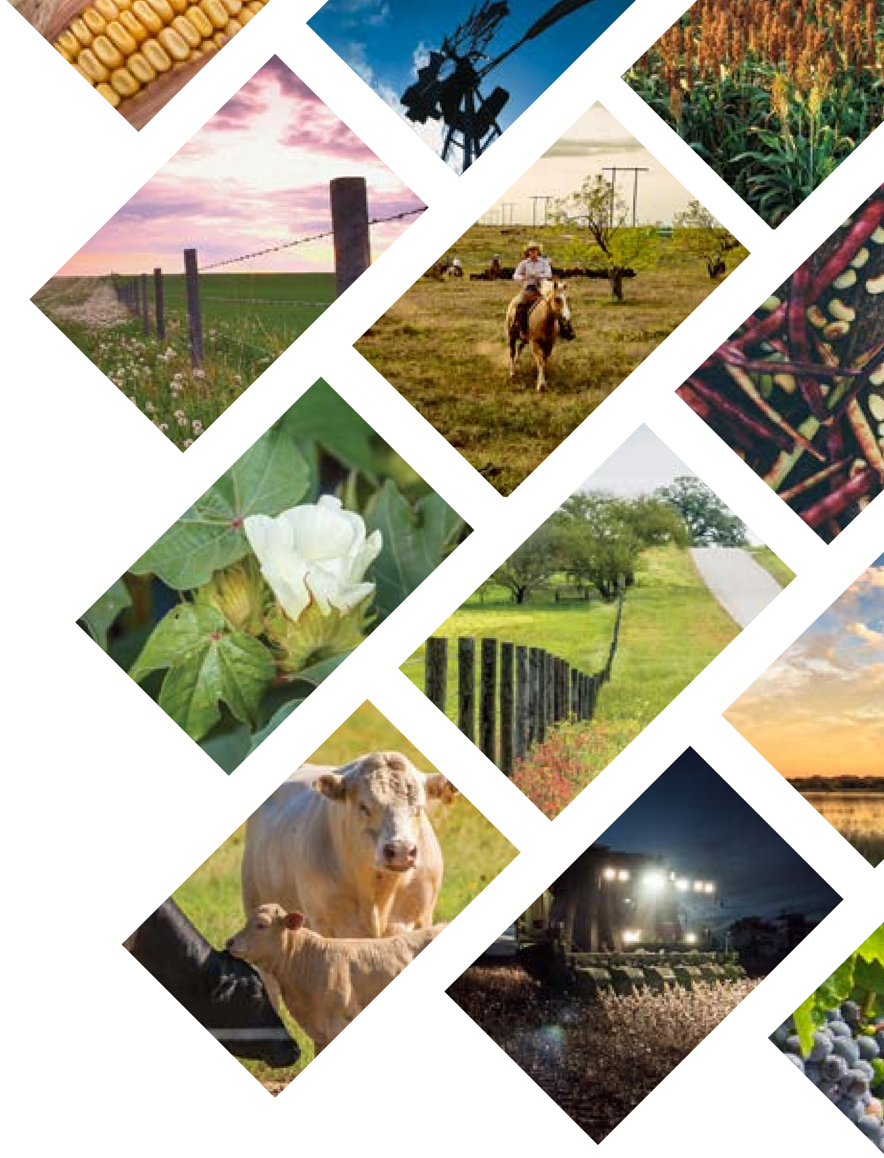


Resilient. Agile. Strong.

2019 ANNUAL REPORT

FARM CREDIT BANK OF TEXAS

Resilient. Agile. Strong.

The strength of our nation's farmers and ranchers continues to define rural America. At Farm Credit Bank of Texas, we strive to match those qualities. By working alongside our affiliated lenders, we help agriculture and rural communities grow and thrive.

Our cooperative provides funding and support services to member-owned lending institutions so they can meet the financial needs of their local borrowers. We also absorb the cost of services and technology so our affiliated lenders can focus on what they do best – supporting the agriculture community.

Much like farmers and ranchers, our strength has been forged through adversity. When we face challenges, we adapt and move forward. And that hard work comes easy because we know what we do is making a difference in rural America. Our financial strength ensures that ag producers, agribusinesses and rural communities have access to the dependable credit and financial services they need to succeed.

Together, we are resilient.
Together, we are agile.
Together, we are strong.

TABLE OF CONTENTS

TO OUR STOCKHOLDERS

2019 was a year of growth for Farm Credit Bank of Texas.

The strong economy combined with a vibrant, diverse agriculture industry in our five-state district fueled loan demand. Our loan portfolios grew steadily, generating strong earnings amid an extremely challenging interest rate environment.

As rates declined and the yield curve flattened and inverted, most banks felt the squeeze in their net interest margins. Fortunately, our flexible asset/liability and funding strategies presented opportunities to take advantage of movements in rates. For example, we reduced our interest expense well into the future by calling $7.2 billion in debt and issuing new debt at lower rates.

We finished 2019 with a record $203 million in net income.

Earnings aren't for the bank's benefit alone. As a cooperative, we distribute earnings in the form of patronage payments to the rural lending cooperatives that own the bank.

Those cooperatives then pass the value on to their borrowers — farmers, ranchers, agribusinesses, rural homeowners and landowners. You can learn about some of those customers on the following pages.

Jimmy Dodson and Larry Doyle

Funding is just part of our role. We also provide our affiliated cooperatives, or associations, financial products and support services at no cost. In 2019 we delivered new technology and other services to aid compliance, enhance security, make it easier for association borrowers to manage their accounts and much more.

Most importantly, we made tremendous progress in our initiative to modernize the technology our district uses to make loans. Working with a top-tier financial technology company, we launched a new suite of powerful lending systems to one association in 2019. We're now planning the rollout of this leading-edge technology to the rest of our district.

Remaining resilient, agile and strong in 2019 positioned us to help agriculture and rural communities succeed in the future. We look forward to embracing the opportunities to come.

James F. "Jimmy" Dodson
Board Chair

Larry R. Doyle
Chief Executive Officer

Key Accomplishments

Bank achieves strong financial results in a challenging environment.
Net income increased 6.5% to $203.0 million. We maintained a flexible funding strategy, finding ways to take advantage of low interest rates and the inverted yield curve.

Assets reach new highs.
Total assets increased 4.6% to a record $25.7 billion. Total loan volume increased 8.0% to a record $19.5 billion. Credit quality remained strong.

Cooperative business model lowers associations' cost of funds.
We shared the bank's earnings with the lending cooperatives that own the bank by distributing $76.7 million in patronage on direct note volume. When combined with the benefit of the bank's capital on loan pricing, this payment effectively reduced associations' cost of funds.

Products and support services help associations serve their customers.
Several operational and technology initiatives are enhancing efficiency, security, risk management, regulatory compliance and customer service. In 2019, we began rolling out new lending systems backed by leading financial technology companies.

Bank maintains strong capital and liquidity.
Our solid capital position, diversified loans and investments, interest rate risk management and debt management provide stability and opportunities for growth. The bank ended the year with 211 days of liquidity coverage, far exceeding the regulatory minimum.

2019 TOP FINANCIAL INDICATORS

FINANCIAL HIGHLIGHTS

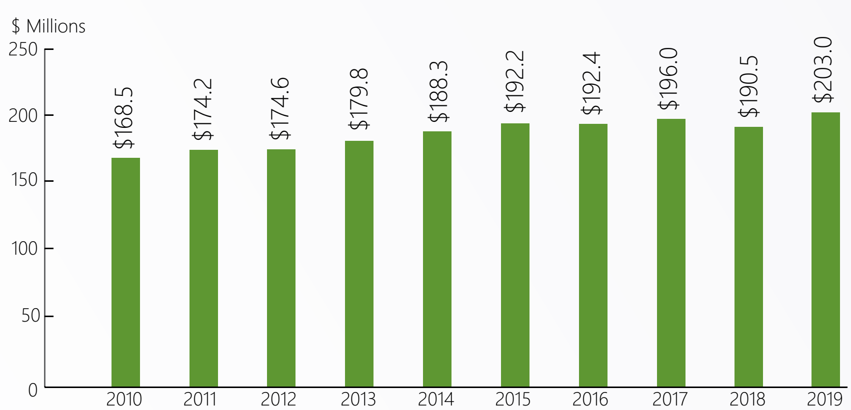
For the Year (in thousands)	**2019**	2018	2017
Net interest income	**$ 271,611**	$ 256,836	$ 251,321
Loan loss reversal (provision for credit losses)	**588**	(4,671)	1,673
Noninterest expense, net	**(69,245)**	(61,635)	(57,008)
Net income	**$ 202,954**	$ 190,530	$ 195,986
Rate of return on:			
Average assets	**0.81%**	0.81%	0.89%
Average shareholders' equity	**10.86%**	10.85%	11.51%
Cash patronage declared	**$ 128,112**	$ 110,853	$ 97,982
At Year End (in millions)			
Total loans	**$ 19,498**	$ 18,057	$ 17,085
Total assets	**25,664**	24,529	22,837
Total liabilities	**23,820**	22,752	21,169
Total shareholders' equity	**1,844**	1,777	1,668

