	2,822,639
Asset-backed securities	—	224,820	—	224,820
Total investments available-for-sale	—	13,997,742	—	13,997,742
Cash collateral posted with counterparties	24,198	—	—	24,198
Derivative assets	—	29,981	—	29,981
Total assets	\$24,198	\$15,725,823	\$—	\$15,750,021
Liabilities:				
Cash collateral posted by counterparties	\$5,231	\$—	\$—	\$5,231
Derivative liabilities	—	14,584	—	14,584
Total liabilities	\$5,231	\$14,584	\$—	\$19,815

(in thousands)	Fair Value Measurement Using			Total Fair
As of December 31, 2017	Level 1	Level 2	Level 3	Value
Assets:				
Federal funds	\$—	\$676,300	\$—	\$676,300
AgriBank investments available-for-sale:				
Mortgage-backed securities	—	6,021,135	—	6,021,135
Commercial paper and other	—	5,220,678	—	5,220,678
U.S. Treasury securities	—	2,917,400	—	2,917,400
Asset-backed securities	—	227,242	—	227,242
Total investments available-for-sale	—	14,386,455	—	14,386,455
Cash collateral posted with counterparties	29,730	—	—	29,730
Derivative assets	—	8,956	—	8,956
Total assets	\$29,730	\$15,071,711	\$—	\$15,101,441
Liabilities:				
Derivative liabilities	\$—	\$34,562	\$—	\$34,562
Total liabilities	\$—	\$34,562	\$—	\$34,562

There were no Level 3 assets measured at fair value on a recurring basis during the years ended December 31, 2019, 2018 and 2017.

Non-Recurring Measurements

The following represents a summary of the valuation techniques and inputs used to measure fair value on a non-recurring basis:

Impaired Loans: Represents the carrying amount of 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.

Assets Measured at Fair Value on a Non-recurring Basis

	As of December 31, 2019			
	Fair Value Measurement Using			Total Fair
(in thousands)	Level 1	Level 2	Level 3	Value
Impaired loans	\$—	\$—	\$30,125	\$30,125

	As of December 31, 2018			
	Fair Value Measurement Using			Total Fair
(in thousands)	Level 1	Level 2	Level 3	Value
Impaired loans	\$—	\$—	\$27,023	\$27,023

	As of December 31, 2017			
	Fair Value Measurement Using			Total Fair
(in thousands)	Level 1	Level 2	Level 3	Value
Impaired Loans	\$—	\$—	\$26,274	\$26,274

Other Financial Instrument Measurements

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

(in thousands)	Total Carrying Amount	Fair Value Measurement Using			Total Fair Value
		Level 1	Level 2	Level 3	
As of December 31, 2019					
Assets:					
Cash	\$675,780	\$675,780	\$—	\$—	\$675,780
Net loans	98,237,243	—	—	99,198,110	99,198,110
Total assets	\$98,913,023	\$675,780	\$—	\$99,198,110	\$99,873,890
Liabilities:					
Bonds and notes	\$108,326,832	\$—	\$—	\$108,833,328	\$108,833,328
Total liabilities	\$108,326,832	\$—	\$—	\$108,833,328	\$108,833,328
Unrecognized financial instruments:					
Commitments to extend credit and letters of credit		\$—	\$—	\$(1,199)	\$(1,199)

(in thousands)	Total Carrying Amount	Fair Value Measurement Using			Total Fair Value
As of December 31, 2018		Level 1	Level 2	Level 3	
Assets:					
Cash	\$545,875	\$545,875	\$—	\$—	\$545,875
Net loans	92,665,393	—	—	91,859,428	91,859,428
Total assets	\$93,211,268	\$545,875	\$—	\$91,859,428	\$92,405,303
Liabilities:					
Bonds and notes	\$103,123,344	\$—	\$—	\$102,061,474	\$102,061,474
Total liabilities	\$103,123,344	\$—	\$—	\$102,061,474	\$102,061,474
Unrecognized financial instruments:					
Commitments to extend credit and letters of credit		\$—	\$—	\$(1,333)	\$(1,333)

(in thousands)	Total Carrying Amount	Fair Value Measurement Using			Total Fair Value
As of December 31, 2017		Level 1	Level 2	Level 3	
Assets:					
Cash	\$469,599	\$469,599	\$—	\$—	\$469,599
Net loans	88,323,853	—	—	87,813,307	87,813,307
Total assets	\$88,793,452	\$469,599	\$—	\$87,813,307	\$88,282,906
Liabilities:					
Bonds and notes	\$98,313,944	\$—	\$—	\$97,834,887	\$97,834,887
Total liabilities	\$98,313,944	\$—	\$—	\$97,834,887	\$97,834,887
Unrecognized financial instruments:					
Commitments to extend credit and letters of credit		\$—	\$—	\$(27,991)	\$(27,991)

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 utilize commodity derivative instruments to manage mineral income volatility. We purchase commodity put options to protect against a decline in oil prices, which could significantly impact our mineral income.

Derivative Instruments Activity (notional amount)

(in millions)	Receive-Fixed Swaps	Pay-Fixed Swaps	Floating-for-Floating	Other Derivatives	Total
As of December 31, 2016	\$2,566	\$2,088	\$3,100	\$90	\$7,844
Additions	1,001	230	—	—	1,231
Maturities/amortization	(950)	(2)	(400)	(2)	(1,354)
As of December 31, 2017	\$2,617	\$2,316	\$2,700	\$88	\$7,721
Additions	250	78	—	8	336
Maturities/amortization	(945)	(52)	(200)	(2)	(1,199)
As of December 31, 2018	\$1,922	\$2,342	\$2,500	\$94	\$6,858
Additions	—	77	—	77	154
Maturities/amortization	(671)	(115)	(200)	(15)	(1,001)
As of December 31, 2019	\$1,251	\$2,304	\$2,300	\$156	\$6,011

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.