$1.2
BILLION
OR ↑9.8%
ASSOCIATION AND OFI DIRECT NOTE GROWTH

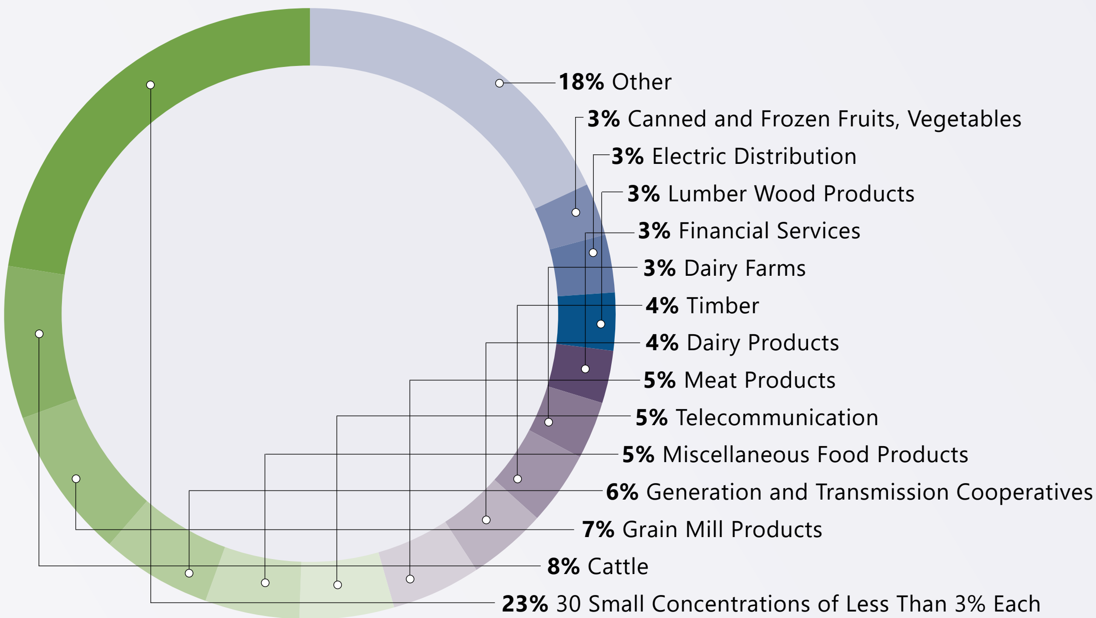
$203.0
MILLION
NET INCOME

$191.4
MILLION
which represents 94.3% of net income
PATRONAGE AND PREFERRED STOCK DIVIDENDS

BANK NET INCOME



DIVERSIFICATION OF CAPITAL MARKETS LOANS BY COMMODITY



99.5%
Acceptable or Special Mention

CREDIT QUALITY

4.6%

ASSET GROWTH

$1.8
BILLION

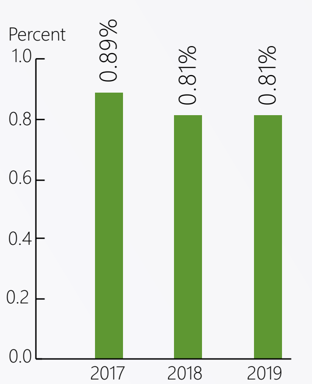
CAPITAL LEVEL

Regulatory Capital & Liquidity Measures

	At Dec. 31, 2019	Regulatory Requirement
Common equity tier 1 ratio	9.91%	7.00%
Total capital ratio	16.12%	10.50%
Tier 1 leverage ratio	7.26%	5.00%
Liquidity	211 days	120 days

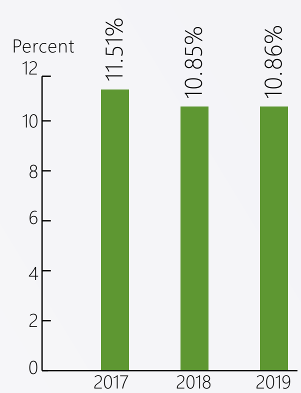
RETURN ON AVERAGE ASSETS

FOR THE YEAR



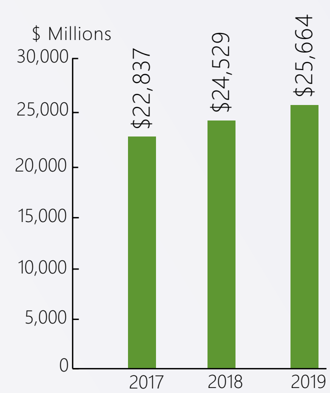
RETURN ON AVERAGE EQUITY

FOR THE YEAR



TOTAL ASSETS OUTSTANDING

AT YEAR END



The Cooperative Advantage

STAYING STRONG FOR THE BENEFIT OF OUR CUSTOMERS

Farm Credit was established in 1916 to meet the critical need for dependable credit in rural America. It was structured as a nationwide network of customer-owned cooperatives, which operate in the best interests of their members.

Our bank is one of four funding banks in the Farm Credit System. We are a federated cooperative, owned by the 14 lending cooperatives we serve. We help our affiliated lenders thrive so they can do the same for agriculture and rural communities.

We give those associations a competitive edge in the marketplace by:

- Providing funding at or below our own cost
- Centralizing key functions and services at the bank, which frees associations to focus on their local customers
- Maintaining a large, diverse asset base so we can manage risk and generate earnings from sources other than our owners
- Absorbing the cost of our services rather than billing associations

The stronger we are, the more we can create a strong future for rural America. On the following pages, we explain how our services, loan pricing and robust patronage benefit our associations and their borrowers.

BOOSTING AGILITY WITH PRODUCTS AND SERVICES

The bank provides services in technology, risk management, credit, compliance, finance, accounting, human resources, training and other areas. This creates greater efficiency and economies of scale for our affiliated associations than they could achieve on their own without a huge investment.

Association loans to their local borrowers contributed greatly to the bank's growth in 2019. Likewise, we helped our associations grow and diversify. We closed high-quality, low-risk capital markets participation loans, and sold portions to associations. In addition, we partnered with them to finance large agribusinesses in their territories.

We continue to bring the financial industry's newest innovations to the rural communities across our district. In 2019, we launched electronic statements so association borrowers can manage their accounts online more easily. We also helped associations prepare for the future phase-out of LIBOR. And we delivered a new system for managing user access to sensitive data.

Our top priority is to deliver modern, market-driven lending systems that are user-friendly, yet powerful enough to handle the most complex loans. We accomplished the first phase of our districtwide launch in 2019 when one association began using the new software suite.

HELPING RURAL LENDERS BE RESILIENT BY LOWERING THEIR FUNDING COSTS

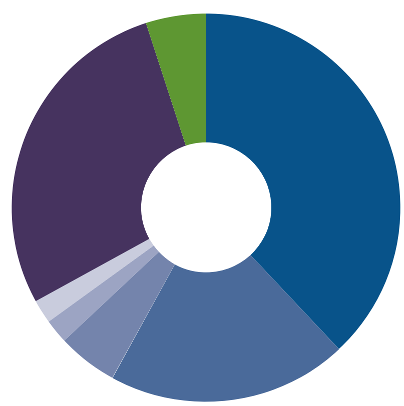
As a Farm Credit System funding bank, we obtain funding through the sale of highly rated Farm Credit notes and bonds to investors.

We lend the funds to our associations and two other financing institutions at our own cost, known as the marginal cost of funds, plus a wholesale spread. We then return the spread to them in two ways. First, we reduce their loan pricing by funding a portion of their direct notes with our own capital. Second, we distribute earnings to them through patronage. In the end, these affiliated lenders pay no more for funding than the bank pays.

Sharing earnings with members is one of the guiding principles for cooperatives. Like the bank, our associations distribute a portion of their own earnings to borrowers in the form of patronage payments. Patronage effectively lowers their members' borrowing costs — a unique benefit of doing business with a cooperative.

In total, the bank is returning 94.3% of our 2019 net income to our affiliated lenders, lending partners and stockholders. This includes $134.9 million through five patronage programs and $56.5 million in preferred stock dividends.

What the Bank Did With its 2019 Earnings



Paid patronage on:

- Affiliated lenders' direct notes
- Participation loans
- Affiliated lenders' stock in the bank
- Capitalized Participation Pool
- Non-Capitalitzed Participation Pool

- Paid dividends on preferred stock

- Retained earnings for associations' benefit

We support agriculture and rural communities

For more than a century, Farm Credit has helped farmers, ranchers, rural homeowners and agribusinesses achieve their goals and dreams.

Farm Credit offers the agricultural expertise and reliable credit borrowers need to get their start, advance and excel. We help them stay resilient as agriculture becomes increasingly high-tech and capital-intensive.

Our bank's role is to provide funding and services that lending cooperatives in five states use to serve their local customer-owners. On the following pages, we introduce some members of our co-op family.

BLAKE BICKHAM

Odem, Texas

Blake Bickham

Blake Bickham graduated from Texas Tech University in 2018, prepared to become a teacher. Instead of teaching, she decided to start her own ag operation on her family's farm in South Texas.

Assisting young, beginning and small farmers is one way Farm Credit carries out its mission to support agriculture and rural communities. As Bickham navigates her career, her lender — Texas Farm Credit — will be with her every step of the way.

"I wouldn't be able to farm without Texas Farm Credit," Bickham says. "The entire team rallied around me. They opened the door for me to build my own business."

To help her get started, Blake's dad made her an offer similar to the one his dad made him. Blake could lease the same 300 acres that her father started farming in the 1980s.

For her first crop, she planted 50/50 cotton and grain sorghum.

"It's challenging and exciting to be my own boss," the fourth-generation farmer says. "I can't wait to see what the future holds."

WALLACE AND CAROL CARSON

Columbia, Mississippi

Dr. Wallace Carson

Veterinary surgeon Dr. Wallace Carson and his wife, Carol, purchased a foreclosed poultry breeder farm in South Mississippi a decade ago. It was too good a deal for the couple to pass up. However, the farm's high energy costs were a different story.

Eventually, electricity for fans, lights and an automatic egg-gathering system climbed to $28,000 a year.

In the poultry business, improving the bottom line requires efficiency.

After visiting two farms that cut their bills with solar energy, Dr. Carson applied for a USDA Rural Energy for America Program (REAP) grant for 25% of a project's cost. He also called their loan officer at Southern AgCredit.

"He knew how to help and that's what he did for me," Dr. Carson says.

With financing and the grant approved, the next step was to install 249 solar panels and 10 inverters.

Now solar energy offsets more than half the poultry operation's electricity costs.

"I always used a local bank, but since I started the chicken farm, I've used Southern Ag. They make it easy," he says. "My system should pay for itself in six years, and last 25."

MICHAEL DAVIS

Hillsboro, Alabama

Michael Davis

As a young man in 1988, Alabamian Michael Davis itched to escape his family's beef cattle operation in Hillsboro. After college, he started a career in town. However, a longing for the familiar began to tug at him. Then destiny changed his course.

In 2000, his father, George Sr., suffered a heart attack and needed help on the farm. He had resigned himself to selling the cattle and leaving farming behind. But to help his dad, the younger Davis stepped in part time, and the farm began to thrive again.

Together with his father and other family members, Davis built the commercial cow-calf operation from only seven head of cattle 20 years ago to 95 head today.

He attributes their ability to expand largely to their strong working relationship with Alabama Farm Credit.

"They have been an important partner," Davis says. "From expanding our pasture and hay ground to financing new barns and equipment, Alabama Farm Credit has made it possible for us to keep growing."

The experience also strengthened family ties.

"Being able to help my dad and also introduce my children to agriculture has been a real blessing," he says.

JERRY AND SHAYNE FRANZOY

Salem, New Mexico

Shayne Franzoy

Shayne Franzoy is carrying on a tradition started by his great grandparents nearly a century ago. He's the fourth generation to grow onions, chiles and other vegetables in New Mexico's Hatch Valley.

But his Chile River Farms is not his great grandparents' farm — not by any means.

He and his father, Jerry, have expanded and automated the operation in ways their ancestors could not have imagined. They did it by harnessing technology and investing in the latest harvesting, processing and cold-storage equipment — largely financed by Ag New Mexico Farm Credit.

In 2007, Ag New Mexico financing allowed the Franzoys to add an onion curing plant. Later they upgraded their onion-processing facility. Now Chile River Farms operates on the cutting edge.

"Our automated sorting and curing facilities allow us to market to higher-end customers who pay more for our products," Franzoy says. "Automation also allows us to package onions to meet specific customer demands."

They even designed a sorting table that rotates onions without damaging them.

"It's valuable to have a partner like Ag New Mexico to help grow our business," says Franzoy.

JODY HIGGINS

Monroe, Louisiana

Jody Higgins

Jody Higgins of Monroe, Louisiana, was a special education teacher with a dream of competing in professional team roping. But his moment awaited him. After a cancer diagnosis sidelined his roping career, Higgins began to look for something to occupy his time. He turned his focus to hay baling.

With an equipment loan from Louisiana Land Bank, Higgins purchased the latest equipment, and his business took off. Today he bales hay for one of Louisiana's largest cattle operations.

"I tell people I rehabbed myself through my hay operation," he says. "It was good therapy for me, because not only did it keep my mind occupied, but the manual labor strengthened my body."

Higgins found a trusted financing partner in Louisiana Land Bank, as well. "I probably wouldn't even have cattle if it weren't for the Land Bank," he says. "They make it so easy."

Higgins' path back to roping wasn't easy. But he was victorious at the 2019 Wrangler National Patriot, held in conjunction with the Bob Feist Invitational in Reno, Nevada. He and teammate Mark Smith won the top-level amateur roping event, each earning a $100,000 payout.

From left to right are John L. "Jack" Dailey; Lester Little, vice chair; Linda Floerke; M. Philip Guthrie; Dorothy Nichols; Ralph W. "Buddy" Cortese; and James F. "Jimmy" Dodson, chair.

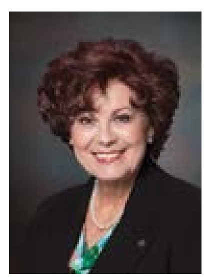
FARM CREDIT BANK OF TEXAS BOARD OF DIRECTORS

The bank provides funding and support services to our affiliated lending cooperatives in a five-state district. It helps these local associations be successful so they can help agricultural producers and rural communities succeed.

Its board of directors establishes policies for the bank, provides strategic direction, oversees management and ensures that the bank operates in a safe and sound manner.

The board members have extensive business and leadership experience in a variety of backgrounds. Five of the directors are farmers or ranchers, elected by the local financing cooperatives that own the bank. Collectively, the two board-appointed directors have backgrounds in banking, finance, business operations, government and law.

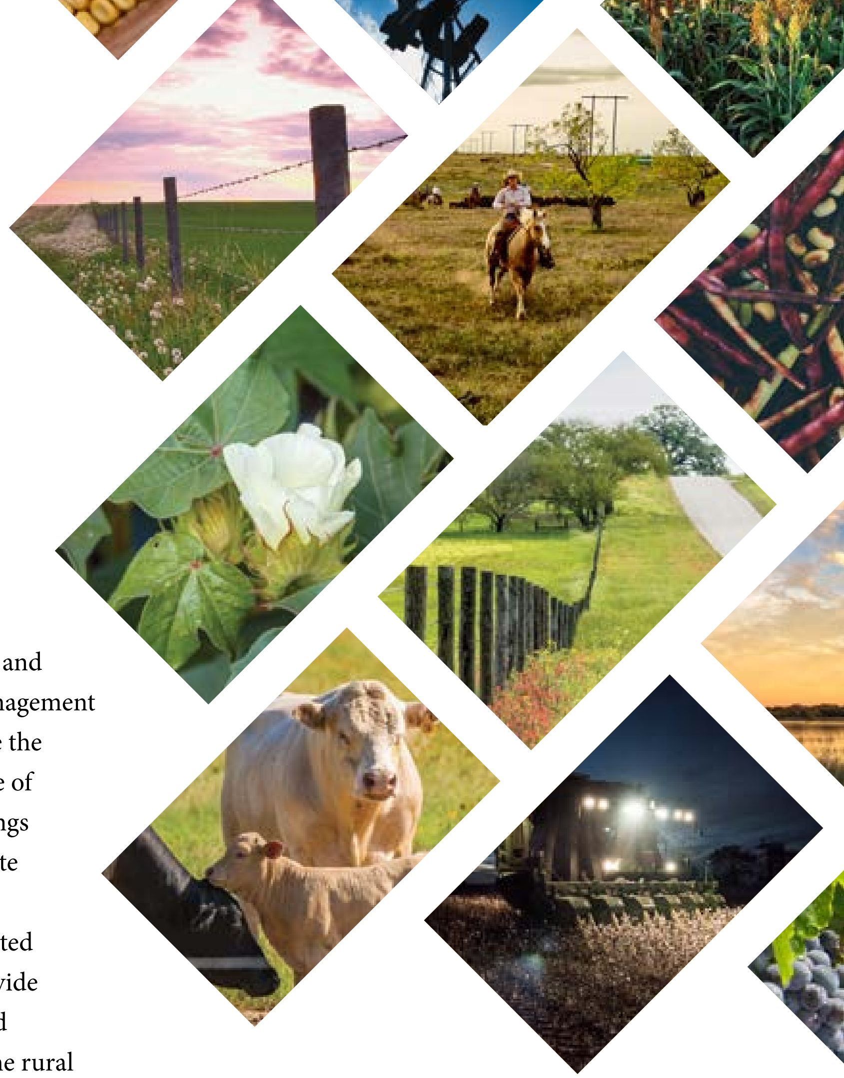
BOARD BIDS FAREWELL TO RETIRING DIRECTOR



Elizabeth G. "Betty" Flores of Laredo, Texas, retired from the board in April 2019 after 12 years of service.