To minimize the risk of credit losses, for non-customer bilateral derivatives we deal only with 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, 2019, 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,	2019	2018	2017
Notional amount	\$3,431,357	\$3,669,654	\$4,313,360
Cash collateral posted with counterparties	\$19,300	\$5,250	\$11,150
Cash collateral posted by counterparties	—	(1,970)	—
Total collateral posted with counterparties, net	\$19,300	\$3,280	\$11,150

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. Beginning in 2018, contracts with certain CCPs changed the legal treatment of variation margin payments, which resulted in daily variation margin payments being recognized as settlements rather than collateral posted.

Centrally Cleared Derivatives

(in thousands)

As of December 31,	2019	2018	2017
Notional Amount	\$2,580,357	\$3,188,774	\$3,408,360
Initial margin posted with counterparties	\$27,612	\$18,948	\$18,580
Additional margin posted with (by) counterparties	1,576	(3,261)	—
Total margin posted with counterparties, net	\$29,188	\$15,687	\$18,580

All margin posted by or with counterparties was in cash. We had no securities posted by counterparties or to counterparties for any year presented.

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, 2019 and any collateral that we may be required to post related to these derivatives was \$76.2 million. In the event that we are downgraded, a tiered collateral posting would be activated which may require us to post collateral of up to \$30.8 million.

Accounting for Derivatives

Fair Value Hedges: For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative as well as the offsetting gain or loss on the hedged item attributable to the hedged risk are recognized in current earnings. Effective January 1, 2019, we include the gain or loss on the derivative in the same line item ("Interest expense") as the offsetting gain or loss on the related hedged item. Prior to the implementation of ASU 2017-12 "Targeted Improvements to Accounting for Hedging Activities" the gain or loss on derivatives representing hedge components excluded from the assessment of effectiveness were recorded in "Miscellaneous income and other non-interest (losses) gains, net" on the Statements of Comprehensive Income.

Cash Flow Hedges: For derivative instruments that are designated and qualify as a cash flow hedge, the gain or loss on the derivative is reported as a component of other comprehensive (loss) income, until earnings are affected by the variability of the cash flows of the hedged transaction. Effective January 1, 2019, 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. Prior to the implementation of ASU 2017-12 "Targeted Improvements to Accounting for Hedging Activities" the gain or loss on derivatives representing hedge components excluded from the assessment of effectiveness were recorded in "Miscellaneous income and other non-interest (losses) gains, net" on the Statements of Comprehensive Income.

Derivatives not Designated as Hedges: For derivatives not designated as a hedging instrument, the related change in fair value is recorded in current period earnings in "Miscellaneous income and other non-interest (losses) gains, net" on the Statements of Comprehensive Income.

Financial Statement Impact of Derivatives

The following tables present the gross fair value, offsetting and net exposure amounts of derivative assets and derivative liabilities. The fair value of our derivative contracts are presented as “Derivative assets” and “Derivative liabilities” on the Statements of Condition, and are presented net for counterparties with master netting agreements.

(in thousands) As of December 31,	2019		2018		2017	
	Fair Value Assets	Fair Value Liabilities	Fair Value Assets	Fair Value Liabilities	Fair Value Assets	Fair Value Liabilities
Derivatives designated as hedging instruments:						
Receive-fixed swaps	\$3,863	\$151	\$542	\$18,176	\$—	\$18,276
Pay-fixed swaps	3,770	78,050	55,736	18,478	34,447	39,615
Floating-for-floating swaps	—	4,237	—	3,252	—	4,950
Total derivatives designated as hedging instruments	7,633	82,438	56,278	39,906	34,447	62,841
Derivatives not designated as hedging instruments:						
Pay-fixed swaps	1,803	1,353	4,030	118	3,670	—
Other derivative products	2,364	832	10,827	3,557	14	3,088
Total derivatives not designated as hedging instruments	4,167	2,185	14,857	3,675	3,684	3,088
Credit valuation adjustments	(81)	—	(309)	—	(49)	—
Total gross amounts of derivatives	\$11,719	\$84,623	\$70,826	\$43,581	\$38,082	\$65,929
Gross amounts offset in Statements of Condition	(8,951)	(8,951)	(28,997)	(28,997)	(29,126)	(29,126)
Variation margin settled	—	(27,089)	(11,848)	—	—	(2,241)
Net amounts in Statements of Condition	\$2,768	\$48,583	\$29,981	\$14,584	\$8,956	\$34,562

(in thousands) As of December 31,	2019	2018	2017
Derivative assets, net	\$2,768	\$29,981	\$8,956
Derivative liabilities, net	(48,583)	(14,584)	(34,562)
Accrued interest payable on derivatives, net	(1,417)	(1,478)	(3,457)
Gross amounts not offset in Statements of Condition:			
Cash collateral posted by counterparties	—	(5,231)	—
Cash collateral posted with counterparties	48,488	24,198	29,730
Net exposure amounts	\$1,256	\$32,886	\$667

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. Effective January 1, 2019, the change in the CVA for the period is included in "Interest expense" on the Statements of Comprehensive Income. Prior to the implementation of ASU 2017-12 "Targeted Improvements to Accounting for Hedging Activities" the change in the CVA was included in "Miscellaneous income and other non-interest (losses) gains, net" 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,

\$11.9 million in losses on derivative instruments that qualify as cash flow hedges are expected to be reclassified into earnings.