Flores brought experience in commercial banking, agriculture and government to her role. She was a strong advocate for Farm Credit everywhere she went — from rural communities to Capitol Hill.

She also was a leader in the Farm Credit System's diversity initiative, one of many ways she made a positive difference during her tenure.



SENIOR MANAGEMENT TEAM

The bank's leaders draw on their lengthy experience in the Farm Credit System and in commercial banking, finance, government, information technology, risk assurance and agriculture.

In addition to overseeing day-to-day operations, the team sets the course for the bank's future success by working with the board of directors to establish business goals and strategies.

Through their vision, combined experience and conservative risk-management approach, they ensure the bank is a stable source of funding and an earnings engine for the five-state district it serves. This strengthens our affiliated lenders' ability to provide competitive credit and superior service for the rural marketplace.

From left to right are Stan Ray, chief administrative officer; Amie Pala, chief financial officer; John Sloan, chief credit officer; Larry Doyle, chief executive officer; Nanci Tucker, general counsel; Ed Benson, chief information and business systems officer; and Nisha Rocap, chief audit executive.

Five-Year Summary of Selected Financial Data

Farm Credit Bank of Texas

(dollars in thousands)	2019	2018	2017	2016	2015
Balance Sheet Data					
Cash, federal funds sold and overnight investments	**$ 421,950**	$ 410,609	$ 303,071	$ 218,380	$ 567,503
Investment securities	**5,295,143**	5,714,638	5,144,985	4,831,375	4,445,105
Loans	**19,498,293**	18,056,686	17,085,177	15,909,403	14,771,006
Less allowance for loan losses	**11,487**	11,974	7,639	7,650	5,833
Net loans	**19,486,806**	18,044,712	17,077,538	15,901,753	14,765,173
Other property owned	**-**	-	-	-	438
Other assets	**459,917**	359,191	311,011	270,890	211,356
Total assets	**$ 25,663,816**	$ 24,529,150	$ 22,836,605	$ 21,222,398	$ 19,989,575
Obligations with maturities of one year or less	**$ 9,660,506**	$ 8,721,295	$ 7,890,433	$ 9,082,248	$ 7,995,821
Obligations with maturities greater than one year	**14,159,127**	14,030,922	13,278,288	10,517,898	10,440,176
Total liabilities	**23,819,633**	22,752,217	21,168,721	19,600,146	18,435,997
Preferred stock	**700,000**	700,000	600,000	600,000	600,000
Capital stock	**335,262**	316,463	301,239	284,038	255,823
Allocated retained earnings	**52,451**	45,685	39,144	33,171	27,203
Unallocated retained earnings	**808,101**	796,478	779,403	737,622	697,883
Accumulated other comprehensive loss	**(51,631)**	(81,693)	(51,902)	(32,579)	(27,331)
Total shareholders' equity	**1,844,183**	1,776,933	1,667,884	1,622,252	1,553,578
Total liabilities and shareholders' equity	**$ 25,663,816**	$ 24,529,150	$ 22,836,605	$ 21,222,398	$ 19,989,575
Statement of Income Data					
Net interest income	**$ 271,611**	$ 256,836	$ 251,321	$ 238,321	$ 232,468
Loan loss reversal (provision for loan losses)	**588**	(4,671)	1,673	(563)	2,506
Noninterest expense, net	**(69,245)**	(61,635)	(57,008)	(45,352)	(42,735)
Net income	**$ 202,954**	$ 190,530	$ 195,986	$ 192,406	$ 192,239
Financial Ratios (unaudited)					
Rate of return on:					
Average assets	**0.81%**	0.81%	0.89%	0.92%	1.02%
Average shareholders' equity	**10.86**	10.85	11.51	11.67	12.22
Net interest income to average earning assets	**1.10**	1.10	1.16	1.18	1.27
Net (recoveries) charge-offs to average loans	**-**	-	(0.01)	(0.01)	0.01
Total shareholders' equity to total assets	**7.19**	7.24	7.30	7.64	7.77
Debt to shareholders' equity (:1)	**12.92**	12.80	12.69	12.08	11.87
Allowance for loan losses to total loans	**0.06**	0.07	0.05	0.05	0.04
Common equity tier 1 ratio	**9.91**	9.92	10.52	n/a	n/a
Tier 1 capital ratio	**16.01**	16.29	16.59	n/a	n/a
Total capital ratio	**16.12**	16.42	16.68	n/a	n/a
Permanent capital ratio	**16.03**	16.31	16.60	17.40	17.74
Tier 1 leverage ratio	**7.26**	7.39	7.33	n/a	n/a
UREE leverage ratio	**3.06**	3.08	3.08	n/a	n/a
Total surplus ratio	**n/a**	n/a	n/a	14.98	15.48
Core surplus ratio	**n/a**	n/a	n/a	9.97	9.88
Net collateral ratio	**n/a**	n/a	n/a	107.35	107.70
Net Income Distributions					
Preferred stock cash dividends	**$ 56,450**	$ 54,727	$ 50,250	$ 50,250	$ 50,250
Patronage distributions declared					
Cash	**$ 128,112**	$ 110,853	$ 97,982	$ 96,449	$ 82,478
Allocated retained earnings	**6,766**	6,541	5,973	5,968	4,695

The following commentary is a discussion and analysis of the financial position and the results of operations of the Farm Credit Bank of Texas (the bank or FCBT) for the years ended December 31, 2019, 2018 and 2017. The commentary should be read in conjunction with the accompanying financial statements, notes to the financial statements (notes) and additional sections of this annual report. The accompanying financial statements were prepared under the oversight of the bank's audit committee.

The bank, together with its affiliated associations (the district), is part of the federally chartered Farm Credit System (System). The district serves Texas, Alabama, Mississippi, Louisiana and most of New Mexico. The bank provides funding to the district associations, which, in turn, provide credit to their borrower-shareholders. As of December 31, 2019, the bank served one Federal Land Credit Association (FLCA), 13 Agricultural Credit Associations (ACAs) and certain Other Financing Institutions (OFIs) which are not part of the System. The FLCA and ACAs are collectively referred to as associations. See Note 1, "Organization and Operations," to the accompanying financial statements for an expanded description of the structure and operations of the bank.

The accompanying financial statements exclude financial information of the bank's affiliated associations. The bank and its affiliated associations are collectively referred to as the "Texas District." The bank separately publishes certain unaudited combined financial information of the Texas District, including a condensed statement of condition and statement of income, which can be found on the bank's website at *www.farmcreditbank.com*. Such information is not incorporated by reference to, and should not be considered part of, this annual report.

Forward-Looking Information

This annual report contains forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. Words such as "anticipates," "believes," "could," "estimates," "may," "should," "will," or other variations of these terms are intended to identify the forward-looking statements. These statements are based on assumptions and analyses made in light of experience and other historical trends, current conditions and expected future developments. However, actual results and developments may differ materially from our expectations and predictions due to a number of risks and uncertainties, many of which are beyond our control. These risks and uncertainties include, but are not limited to:

- political, legal, regulatory, and economic conditions and developments in the United States and abroad;
- economic fluctuations in the agricultural, rural utility, international and farm-related business sectors;
- weather-related, disease and other adverse climatic or biological conditions that periodically occur that impact agricultural productivity and income;
- changes in United States 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 and government-sponsored enterprises; and
- actions taken by the Federal Reserve System in implementing monetary policy.

Critical Accounting Policies

The financial statements are reported in conformity with generally accepted accounting principles in the United States of America. Our significant accounting policies are critical to the understanding of our results of operations and financial position because some accounting policies require us to make complex or subjective judgments and estimates that may affect the value of certain assets or liabilities. We consider these policies critical because management has to make judgments about matters that are inherently uncertain. For a complete discussion of significant accounting policies, see Note 2, "Summary of Significant Accounting Policies," to the accompanying financial statements. The following is a summary of certain critical policies.