Cash Flow Hedging Relationships

(in thousands)	Amount of Loss Recognized in OCI on Derivatives	Amount of Gain (Loss) Reclassified from AOCI into Income
For the year ended December 31, 2019		
Pay-fixed swaps	\$(110,003)	\$1,536
Floating-for-floating swaps	\$(2,196)	(1,210)
Total	\$(112,199)	\$326
(in thousands)	Amount of Gain Recognized in OCI on Derivatives	Amount of Loss Reclassified from AOCI into Income
For the year ended December 31, 2018		
Pay-fixed swaps	\$37,307	\$(5,120)
Floating-for-floating swaps	227	\$(1,470)
Total	\$37,534	\$(6,590)
(in thousands)	Amount of Gain (Loss) Recognized in OCI on Derivatives	Amount of Gain (Loss) Reclassified from AOCI into Income
For the year ended December 31, 2017		
Pay-fixed swaps	\$12,108	\$—
Floating-for-floating swaps	(5,070)	—
Total	\$7,038	\$—

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, 2019.

(in thousands)	Miscellaneous Income and Other (Losses) Gains, net	Interest Expense
For the year ended December 31, 2019		
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:	\$(7,675)	\$2,461,562
Asset and Liability Management Positions		
Fair value hedges:		
Interest rate derivatives	—	(21,575)
Bonds and notes	—	21,145
Cash flow hedges:		
Interest rate derivatives	—	(326)
Economic hedges:		
Interest rate derivatives	1,309	—
Commodity derivatives	(8,075)	—

Note: AgriBank does not exclude components from effectiveness testing for fair value or cash flow hedges. AgriBank did not reclassify gains or losses into earnings as a result of the discontinuance of cash flow hedges during the the year ended December 31, 2019.

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 Amount of	Cumulative Fair Value Adjustment Included in
As of December 31, 2019	the Hedged Item	the Carrying Amount of the Hedged Item
Line Item on the Statements of Condition		
Bonds and notes	\$1,254,282	\$3,451

Note: AgriBank did not have any 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	Derivatives and Activity	Employee Benefits Activity	Total
Balance at December 31, 2016	\$(62,873)	\$(17,157)	\$—	\$(80,030)
Other comprehensive (loss) income before reclassifications	(12,311)	7,038	—	(5,273)
Net other comprehensive (loss) income	(12,311)	7,038	—	(5,273)
Other pension adjustments	—	—	(1,123)	(1,123)
Balance at December 31, 2017	\$(75,184)	\$(10,119)	\$(1,123)	\$(86,426)
Other comprehensive (loss) income before reclassifications	(7,673)	37,534	(23)	29,838
Amounts reclassified from accumulated other comprehensive loss	—	6,590	128	6,718
Net other comprehensive (loss) income	(7,673)	44,124	105	36,556
Balance at December 31, 2018	\$(82,857)	\$34,005	\$(1,018)	\$(49,870)
Other comprehensive income (loss) before reclassifications	84,867	(112,199)	(108)	(27,440)
Amounts reclassified from accumulated other comprehensive loss	—	(326)	(276)	(602)
Net other comprehensive income (loss)	84,867	(112,525)	(384)	(28,042)
Balance at December 31, 2019	\$2,010	\$(78,520)	\$(1,402)	\$(77,912)

Reclassifications Out of Accumulated Other Comprehensive Loss

(in thousands)	Amount Reclassified from Accumulated Other Comprehensive Loss			Affected Line Item in the Statements of Comprehensive Income
Accumulated Other Comprehensive Loss Components	2019	2018	2017	
For the year ended December 31,				
Derivatives and hedging activity:				
Interest rate contracts	\$(326)	\$6,590	\$—	Interest expense
Employee benefit plans activity:				
Other pension adjustments	\$(276)	\$128	\$—	Other operating expenses
Total reclassifications	\$(602)	\$6,718	\$—	

NOTE 14

Subsequent Events

We have evaluated subsequent events through February 28, 2020, which is the date the Financial Statements were available to be issued. Effective February 1, 2020, the FCA provided regulatory approval for the formation of a separate service entity, SunStream, under Section 4.25 of the Farm Credit Act. Effective April 1, 2020, SunStream will be owned by AgriBank and 11 District Associations and will provide services to its owners and certain other FCIs. Under Farm Credit's cooperative structure, any SunStream profits will be either held as retained earnings or returned to its owners in the form of patronage. At the effective date, approximately 80 AgriBank employees will become SunStream employees located at the organization's headquarters in St. Paul, Minn. While not significant, final valuations for the divestiture have not been completed. There have been no other material subsequent events that would require recognition in our 2019 Financial Statements or disclosure in the Notes to those Financial Statements.

NOTE 15

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 approximately 75 days following the end of the calendar year, including a condensed statement of condition and statement of income, which can be found on our website at www.AgriBank.com. Such information is not incorporated by reference into, and should not be considered part of, this Annual Report.

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 to SunStream effective April 1, 2020.

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, 2019.

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

During 2019, the board of directors of AgriBank (the board) continued its work on a project to determine a board design and operations that will align with AgriBank's role as a Funding Bank in the Farm Credit System. Finance and credit topics continue to be directed to the full board under the updated board design.

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.