- *Reserves for credit losses* — The bank records reserves for credit losses, consisting of an allowance for loan losses, reported as a reduction of loans on the bank's balance sheets, and a reserve for losses on unfunded commitments, including letters of credit and unused loan commitments, which is reported as a liability on the bank's balance sheets. These reserves are management's best estimate of the amount of probable losses existing in and inherent in our loan portfolio. The allowance for loan losses and reserves for credit losses are increased through provisions for credit losses and loan recoveries and are decreased through loan loss reversals and loan charge-offs. The allowance for loan losses is determined based on a periodic evaluation of the loan portfolio, which identifies loans that may be impaired. Each of these individual loans is evaluated based on the borrower's overall financial condition, resources and payment record; the prospects for support from any financially responsible guarantor; and, if appropriate, the estimated net realizable value of any collateral. If the present value of expected future cash flows (or, alternatively, the fair value of the collateral) is less than the recorded investment in the loan (including accrued interest, net deferred loan fees or costs, and unamortized premium or discount), an impairment is recognized by making an addition to the allowance for loan losses with a corresponding charge to the provision for credit losses or by similarly adjusting an existing valuation allowance.
- *Valuation methodologies* — Management applies various valuation methodologies to assets and liabilities that often involve a significant degree of judgment, particularly when liquid markets do not exist for the particular items being valued. Quoted market prices are used when estimating fair values for certain assets for which an observable liquid market exists, such as most investment securities. Third-party valuation services are utilized by management to obtain fair

values for the majority of the bank's investments. Management utilizes significant estimates and assumptions to value items for which an observable liquid market does not exist. Examples of these items include impaired loans, other postretirement benefit obligations, and certain derivative and other financial instruments. These valuations require the use of various assumptions, including, among others, discount rates, rates of return on assets, repayment rates, cash flows, default rates, costs of servicing and liquidation values. The use of different assumptions could produce significantly different results, which could have material positive or negative effects on the bank's results of operations.

- *Pensions and retirement plans* — The bank and its related associations participate in the district's defined benefit retirement plan (DB plan). The plan is noncontributory, and benefits are based on salary and years of service. As of January 1, 1996, the bank and associations froze participation in their defined benefit pension plan and offered defined contribution retirement plans to all employees hired subsequent to the freeze.

  The structure of the district's single-employer DB plan is characterized as multiemployer for participating employers' accounting purposes, since neither the assets, liabilities nor cost of any plan is segregated or separately accounted for by participating employers (bank and associations). No portion of any surplus asset is available to any participating employer. Participating employers are jointly and severally liable for the plan obligations. Upon withdrawal or termination of their participation in the plan, a participating employer must pay all associated costs of its withdrawal from the plan, including its unfunded liability (the difference between replacement annuities and the withdrawing employer's share of allocated plan assets). As a result, participating employers of the plan only recognize as cost the required contributions for the period and a liability for any unpaid contributions required for the period of their financial statements. Plan obligations, assets and the components of annual benefit expenses are recorded and reported upon combination only. The bank records current contributions to the DB plan as an expense in the current year.

  The liability and expense for other postemployment benefits is determined actuarially based on certain assumptions, including discount rate and mortality assumptions. The discount rate is used to determine the present value of our future benefit obligations. We selected the discount rate by reference to the Aon AA Only Above-Median Yield Curve, actuarial analyses and industry norms. The Aon yield curves are determined based on actual corporate bond yields for bonds rated AA as of the measurement date. The discount rate at December 31, 2019, was 3.45%, compared to 4.75% at December 31, 2018 and 4.00% at December 31, 2017.

OVERVIEW

General

The bank's loan portfolio totaled $19.50 billion at December 31, 2019, a 7.98% increase from the prior year. The increase in the bank's loan portfolio was mainly due to an increase in the bank's direct loans to associations and an increase in the bank's capital markets loan portfolio. The bank's net income for 2019 was $203.0 million, an increase of $12.4 million compared to 2018. The increase in net income was the result of a $14.8 million increase in net interest income, a $5.2 million decrease in the provision for loan losses and a $1.7 million increase in noninterest income, offset by a $9.3 million increase in noninterest expenses. The increase in net interest income was the result of a $1.36 billion increase in average earning assets, net of a reduction in the bank's net interest rate spread. The bank's net interest rate spread declined by 3 basis points to 0.94% due to an increase in the cost of debt of 32 basis points, offset by an increase in interest-earning assets of 29 basis points.

While loan growth remains strong, the yield curve and competitive market pricing puts pressure on the net interest rate spread. The bank's net interest margin of 1.10% for 2019 was equal to 2018. The net interest margin was negatively impacted by a 3-basis-point decrease in the net interest rate spread and was positively impacted by a 3-basis-point increase in income earned on earning assets funded by noninterest-bearing sources (principally capital).

Funding

During 2019, the System continued to have reliable access to the debt capital markets to support its mission of providing credit to farmers, ranchers and other eligible borrowers. Investor demand for Systemwide debt securities has remained favorable across all products. The bank has continued to have reliable access to funding at competitive rates and terms necessary to support our lending and business operations. Future ratings action affecting the U.S. government and related entities (including the System) may affect our borrowing cost and/or limit our access to the debt capital markets, reducing our flexibility to issue debt across the full spectrum of the yield curve.

Conditions in the Texas District

The district economy performed well during 2019, and employment growth was strong across the five-state territory. According to the U.S. Bureau of Labor Statistics, the Texas economy has added more than 250 thousand jobs year-over-year as of November 2019. The Bureau of Economic Analysis similarly reported that Texas achieved the fastest state-level growth in real gross domestic product in the country during the second and third quarters of 2019. All Texas District states recorded positive year-over-year job growth as of November 2019. This job growth has been diverse, as gains observed in district states have been spread across various industry sectors. In November 2019, the unemployment rates in the five district states ranged from a low of 2.7% in Alabama to a high of 5.6% in Mississippi. The U.S. unemployment rate was 3.5% as of November 2019.

The U.S. Energy Information Administration estimates that West Texas Intermediate oil prices averaged about $57 per barrel in 2019 and should average about $55 per barrel in 2020. Generally, oil prices at or above $50 per barrel tend to be supportive of economic growth in Texas.

Farm income was supported during 2019 by the U.S. Department of Agriculture (USDA) Market Facilitation Program, which authorized up to $16 billion in funding to offset the negative impacts of trade disputes on agricultural commodity prices. On January 15, 2020, the United States and China signed a "phase one" trade agreement that should alleviate tensions and increase exports of U.S. goods, including agricultural products, and services to China over the next two years. Negotiations between the U.S. and China are anticipated to continue for the foreseeable future. On January 16, 2020, the U.S. Senate passed the U.S.-Mexico-Canada Agreement (USMCA). While the USMCA will likely not lead to significant changes in export patterns for most agricultural products relative to the previous North American Free Trade Agreement (NAFTA), it should provide some certainty to exporters and importers operating across North America. These recent events are generally viewed as beneficial for agricultural prices.

According to USDA estimates released in December 2019, U.S. cotton production increased by approximately 10% in 2019 relative to the previous season. Consequently, farmers are likely to receive lower prices for cotton relative to those received in the previous marketing year. Meanwhile, lower corn and soybean production during the 2019 crop year is likely to lead to higher prices for both commodities.

According to USDA estimates, the average steer price observed during 2019 was relatively stable compared to the previous year. Projections indicate that cattle prices should remain near this same level in 2020. Milk prices increased substantially during 2019, and recent USDA estimates indicate that this trend should continue through 2020. U.S. pork producers continue to benefit from reduced production in China, where African swine fever has substantially impacted output.

Farmers in the district utilize risk management tools, such as Federally-sponsored crop insurance programs and forward, futures and options contracts, to mitigate risk and enhance margins. The district portfolio continues to be supported by strong credit quality, high levels of capital, low advance rates and diversification.

RESULTS OF OPERATIONS

Net Income

The bank's net income of $203.0 million for the year ended December 31, 2019, reflects an increase of 6.52% over 2018, while 2018 net income of $190.5 million decreased by 2.78% from 2017. The return on average assets was 0.81% for the years ended December 31, 2019 and December 31, 2018. The return on average assets was 0.89% for the year ended December 31, 2017.

Changes in the major components of net income for the referenced periods are outlined in the table below and in the discussion following:

	Year Ended December 31,	
	2019 vs. 2018	**2018 vs. 2017**
Net income (prior period)	**$ 190,530**	$ 195,986
Increase due to:		
Increase in interest income	**113,153**	143,045
Increase in interest expense	**(98,378)**	(137,530)
Increase in net interest income	**14,775**	5,515
Decrease (increase) in provision for credit losses	**5,259**	(6,344)
Increase in noninterest income	**1,697**	2,346
Increase in noninterest expense	**(9,307)**	(6,973)
Total change in net income	**12,424**	(5,456)
Net income	**$ 202,954**	$ 190,530

Discussion of the changes in components of net income is included in the following narrative.

Interest Income

Total interest income for the year ended December 31, 2019, was $803.7 million, an increase of $113.2 million, or 16.39%, compared to 2018. Total interest income for the year ended December 31, 2018, was $690.6 million, an increase of $143.0 million, or 26.13%, compared to 2017.

The increase for 2019 was due primarily to a $1.36 billion increase in average earning assets and a 29-basis-point increase in the average yield. The increase for 2018 was due primarily to a $1.65 billion increase in average earning assets and a 44-basis-point increase in the average yield.