Information regarding directors who served as of December 31, 2019, 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	Term Expires	Principal Occupation, Board Committees and Other Affiliations
Richard Davidson, Board chair Year term began: 2017	2021	Principal Occupation: Self-employed grain and livestock farmer in Washington Court House, Ohio Board Committees: Vice chair of the Compensation Committee Other Affiliations: Federal Agricultural Mortgage Corporation (Farmer Mac) Board, an agricultural secondary market real estate lending corporation, Washington, D.C. Fayette County Charitable Foundation Board, charity work, Washington Court House, Ohio
Stan Claussen, Board vice chair Year term began: 2016	2020	Principal Occupation: Self-employed grain, cattle, sugar beet and vegetable farmer in Montevideo, Minn. Board Committees: Audit Committee Other Affiliations: Vice President: Bushmills Ethanol Board, Atwater, Minn. Fairland Management Company Board, a farm land management company in Windom, Minn. The Farm Credit Council Board, Washington, D.C. AgriBank District Farm Credit Council Board, St. Paul, Minn.
Joseph M. Busuttil, appointed director and financial expert Year term began: 2018	2022	Principal Occupation: Consultant for Ernst and Young, a professional services firm, New York, N.Y. Former Chief Financial Officer, Barclays Global Investment Bank and Barclays Americas, New York, N.Y. Board Committees: Chair of the Audit Committee

Name	Term Expires	Principal Occupation, Board Committees and Other Affiliations
Dale Crawford Year term began: 2017	2021	Principal Occupation: Self-employed crop farmer in Sullivan, Ill. Board Committees: Vice chair of the Risk Management Committee Other Affiliations: Secretary/Treasurer: Moultrie-Sullivan Fair Association, a county agricultural fair in Sullivan, Ill.
Christine Crumbaugh Year term began: 2018	2022	Principal Occupation: Self-employed crop farmer in Gratiot, Mich. Board Committees: Governance Committee Other Affiliations: Owner: Captured by Christine Crumbaugh, LLC, photography, Gratiot, Mich. Greater Gratiot Development Board, economic development, Gratiot, Mich. President: Gratiot Area Chamber of Commerce, community business organization, Gratiot, Mich. AgriBank District Farm Credit Council Board, St. Paul, Minn.
Ernie Diggs Year term began: 2016	2020	Principal Occupation: Self-employed crop farmer in Paris, Tenn. Board Committees: Risk Management Committee
Natalie Laackman, appointed director and financial expert Year term began: 2017	2021	Principal Occupation: Consultant to global businesses in the food industry Former Chief Financial Officer, Service Operations North America, Sodexo, a quality of life services company, Gaithersburg, Md Former Chief Financial Officer, The Shamrock Foods Company, a food manufacturing and distribution company, Phoenix, Ariz. Former Chief Financial Officer and vice president of Finance Global Information Systems and of the specialty channels division, The Kellogg Company, a multinational food manufacturing company, Battle Creek, Mich. Board Committees: Chair of the Compensation Committee Other Affiliations: Chicago Zoological Society Brookfield Zoo Board, animal and nature conservation, Brookfield, Ill.
Brian Peterson Year term began: 2016	2020	Principal Occupation: Self-employed dairy and crop farmer in Trenton, Mo. Board Committees: Chair of the Risk Management Committee Other Affiliations: AgriBank District Farm Credit Council Board, St. Paul, Minn. Treasurer: Rural Dale Cemetery Association Board, Trenton, Mo.
Richard Price Year term began: 2017	2021	Principal Occupation: Self-employed dairy and crop farmer in Stanley, Wis. Board Committees: Audit Committee
Timothy Rowe Year term began: 2017	2021	Principal Occupation: Self-employed grain and livestock farmer in Elwood, Neb. Board Committees: Vice chair of the Governance Committee Other Affiliations: Chair: Country Partners Cooperative Board, a local supply co-op, Gothenburg, Neb. Nebraska Cooperative Council Board, a trade association representing agricultural cooperatives, Lincoln, Neb.
John Schmitt Year term began: 2019	2023	Principal Occupation: Self-employed grain and beef cattle farmer in Quincy, Ill. Board Committees: Governance Committee Other Affiliations: AgriBank District Farm Credit Council Board, St. Paul, Minn. National Farm Credit Council Board, Washington, D.C. Adams County Farm Bureau Board, Quincy, Ill.
Daniel Shaw Year term began: 2018	2022	Principal Occupation: Self-employed livestock and grain farmer and grain merchandiser in Edgar, Neb. Board Committees: Compensation Committee Other Affiliations: Board chair: Edgar Township Board, Edgar, Neb.
George Stebbins Year term began: 2018	2022	Principal Occupation: Self-employed crop farmer in Englewood, Ohio Board Committees: Vice chair of Audit Committee Other Affiliations: Director: Miami County Zoning Commission, Troy, Ohio

Name	Term Expires	Principal Occupation, Board Committees and Other Affiliations
Rollin Tonneson Year term began: 2019	2023	Principal Occupation: Self-employed grain farmer in Souris, N.D. Board Committees: Compensation Committee
Nick Vande Weerd Year term began: 2019	2023	Principal Occupation: Self-employed livestock and grain farmer in Brookings, S.D. Board Committees: Chair of the Governance Committee Other Affiliations: Major: South Dakota Air National Guard AgriBank District Farm Credit Council Board, St. Paul, Minn.
Matthew Walther Year term began: 2019	2023	Principal Occupation: Self-employed crop and cow/calf herd and finished cattle farmer in Centerville, Ind. Board Committees: Audit Committee Other Affiliations: Member: Buell Drainage, LLC, tile drainage company, Centerville, Ind. Federal Farm Credit Banks Funding Corporation Board, Jersey City, N.J.
Thomas Wilkie, III Year term began: 2018	2022	Principal Occupation: Self-employed grain farmer Owner and President: Wifco, Inc., a drainage supply company in Forrest City, Ark. Board Committees: Risk Management Committee Other Affiliations: AgriBank District Farm Credit Council Board, St. Paul, Minn. The Farm Credit Council Board, Washington, D.C. Farm Credit System Coordinating Committee, Washington, D.C. Owner and President: TW Wilkie LLC, a land management and investment company in Forrest City, Ark.