The following table illustrates the impact that volume and yield changes had on interest income over these periods:

	Year Ended December 31,	
	2019 vs. 2018 [1]	**2018 vs. 2017 [1]**
Increase in average earning assets	**$ 1,362,300**	$ 1,647,227
Average yield (prior year)	**2.97%**	2.53%
Interest income variance attributed to change in volume	**40,460**	41,718
Average earning assets (current year)	**24,627,888**	23,265,588
Increase in average yield	**0.29%**	0.44%
Interest income variance attributed to change in yield	**72,693**	101,327
Net change in interest income	**$ 113,153**	$ 143,045

[1] The change in interest income not solely due to changes in volume or rate has been allocated in proportion to the absolute dollar amount of the change in volume and rate.

Interest Expense

Total interest expense for the year ended December 31, 2019, was $532.1 million, an increase of $98.4 million, or 22.68%, compared to the same period of 2018. Total interest expense for the year ended December 31, 2018, was $433.7 million, an increase of $137.5 million, or 46.43%, compared to the same period of 2017. The increase in 2019 was due primarily to the effects of a 32-basis-point increase in the average cost of debt and a $1.27 billion increase in average interest-bearing liabilities. The increase for 2018 was due primarily to the effects of a 53-basis-point increase in the average cost of debt and a $1.50 billion increase in average interest-bearing liabilities.

During 2019, 2018 and 2017, the bank was able to reduce its interest expense by calling and replacing debt totaling $7.18 billion, $268.0 million and $1.03 billion, respectively. During the years ended December 31, 2019 and 2017, the bank recognized concession expense of $12.7 million and $1.7 million, respectively. During the year ended December 31, 2018, the bank did not recognize any concession expense.

The following table illustrates the impact that volume and rate changes had on interest expense over these periods:

	Year Ended December 31,	
	2019 vs. 2018 [1]	**2018 vs. 2017 [1]**
Increase in average interest-bearing liabilities	**$ 1,273,943**	$ 1,500,458
Average rate (prior year)	**2.00%**	1.47%
Interest expense variance attributed to change in volume	**25,479**	22,060
Average interest-bearing liabilities (current year)	**22,920,650**	21,646,707
Increase in average rate	**0.32%**	0.53%
Interest expense variance attributed to change in rate	**72,899**	115,470
Net change in interest expense	**$ 98,378**	$ 137,530

[1] The change in interest expense not solely due to changes in volume or rate has been allocated in proportion to the absolute dollar amount of the change in volume and rate.

Net Interest Income

Net interest income, the excess of interest income over interest expense, increased by $14.8 million from 2018 to 2019, and increased by $5.5 million from 2017 to 2018. The increase in 2019 was due to the effects of a $1.36 billion increase in average interest-earning assets, partially offset by a 3-basis-point decrease in the interest rate spread, which is the difference between the average rate received on interest-earning assets and the average rate paid on interest-bearing debt. The bank's increase in average earning assets included growth in direct notes to district associations and the bank's capital markets loan portfolio.

Net interest income in 2018 was $5.5 million greater than 2017. The increase in 2018 was due to the effects of a $1.65 billion increase in average interest-earning assets, partially offset by a 9-basis-point decrease in the interest rate spread.

ANALYSIS OF NET INTEREST INCOME

	2019		2018		2017	
	Average Balance	**Interest**	Average Balance	Interest	Average Balance	Interest
Loans	**$ 18,882,265**	**$ 661,515**	$ 17,662,587	$ 563,495	$ 16,520,111	$ 462,765
Investments	**5,745,623**	**142,203**	5,603,001	127,070	5,098,250	84,755
Total earning assets	**24,627,888**	**803,718**	23,265,588	690,565	21,618,361	547,520
Interest-bearing liabilities	**22,920,650**	**532,107**	21,646,707	433,729	20,146,249	296,199
Impact of capital	**$ 1,707,238**		$ 1,618,881		$ 1,472,112	
Net Interest Income		**$ 271,611**		$ 256,836		$ 251,321

	2019 Average Yield	2018 Average Yield	2017 Average Yield
Yield on loans	**3.50%**	3.19%	2.80%
Yield on investments	**2.47%**	2.27%	1.66%
Yield on earning assets	**3.26%**	2.97%	2.53%
Cost of interest-bearing liabilities	**2.32%**	2.00%	1.47%
Interest rate spread	**0.94%**	0.97%	1.06%
Impact of capital	**0.16%**	0.13%	0.10%
Net interest income/average earning assets	**1.10%**	1.10%	1.16%

Provision for Credit Losses

The bank's loan loss reversal for 2019 was $0.5 million, a decrease of $5.2 million from the $4.7 million provision recorded for 2018. The loan loss reversal recognized in 2019 is primarily due to reversals of $2.1 million for specific reserves on one agribusiness loan, offset by an increase of $1.6 million in general reserves due to slight credit quality deterioration in certain sectors of the loan portfolio.

The bank's provision for credit losses for 2018 totaled $4.7 million, an increase of $6.3 million from the $1.7 million negative provision recorded for 2017. The provision recognized in 2018 included required allowances related to loans individually evaluated for impairment of $7.4 million, offset by decreases in general reserves of $2.6 million.

The bank's loan loss reversal for 2017 totaled $1.7 million, a decrease of $2.2 million from the $563 provision recorded for 2016. The loan loss reversal recognized in 2017 included recoveries of $1.4 million and a decrease in general reserves.

Noninterest Income

Noninterest income for the year ended December 31, 2019, was $49.2 million, an increase of $1.7 million, or 3.57%, compared to 2018. The increase was primarily due to a $12.1 million increase in the gain on sale of investments, offset by a $5.9 million decrease in the refund from the Farm Credit System Insurance Corporation (FSCIC), a decrease of $3.6 million in other income related to gains on the extinguishment of debt, a $1.6 million decrease in prepayment penalty fees and a $1.0 million decrease in patronage income.

Noninterest income for the year ended December 31, 2018, was $47.6 million, an increase of $2.3 million, or 5.19%, compared to 2017. The increase was primarily due to an $8.4 million increase in the refund from the FCSIC, and an increase of $3.6 million in other income related to gains on the extinguishment of debt, offset by a $1.3 million decrease in prepayment penalty fees, a $3.7 million decrease in gain on sale of loans, a $1.3 million decrease in patronage income, and a $3.0 million decrease in Rural Business Investment Companies (RBICs) income.

Noninterest Expense

Noninterest expense totaled $118.5 million for 2019, an increase of $9.3 million, or 8.52%, from 2018. The $4.3 million increase in other operating expenses was primarily due to a $2.6 million increase in professional and contract services. The $2.7 million increase in occupancy and equipment expenses was primarily due to a $2.1 million increase in maintenance and depreciation expense on software. The $1.7 million increase in salaries and benefits is due to normal annual merit increases coupled with an increase in the average number of employees. The $633 increase in FCSIC premiums is due to an increase in outstanding debt.

Professional and contract services increased primarily due to resources assigned to the bank's technology initiatives. FCSIC premium rate on outstanding debt was 9 basis points for both 2019 and 2018.

Noninterest expense totaled $109.2 million for 2018, an increase of $7.0 million, or 6.82%, from 2017. This increase was primarily due to a $5.3 million increase in professional and contract services, a $2.8 million increase in salaries and benefits, and a $2.1 million increase in occupancy and equipment expenses, offset primarily by a $4.4 million decrease in FCSIC premiums.

Professional and contract services increased primarily due to an increase in compliance costs and resources assigned to the bank's technology initiatives. FCSIC premiums decreased due to a rate decrease on outstanding debt from 15 basis points in 2017 to 9 basis points in 2018.

Noninterest expense totaled $102.2 million for 2017, an increase of $6.4 million, or 6.70%, from 2016. This increase was primarily due to a $4.7 million increase in professional and contract services and a $2.3 million increase in salaries and benefits, offset primarily by a $947 decrease in FCSIC premiums.

Operating expense (salaries and employee benefits, occupancy and equipment, FCSIC premiums, and other operating expenses) statistics are set forth below for each of the three years ended December 31:

	2019	2018	2017
Excess of net interest income over operating expense	**$ 153,119**	$ 147,651	$ 149,109
Operating expense as a percentage of net interest income	**43.6%**	42.5%	40.7%
Operating expense as a percentage of net interest income and noninterest income	**36.9**	35.9	34.5
Operating expense as a percentage of average loans	**0.63**	0.62	0.62
Operating expense as a percentage of average earning assets	**0.48**	0.47	0.47

CORPORATE RISK PROFILE

Overview

The bank is in the business of funding and participating in agricultural and other loans which requires us to take certain risks in exchange for compensation for the risks undertaken. Management of risks inherent in our business is essential for our current and long-term financial performance. Our goal is to mitigate risk, where appropriate, and to properly and effectively identify, measure, price, monitor and report risks in our business activities.

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

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

Structural Risk Management

Structural risk results from the fact that the bank, along with its related associations, is part of the Farm Credit System (System), which is composed of banks and associations that are cooperatively owned, directly or indirectly, by their borrowers. While System institutions are financially and operationally interdependent, this structure at times requires action by consensus or contractual agreement. Further, there is structural risk in that only the banks are jointly and severally liable for the payments of Systemwide debt securities. Although capital at the association level reduces a bank's credit exposure with respect to its direct loans to its affiliated associations, this capital may not be available to support the payment of principal and interest on Systemwide debt securities.