Information regarding days served and compensation paid during 2019 for each director follows:

	Days Served		Compensation Paid for Service on a Board Committee	Name of Committee	Total Compensation Paid
	Board Meetings	Other Activities			
Richard Davidson	14	10	\$—		\$72,333
Keri Votruba ⁽¹⁾	14	15	—		68,250
Stan Claussen	14	30	875	Governance Committee	76,125
Ed Breuer ⁽²⁾	3	6	—		14,838
Joseph M. Busuttil	14	15	5,250	Audit Committee	75,250
Dale Crawford	14	14	—		70,000
Christine Crumbaugh	14	20	—		70,000
Ernie Diggs	14	12	—		70,000
Natalie Laackman	14	21	1,750	Audit Committee	74,375
			2,625	Compensation Committee	
Brian Peterson	14	21	2,625	Risk Management Committee	72,625
Richard Price	14	17	—		70,000
Timothy Rowe	14	13	—		70,000
John Schmitt	14	26	—		70,000
Daniel Shaw	14	13	875	Risk Management Committee	70,875
George Stebbins	14	12	—		70,000
Rollin Tonneson ⁽³⁾	11	4	—		52,500
Nick Vande Weerd	14	22	2,625	Governance Committee	73,125
Leon Westbrook ⁽²⁾	3	6	—		14,838
Matthew Walther	14	16	—		73,500
Thomas Wilkie, III	11	21	—		71,000
Total			<u>\$16,625</u>		<u>\$1,299,634</u>

⁽¹⁾ Mr. Votruba served as board chair until passing away unexpectedly during 2019.

⁽²⁾ Term expired in 2019

⁽³⁾ Elected to board in 2019

Days served in the preceding chart represent actual days at board meetings and activities. Board members 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 which attendance is required or desirable. Additionally, a position retainer is paid for specified roles which involve an increased level of activity relative to the standard director duties. The roles designated to receive the position retainer are board chair, board vice chair and each committee chair. The board in its sole discretion may designate different amounts to each position under the position retainer. In addition to the standard and position retainers, additional compensation may be provided for where such director has devoted extraordinary time and effort in the service of AgriBank and its shareholders. The board of directors approved compensation for extraordinary service in the amount up to \$1,000 for certain board members' representation on behalf of the AgriBank board at a memorial service. Directors are also reimbursed for reasonable expenses incurred.

Senior Officers

The senior officers of AgriBank, FCB at December 31, 2019 included:

Name	Position	Business experience and employment during past five years
Jeffrey R. Swanhorst	Chief Executive Officer	Current position began in April 2018. Prior to that served as chief credit officer for AgriBank beginning in August 2011. Board member on the Federal Farm Credit Banks Funding Corporation.
John J. Grace	Chief Risk Officer	Current position began in December 2018. Prior to that served as President of Steller-Grace Consulting beginning in January 2017. Prior to that served as chief risk officer for Options Clearing Corporation beginning in January 2015.
James B. Jones	Chief Credit Officer	Current position began in October 2018. Prior to that served as chief risk officer for AgriBank beginning in August 2015. Prior to that served as vice president, chief risk officer for AgriBank beginning in 2011.
Jeffrey L. Moore	Chief Financial Officer	Current position began in October 2017. Prior to that served as senior vice president, finance for AgriBank beginning in August 2012. Chair of the Farm Credit Foundations Trust Committee.
Barbara K. Stille	Chief Administrative Officer and General Counsel	Current position began in October 2017. Prior to that served as senior vice president and general counsel for AgriBank beginning in December 2014. Board member on Farm Credit System Association Captive Insurance Company.

Senior Officer Compensation

All senior officers, including the chief executive officer (CEO), are compensated with a mix of salary, short-term and long-term 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 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 officer base salaries reflect the officer's experience and level of responsibility. The base salary of the CEO is subject to review and approval by 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, 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 2019 and 2018, 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 excellence measure for client satisfaction. In 2017 the criteria for AgriBank performance objectives included: financial measures for an efficiency ratio and a return available for patronage; client measures for our CIPA performance score and client satisfaction; and performance achievement of our strategic imperatives.

Long-term Incentive Compensation: The CEO receives long-term incentive compensation. Additionally, senior officers received long-term incentive compensation in 2019 and 2018 with certain senior officers receiving it in 2017. 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 2019, 2018 and 2017 were based on earnings available for wholesale patronage measure and our CIPA performance score. The long-term incentive compensation amounts in 2018 and 2017 for retired CEO William J. Thone were determined based upon level of achievement as determined by the board of specific performance goals, intended to position the Bank for future success.

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 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, commuting assistance, relocation assistance, and tax reimbursement for perquisite compensation, as applicable. The senior officers did not receive any additional noncash perquisite compensation during any year presented. 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.
- 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 to 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. In the periods which the CEO or senior officer receives pension distributions, the change in the value of pension benefits is not included. 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.
- Severance reported in 2017 includes payments to Brian O'Keane, AgriBank's former CFO, and Patricia Jones, AgriBank's former senior vice president of human resources and communications, in 2018. The separation agreements did not require further payments beyond 2018.
- Retirement payouts, including vacation payouts, 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.

In October 2017, certain employees were impacted by the implementation of a workforce reduction plan. As part of the severance offered to all terminated employees, outplacement services were offered up to \$6 thousand per person based on his/her level in the organization. This noncash compensation has been excluded from the Compensation Paid to the Senior Officers.