In order to mitigate this risk, the System utilizes two integrated contractual agreements — the Amended and Restated Contractual Interbank Performance Agreement (CIPA), and the Third Amended and Restated Market Access Agreement (MAA). Under provisions of the CIPA, a score (CIPA score) is calculated that measures the financial condition and performance of each district using various ratios that take into account the district's and bank's capital, asset quality, earnings, interest-rate risk and liquidity. The CIPA score is then compared against the agreed-upon standard of financial condition and performance that each district must achieve and maintain. The measurement standard established under the CIPA is intended to provide an early-warning mechanism to assist in monitoring the financial condition of each district. The performance standard under the CIPA is based on the average CIPA score over a four-quarter period.

The MAA is designed to provide for the timely identification and resolution of individual bank financial issues and establishes performance criteria and procedures for the banks that provide operational oversight and control over a bank's access to System funding.

As required by the MAA, the banks and the Federal Farm Credit Banks Funding Corporation (Funding Corporation) undertake a periodic formal review of the MAA to consider whether any amendments are appropriate. In connection with the most recent review, the banks and the Funding Corporation agreed to enter into the Third Amended and Restated MAA, which was effective on January 1, 2017.

Periodically, the CIPA model and the MAA performance criteria are reviewed to take into consideration current performance standards in the financial services industry or regulatory changes. As a result of the changes to regulatory capital ratio requirements that became effective January 1, 2017, the performance criteria set forth in the MAA are as follows:

- the defined CIPA scores,
- the tier 1 leverage ratio of a bank, and
- the total capital ratio of a bank.

The bank's tier 1 leverage ratio is tier 1 capital (primarily unallocated retained earnings, the bank's common stock and preferred stock less certain regulatory required deductions) divided by non-risk adjusted assets. The bank's total capital ratio is the sum of the bank's common equity tier 1 capital, additional tier 1 capital and tier 2 capital elements, minus regulatory deductions and adjustments, divided by risk-adjusted assets.

If a bank fails to meet the above performance criteria, it will be placed into one of three categories. Each category gives the other System banks progressively more control over a bank that has declining financial performance under the MAA performance criteria. A "Category I" bank is subject to additional monitoring and reporting requirements; a "Category II" bank's ability to participate in issuances of Systemwide debt securities may be limited to refinancing maturing debt obligations; and a "Category III" bank may not be permitted to participate in issuances of Systemwide debt securities. A bank exits these categories by returning to compliance with the agreed-upon performance criteria.

The criteria for the tier 1 leverage ratio and the total capital ratio are:

	Tier 1 Leverage Ratio	Total Capital Ratio
Category I	<5.0%	<10.5%
Category II	<4.0%	<8.0%
Category III	<3.0%	<7.0%

During the year ended December 31, 2019, all banks met the agreed-upon standards for the tier 1 leverage ratio and total capital ratios required by the MAA that became effective January 1, 2017. As of December 31, 2019, all banks met the agreed-upon standard of financial condition and performance required by the CIPA. During the three years ended December 31, 2019, the banks met the defined CIPA score required by the MAA.

Credit Risk Management

Credit risk arises from the potential inability of an obligor to meet its repayment obligation and exists in our outstanding loans, letters of credit, unfunded loan commitments, investment portfolio and derivative counterparty credit exposures. We manage credit risk associated with our lending activities through an assessment of the credit risk profile of an individual borrower. We set our own underwriting standards and lending policies, approved by the board of directors, that provide direction to loan officers. Underwriting standards include, among other things, an evaluation of:

- character — borrower integrity and credit history;
- capacity — repayment capacity of the borrower based on cash flows from operations or other sources of income;
- collateral — protects the lender in the event of default and represents a potential secondary source of loan repayment;
- capital — ability of the operation to survive unanticipated risks; and
- conditions — requirements that govern intended use of loan funds.

The retail credit risk management process begins with an analysis of the borrower's credit history, repayment capacity and financial position. Repayment capacity focuses on the borrower's ability to repay the loan based on cash flows from operations or other sources of income, including non-farm income. Real estate loans with terms greater than 10 years must be secured by first liens on the real estate (collateral). As required by Farm Credit Administration regulations, each institution that makes loans on a secured basis must have collateral evaluation policies and procedures. Real estate loans with terms greater than 10 years may be made only in amounts up to 85% of the original appraised value of the property taken as security or up to 97% of the appraised value if guaranteed by a state, federal or other governmental agency. The actual loan to appraised value when loans are made is generally lower than the statutory maximum percentage. Appraisals are required for loans of more than $250,000. This credit risk-rating process incorporates objective and subjective criteria to identify inherent strengths and weaknesses and risks in a particular relationship.

This credit risk-rating process uses a two-dimensional loan rating structure, incorporating a 14-point risk-rating scale to identify and track the probability of borrower default and a separate 4-point scale addressing loss given default. The 14-point risk-rating scale provides for nine "acceptable" categories, one "other assets especially mentioned" (OAEM) category, two "substandard" categories, one "doubtful" category and one "loss" category. The loss given default scale establishes ranges of anticipated economic loss if the loan defaults. The calculation of economic loss includes principal and interest as well as collections costs, legal fees and staff costs.

By buying and selling loans or interests in loans to or from other institutions within the System or outside the System, we limit our exposure to either a borrower or commodity concentration. This also allows us to manage growth and capital, and to improve geographic diversification.

Portfolio credit risk is also evaluated with the goal of managing the concentration of credit risk. Concentration risk is reviewed and measured by industry, commodity, geography and customer limits.

Loans

The bank's loan portfolio consists of direct notes receivable from district associations and qualifying other financing institutions (OFIs), the bank's capital markets loan portfolio and other bank-owned loans. See Note 1, "Organization and Operations," Note 2, "Summary of Significant Accounting Policies," and Note 4, "Loans and Reserves for Credit Losses," to the accompanying financial statements for further discussions.

The bank's capital markets loan portfolio predominantly includes participations, syndications and purchased whole loans, along with other financing structures within our lending authorities. The bank also refers to the capital markets portfolio as participations purchased. In addition to purchasing loans from our district associations, which may exceed their hold limits, the bank seeks the purchase of participations and syndications originated outside of the district's territory by other System institutions, commercial banks and other lenders. These loans may be held as earning assets of the bank or subparticipated to the associations or to other System entities.

Gross loan volume of $19.50 billion at December 31, 2019, reflected an increase of $1.44 billion, or 7.98%, from December 31, 2018. The balance of $18.06 billion at December 31, 2018, reflected an increase of $971.5 million, or 5.69%, from December 31, 2017. The increase in the loan portfolio from 2018 to 2019 is mainly attributable to a $1.15 billion increase in the bank's direct loans to associations and OFIs and a $288.5 million increase in the bank's capital markets loan portfolio.

The bank has purchased loan participations and Federal Agricultural Mortgage Corporation (Farmer Mac) guaranteed agricultural mortgage-backed securities (AMBS) from associations in Capitalized Participation Pool (CPP) program transactions. CPP purchases result in pay downs on the associations' direct notes at the time of purchase. During 2019, the bank purchased $9.6 million in loan participations from associations, which resulted in net stock issuances of $578. CPP loans held at December 31, 2019, totaled $118.7 million and were included in loans on the balance sheet. The balance of the Farmer Mac AMBS CPP was $29.1 million at December 31, 2019, and is included in investment securities on the balance sheet.

The bank also purchased loans from a district association in Non-Capitalized Participation Pool (NCPP) program transactions. NCPP purchases result in pay downs on the associations' direct notes at the time of purchase. There were no NCPP loan purchases for the year ended December 31, 2019. NCPP loans held at December 31, 2019, totaled $144.0 million, and were included in loans on the balance sheet.

The following table presents each loan category as a percentage of the total loan portfolio:

	December 31,		
	2019	2018	2017
Direct notes receivable from district associations and OFIs	**66.6%**	65.5%	67.8%
Participations purchased	**33.4**	34.5	32.2
Other bank-owned loans	-	-	-
Total	**100.0%**	100.0%	100.0%

The following table discloses the credit quality of the bank's loan portfolio:

	December 31,		
	2019	2018	2017
Acceptable	**93.8%**	95.3%	94.2%
OAEM (special mention)	**5.7**	4.3	5.5
Substandard/Doubtful	**0.5**	0.4	0.3
Total	**100.0%**	100.0%	100.0%

During the second quarter of 2019, the bank downgraded the direct loan to one of our affiliated associations to the special mention credit quality classification. As of December 31, 2019, the outstanding direct note balance totaled $232.7 million. The bank's loans to our affiliated associations are collateralized by substantially all of the association assets, and the earnings, capital and loan loss reserves of the association provide a buffer against losses in their retail portfolio. The bank has not made any provision for loan loss or recorded any allowance for credit loss related to our direct note to that affiliated association.