Retirement Plans: The AgriBank District has various post-employment benefit plans which are generally available to all AgriBank employees, including the CEO and senior officers, 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 to 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. Jeffrey R. Swanhorst, CEO, did not defer any compensation during 2019 or 2018. William J. Thone, CEO, deferred \$603 thousand in 2018, and did not defer any compensation in 2017. Total amounts deferred by senior officers (excluding the CEO) were \$148 thousand and \$10 thousand for amounts that were to be paid in 2019 and 2017, respectively. Senior officers (excluding CEO) and highly compensated individuals did not defer any compensation in 2018.

Compensation Paid to the Senior Officers

(in thousands)

Name of Individual	Year	Salary	Short-term Incentive Compensation	Long-term Incentive Compensation ⁽¹⁾	Perquisites	Other ⁽⁵⁾	Total
CEO ⁽²⁾ :							
Jeffery R. Swanhorst	2019	\$666	\$467	\$350	\$7	\$84	\$1,574
Jeffrey R. Swanhorst	2018	487	347	225	5	49	1,113
William J. Thone	2018	362	237	276	10	158	1,043
William J. Thone	2017	700	467	525	25	46	1,763

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

4	2019	\$1,310	\$474	\$302	\$59	\$1,091	\$3,236
6 ⁽³⁾	2018	1,361	532	311	95	244	2,543
6 ⁽⁴⁾	2017	2,170	1,009	510	20	1,391	5,100

⁽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⁾ On April 2, 2018, Mr. Swanhorst was promoted to the position of CEO. For the purposes of this disclosure, Mr. Swanhorst's CEO compensation only includes the compensation he earned as CEO.

⁽³⁾ 2018 count and compensation includes Mr. Swanhorst for the period in which he served as a senior officer, but not as CEO. Additionally, it includes compensation to one senior officer who began in December 2018 and one highly compensated individual not serving as a senior officer during 2018. The compensation paid to individuals who were not deemed to be Highly Compensated Individuals, but served as interim CCO and CRO, respectively, was not included for the purposes of this disclosure.

⁽⁴⁾ 2017 count reflects the workforce reduction plan implementation effective October 16, 2017. Dollars include only those senior officers who served as of December 31, 2017, including those whose titles remained unchanged, but job duties changed effective with the workforce reduction.

⁽⁵⁾ The value of the pension benefits increased significantly from December 31, 2018 to December 31, 2019, primarily due to the decrease in interest rates year over year as well as the accumulation of an additional year of credited service and related compensation for plan participants.

Farm Credit Administration (FCA) regulations require the disclosure of the compensation paid during the last three fiscal years to all senior officers 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 2019 or 2017 in the Compensation to Senior Officers table. There was one highly compensated individual who required disclosure under FCA regulations in 2018.

Pension Benefits Attributable to Senior Officers

(in thousands)

2019

Aggregate Number of Senior Officers (excluding CEO)	Plan	Years of Credited Service	Present Value of Accumulated Benefits	Payments Made during the Reporting Period
3	AgriBank District Retirement Plan	22.7	\$3,782	\$—
3	AgriBank District Pension Restoration Plan	22.7	\$402	\$—

The change in composition of the aggregate senior officers can have a significant impact on the calculation of the accumulated pension benefits.

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 related party transactions is incorporated herein by reference from Note 8 to the accompanying Financial Statements included in this Annual Report.

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 \$443,340, \$365,197 and \$254,526 in 2019, 2018 and 2017, 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, 2020 or at any time during 2019.

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. The total integrated audit fees paid during 2019 were \$828 thousand. In addition, we incurred fees of \$3 thousand for accounting research and disclosure software and employee training sponsored by the external auditor which occurred in the normal course of business and were pre-approved by the Audit Committee. Our engagement letter commits to reimbursing the external auditor for reasonable out-of-pocket expenses as incurred for travel. There were no other audit, tax, audit related or non-audit related services paid in 2019.

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	Corporate entity and consolidated subsidiaries Description of entity consolidation Restrictions on transfers of funds or capital	Page 134 Page 134 Page 134
Capital Structure	Terms and conditions of capital instruments Regulatory capital components	Pages 92-95 Page 135
Capital Adequacy	Capital adequacy assessment Risk-weighted assets Regulatory capital ratios	Page 136 Page 136 Page 137
Capital Buffers	Quantitative disclosures	Pages 136-137
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 31-36, 55, 69-71 Pages 137-138 Page 138 Pages 41, 55, 89, 140 Page 139 Pages 84-87, 139-140
Counterparty Credit Risk-Related Exposures	General description Counterparty exposures	Pages 140-141 Pages 53, 118, 141
Credit Risk Mitigation	General description Exposures with reduced capital requirements	Pages 31-36, 41, 52-53, 115-117, 141 Page 141
Securitization	General description Methods and key assumptions Securitization exposures	Pages 141-142 Page 110 Page 142
Equities	General description Equity exposures	Pages 142-143 Page 143
Interest Rate Risk for Non-Trading Activities	General description Interest rate sensitivity	Pages 50-51 Page 51-52

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 accounting principles generally accepted 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 and Farm Credit Foundations. 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 Average Daily Balance
As of December 31, 2019	
Common Equity Tier 1 Capital (CET1)	
Common Cooperative Equities:	
Statutory minimum purchased borrower stock	\$26
Other required member purchased stock	1,381,879
Allocated equities:	
Allocated stock subject to retirement	1,227,471
Nonqualified allocated equities subject to retirement	—
Nonqualified allocated equities not subject to retirement	—
Unallocated retained earnings as regulatorily prescribed	3,402,759
Paid-in capital	—
Regulatory adjustments and deductions made to CET1	(5,418)
Total CET1	<u>\$6,006,717</u>
Tier 1 Capital	
Non-cumulative perpetual preferred stock	\$250,000
Regulatory adjustments and deductions made to tier 1 capital	—
Total additional tier 1 capital	<u>250,000</u>
Total Tier 1 Capital	<u>\$6,256,717</u>
Total Capital	
Allowance for loan losses	\$27,638
Regulatory adjustments and deductions made to total capital	—
Total tier 2 capital	<u>27,638</u>
Total Capital	<u>\$6,284,355</u>
Reconciliation to Audited Statement of Condition:	
Protected stock	\$181
Nonqualified allocated equities subject to retirement	277
Accumulated other comprehensive loss	(107,827)
Regulatory adjustments and deductions	5,418
Tier 2 allowance and reserve	(27,638)
Adjustment to GAAP ⁽¹⁾ unallocated retained earnings	(187,995)
Adjustment for average daily balance to point-in-time	215,622
Total shareholders' equity	<u>\$6,182,393</u>

⁽¹⁾Generally Accepted Accounting Principles

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, 2019

Exposures to:	
Sovereign entities	\$—
Foreign bank entities	354,628
Government-sponsored enterprises ⁽¹⁾	18,805,633
Depository institutions and credit unions ⁽²⁾	285,928
Public sector entities	—
Corporate, including borrower loans	14,589,703
Residential mortgage	66,683
Past due and nonaccrual	2,135
Securitization exposures	972,788
Cleared transactions	142
Unsettled transactions	—
All other assets	83,557
Deductions:	
Regulatory adjustments and deductions made to CET1	5,418
Regulatory adjustments and deductions made to AT1 ⁽³⁾	—
Regulatory adjustments and deductions made to T2 ⁽⁴⁾	—
Total standardized risk-weighted assets	\$35,155,779

⁽¹⁾ Includes exposures to Farm Credit System entities

⁽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, 2019, 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 \$335.9 million as of December 31, 2019.

Regulatory Capital Requirements and Ratios

	Regulatory Minimums	Required Buffer	As of December 31, 2019	Calculated Buffer
Common equity tier 1 capital ratio*	4.5 %	2.5 %	17.1 %	12.6 %
Tier 1 capital ratio*	6.0 %	2.5 %	17.8 %	11.8 %
Total capital ratio*	8.0 %	2.5 %	17.9 %	9.9 %
Capital conservation buffer				9.9 %
Tier 1 leverage ratio	4.0 %	1.0 %	5.5 %	1.5 %
Leverage buffer				1.5 %

*The 2.5% capital conservation buffer over risk-adjusted ratio minimums was phased in over three years under the FCA capital requirements. The phase in period ended on December 31, 2019.

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, 2019, and we do not foresee any events that would result in this prohibition during 2020.

Additional Regulatory Capital Disclosure

Regulatory Capital Ratios Pursuant to FCA Regulation 620.5

As of December 31,	2014	2013	2012
Permanent capital ratio	20.8 %	22.1 %	21.1 %
Total surplus ratio	18.1 %	18.5 %	17.4 %
Core surplus ratio	11.8 %	11.4 %	10.4 %
Net Collateral Ratio	105.9 %	106.4 %	106.0 %

Refer to the Five-Year Summary of Selected Financial Data for capital ratio calculations for the past five years.

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 Daily
As of December 31, 2019	End of Period	Balance
Loans	\$98,298,023	\$96,483,085
Investments	15,418,158	16,211,938
Loan and other commitments	21,628,058	23,218,167
Letters of credit	91,962	92,019

Credit Exposures - Derivatives

(in thousands)	End of Period		3-month Average Daily Balance	
As of December 31, 2019	Notional Amount	Net Liability Exposure	Notional Amount	Net Asset (Liability) Exposure
Cleared derivatives	\$2,580,357	\$(27,138)	\$2,587,231	\$(39,044)
Bilateral derivatives	3,431,357	(47,100)	3,590,089	(57,355)

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

Loan and Commitment Geographic Distribution

As of December 31, 2019			
Wholesale Portfolio		Retail Portfolio	
Iowa	11 %	Illinois	14 %
Illinois	9 %	Minnesota	14 %
Minnesota	8 %	Nebraska	9 %
Nebraska	8 %	Wisconsin	8 %
Michigan	6 %	Iowa	8 %
Indiana	6 %	Indiana	4 %
Wisconsin	6 %	Michigan	4 %
South Dakota	5 %	Other	39 %
Ohio	5 %	Total	100 %
Missouri	5 %		
Other	31 %		
Total	100 %		

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, 2019

Retail Portfolio	
Crops	61 %
Loans to OFIs	10 %
Cattle	7 %
Dairy	5 %
Other	17 %
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 79 percent as of December 31, 2019. 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 PD and LGD (flooding, drought, etc.). There was no allowance attributed to a geographic area as of December 31, 2019.

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)	Over One Year			Total
	One Year or Less	but Less than Five Years	Five Years or More	
As of December 31, 2019				
Wholesale loans	\$596,061	\$89,039,206	\$—	\$89,635,267
Retail loans	1,857,164	4,103,975	3,405,611	9,366,750
Investments (including federal funds)	8,167,102	2,205,878	5,045,178	15,418,158
Wholesale loan commitments	165,478	19,056,612	—	19,222,090
Retail loan and other commitments	1,079,052	1,260,607	66,309	2,405,968
Cleared derivative notional	955,000	800,000	825,357	2,580,357
Bilateral derivative notional	404,000	1,820,000	1,207,357	3,431,357

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.

To minimize the risk of credit losses, for non-customer bilateral derivatives we deal only with 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 derivative contract. We had derivative interest rate contracts with a current credit exposure of \$10.7 million as of December 31, 2019.

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 section of the Management's Discussion and Analysis in the accompanying Financial Statements.

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 Balance	Risk-weighted 3- month Average Daily Balance
As of December 31, 2019		
Conditionally guaranteed		
Loans	\$17,576	\$3,515
Total	\$17,576	\$3,515

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.

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, 2019.

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

Investment Exposures Covered by Guarantees

(in thousands)	3-month Average Daily Balance	Risk-weighted 3- month Average Daily Balance
As of December 31, 2019		
Unconditionally guaranteed	\$5,983,471	\$—
Conditionally guaranteed	1,970,411	394,082
Total	\$7,953,882	\$394,082

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 re-securitization transaction; or an exposure that directly or indirectly references a securitization (e.g., credit derivative). A re-securitization 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 prohibit investment in securities below established credit ratings.

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)			
As of December 31, 2019	Exposure	Weighted average risk-weight factor	Risk-weighted assets
Gross up risk weight bands:			
100%	\$95,005	100%	\$95,005
> 100% and < 1,250%	543,707	161%	877,783
1250%	—	1,250%	—
Total risk-weighted securitization assets	<u>\$638,712</u>	<u>152%</u>	<u>\$972,788</u>

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, 2019. 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 a limited partner in a Rural Business Investment Company (RBIC) for various relationship and strategic reasons. This 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. This investment is accounted for under the equity method when we are considered to have significant influence; otherwise, it would be accounted for at cost less impairment. This investment is not publicly traded and the book value approximates fair value. There have been no sales or liquidations of this investment during the period. As of December 31, 2019, 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.

Equity Investments included in Capital Ratios

(in thousands)		
As of December 31, 2019	Disclosed in Other Assets	Life-to-Date losses recognized in Retained Earnings ⁽¹⁾
RBIC	\$16,527	\$9,992

⁽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, 2019	Young	Beginning	Small
As a percentage of total District farm members:			
Number of loans	20.4 %	27.8 %	47.9 %
Loans and commitment volume	13.6 %	18.0 %	19.6 %

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 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' 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.

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. However, as a direct result of the financial difficulties experienced by the housing-related GSEs, with both Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Company (Freddie Mac) having been placed into conservatorship by the U.S. government, housing-related GSE status reform has been a topic of debate by Congress and the U.S. administration. While GSE reform debate has focused on housing-related GSEs, 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, other GSEs, including Fannie Mae, Freddie Mac and the Federal Home Loan Banks, and other highly rated institutions and companies. Competition for debt funding from these entities can vary with changes in economic, financial market and regulatory environments. In addition, any change in the perceptions of 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 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 and 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. Failure to timely issue the System's combined financial statements could disrupt the System's ability to access debt capital markets.

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 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"). However, the holders of outstanding subordinated notes that are subject to the Co-Liability Statute waived any right they may have pursuant to the Co-Liability Statute or otherwise to hold other Banks liable for interest payments on such subordinated notes. Additionally, each Bank is jointly and severally liable for the Systemwide Debt Securities issued on behalf of a Bank that is in default 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 or any class of our common stock or preferred stock.

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.

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
- Major international events, including a downturn in the world economy, military or other armed conflicts, political disruptions, civil unrest or tariffs and embargos 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
- 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 laws impacting our lending activities
- Changes in U.S. tax laws could modify deductions taken by Farm Credit System borrowers
- Increasing 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 are exposed to concentrated 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 agreements and trade 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
- 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 receives 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), 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 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 U.S. government actions or inactions could affect the viability of the Farm Credit System or create instability in agriculture, impacting the viability of Farm Credit System borrowers. The Farm Credit System, as a GSE, is 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.

The System is also influenced by changes to trade policies and farm programs, including the Farm Bill and crop insurance support. The agricultural industry is impacted by policies and regulations 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. 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 System's borrowers to do business in existing and target markets. This could cause a deterioration in their financial condition and results of operations, which could in turn adversely affect our financial condition and results of operations.

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 - Our business model does 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 Director 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 fail 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 2019 and beyond. 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 depend on the accuracy and completeness of customer and counterparty information.

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 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 fund real estate mortgage loans through District Associations 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 “match-funding” debt securities issued to the maturities of our loans and investments and entering into interest-rate derivative transactions, and through the rebalancing of cash-flow mismatches of assets and liabilities. Our inability to “match-fund” 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 nature and quantity 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.

In 2017, the United Kingdom’s Financial Conduct Authority, which regulates LIBOR, announced its intention to stop persuading or compelling the group of major banks that sustains LIBOR to submit rate quotations after 2021. As a result, it is uncertain whether LIBOR will continue to be quoted after 2021. AgriBank and its affiliated associations have exposure to LIBOR, including in financial instruments that reference LIBOR that mature after 2021. AgriBanks’ exposure arises from loans to customers, investment securities, Systemwide Debt Securities that are issued by the Funding Corporation on AgriBanks’ behalf, preferred stock and derivative transactions. 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.

There is considerable uncertainty as to how the financial services industry will address the discontinuance of LIBOR in financial instruments. This uncertainty could result in disputes and litigation with counterparties and borrowers surrounding the implementation of alternative reference rates in our financial instruments that reference LIBOR. If LIBOR ceases or changes in a manner that causes regulators or market participants to question its viability, 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 if LIBOR ceases or is no longer viable, or what those actions might be.

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 GSEs or the U.S. government, 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 two 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 at times 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 reputation risk.

Reputation 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 reputation 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.