The increase in special mention loans credit quality (as a percentage of total loans) as of December 31, 2019, compared to December 31, 2018, is mainly due to the movement of loans from acceptable to special mention. The increase in acceptable loans credit quality (as a percentage of total loans) as of December 31, 2018, compared to December 31, 2017, is mainly driven by growth in the capital markets loan portfolio, and to a lesser extent, an increase in the direct note volume.

The bank's capital markets loan portfolio's concentration of credit risk in various commodities is shown in the following table at December 31:

	Percentage of Portfolio		
Commodity Group	**2019**	2018	2017
Rural electric	**16%**	19%	22%
Livestock	**11**	11	10
Dairy	**7**	7	7
Grain mill products	**6**	7	7
Miscellaneous food products	**6**	5	6
Meat products	**5**	5	5
Telecommunication	**5**	4	6
Timber	**4**	4	4
Other	**40**	38	33
Total	**100%**	100%	100%

The diversity of states underlying the bank's capital markets loan portfolio is reflected in the following table:

	December 31,		
States	**2019**	2018	2017
Texas	**19%**	18%	15%
California	**6**	6	5
Illinois	**6**	5	6
Georgia	**4**	5	6
Minnesota	**4**	5	4
All other states	**61**	61	64
Total	**100%**	100%	100%

The balance of the bank's association direct notes sold to another System bank was $3.85 billion at December 31, 2019, 2018 and 2017, respectively. The bank sold no OFI direct notes to another System bank during 2019 and 2018 and $1.5 million at December 31, 2017.

Association Direct Notes

As the preceding table illustrates, 66.6% of the bank's loan portfolio consisted of direct notes from associations and OFIs at December 31, 2019. Terms of direct notes to associations and OFIs are specified in a separate general financing agreement between each association and OFI and the bank, and all assets of each association secure the direct notes to the bank. Each association is a federally chartered instrumentality of the United States and is regulated by the Farm Credit Administration (FCA). See Note 1, "Organization and Operations," to the accompanying financial statements for further discussion of the Farm Credit System.

Direct notes from the associations in Texas represent the majority of the bank's direct notes from all district associations. However, these notes are collateralized by a diverse loan portfolio, both in terms of geography and underlying commodities, which helps to mitigate the concentration risk often associated with one state or locale. Associations in each state have commodity diversification that is being augmented by purchases of loan participations.

The credit exposure of the bank's loans to associations, which are evidenced by direct notes with full recourse, is dependent on the associations' creditworthiness and the ability of their borrowers to repay loans made to them. The credit risk to the bank is mitigated by diversity in the associations' loan portfolios in terms of underlying collateral and income sources, geography and range of individual loan amounts. In addition, the risk-bearing capacities of the associations are assessed quarterly by the bank and are currently deemed adequate to absorb most interest-related shocks. Each association maintains an allowance for loan losses determined by its management and is capitalized to serve its unique market area. Associations are subject to FCA regulations concerning minimum capital, loan underwriting and portfolio management, and are audited annually by independent auditors. In addition, associations are required by the general financing agreement with the bank to provide copies of their risk-based internal credit review reports and other audit/examination reports. The associations are required to maintain a risk-based internal credit review program including procedures addressing: reviewer qualification and independence, review frequency, accuracy of risk ratings, credit administration, regulatory compliance, scope selection, documentation of audit committee approval of reviewers and audit committee review of the internal control reports. As of December 31, 2019, all associations were in compliance with their general financing agreements with the bank, including one in compliance with conditions contained in a waiver of default.

Loans held by district associations totaled $19.77 billion at December 31, 2019, an increase of $1.19 billion, or 6.41%, from loan volume at December 31, 2018, due to a strong general economy in the chartered territories of the district associations. In 2018 and 2017, association loan volume increased by $378.4 million and $1.10 billion, respectively.

The combined associations' concentration of credit risk in various agricultural commodities is shown in the following table at December 31:

	Percentage of Portfolio		
Commodity Group	**2019**	2018	2017
Livestock	**38%**	39%	40%
Crops	**17**	17	17
Timber	**8**	9	9
Poultry	**6**	5	5
Cotton	**5**	5	5
Dairy	**4**	4	3
Rural home	**1**	1	1
Other	**21**	20	20
Total	**100%**	100%	100%

The diversity of states underlying the combined associations' loan portfolio is reflected in the following table:

	December 31,		
States	**2019**	2018	2017
Texas	**64%**	65%	65%
Alabama	**9**	9	9
Mississippi	**9**	9	8
Louisiana	**4**	4	4
All other states	**14**	13	14
Total	**100%**	100%	100%

The combined associations' loans by size are shown in the following table at December 31:

Size (thousands)	**2019**
<$250	**19%**
$250-$500	**13**
$500-$1,000	**16**
$1,000-$5,000	**32**
$5,000-$25,000	**18**
$25,000-$100,000	**2**
Total	**100%**

Credit quality at the district's associations remained strong, with loans classified as "acceptable" or "other assets especially mentioned" (special mention) as a percentage of total loans of 98.3%, 99.6% and 98.5% at December 31, 2019, 2018 and 2017, respectively. Association nonearning assets as a percentage of total loans at December 31, 2019, were 0.84%, compared to 0.73% and 0.90% at December 31, 2018 and 2017, respectively.

From the perspective of the district, which is the bank and its related associations collectively, the loan portfolio consists only of retail loans. The diversity of the commodity types and income sources supporting district loan repayment further mitigates credit risk at the bank.

The following table illustrates the district's loan portfolio by major commodity segments at December 31:

	Percentage of Portfolio		
Commodity Group	**2019**	2018	2017
Livestock	**31%**	32%	33%
Crops	**14**	14	14
Timber	**8**	7	8
Dairy	**5**	4	4
Cotton	**4**	4	4
Poultry	**4**	4	4
Rural home	**1**	1	1
Other	**33**	34	32
Total	**100%**	100%	100%

The following table reflects the district's geographic distribution, by major states, at December 31:

	Percentage of Portfolio		
States	**2019**	2018	2017
Texas	**53%**	53%	54%
Alabama	**7**	7	7
Mississippi	**7**	7	7
Louisiana	**4**	3	4
California	**2**	2	2
All other states	**27**	28	26
Total	**100%**	100%	100%

High-Risk Assets

Nonperforming loan volume is composed of nonaccrual loans, accruing restructured loans and loans 90 days or more past due and still accruing interest, and is referred to as impaired loans. High-risk assets consisted of impaired loans and OPO.

The following table discloses the components of the bank's high-risk assets at December 31:

	2019	2018	2017
Nonaccrual loans	**$ 16,765**	$ 19,486	$ 3,393
Accruing formally restructured loans	**2,450**	2,531	2,607
Loans past due 90 days or more and still accruing interest	**229**	-	-
Total impaired loans	**19,444**	22,017	6,000
Total high-risk assets	**$ 19,444**	$ 22,017	$ 6,000

High-risk assets at December 31, 2019 decreased by $2.6 million, or 11.7%, from $22.0 million at December 31, 2018. At December 31, 2019, $16.1 million, or 95.9%, were current as to principal and interest, compared to $18.3 million, or 93.7% at December 31, 2018, respectively. At December 31, 2017, no loans classified as nonaccrual were current as to principal and interest.

The decrease in nonaccrual loans at December 31, 2019 was primarily attributable to repayments. The increase in nonaccrual loans at December 31, 2018 was primarily attributable to credit deterioration of two loans in the energy and agribusiness sectors that were classified as nonaccrual during 2018 totaling $18.3 million, offset by repayments of $2.7 million. For the periods presented, the bank held no OPO.

Allowance and Reserve for Credit Losses

The allowance for loan losses at December 31, 2019, was $11.5 million, compared to $12.0 million at December 31, 2018, and $7.6 million at December 31, 2017. The decrease from 2018 to 2019 is primarily due to reversals of $2.1 million for specific reserves on one agribusiness loan, offset by an increase of $1.6 million in general reserves due to slight credit deterioration. The reserve for credit losses on letters of credit (LOC) and unfunded commitments was $1.8 million, $1.9 million and $1.4 million at December 31, 2019, 2018 and 2017, respectively. The allowance and reserve for credit losses in its entirety is related to risks identified in the bank's participation portfolio.

The following table provides an analysis of key statistics related to the allowance and reserve for credit losses at December 31:

	2019	2018	2017
Allowance and reserve for credit losses as a percentage of:			
Average loans	**0.06%**	0.07%	0.05%
Loans at year end			
Total loans	**0.06**	0.07	0.05
Participations	**0.18**	0.19	0.14
Nonaccrual loans	**68.52**	61.45	225.14
Total high-risk loans	**59.08**	54.39	127.32
Net (recoveries) charge-offs to average loans	**-**	-	(0.01)
Provision (loan loss reversal) expense to average loans	**-**	0.03	(0.01)

The activity in the reserves for credit losses is discussed further in Note 4, "Loans and Reserves for Credit Losses," to the accompanying financial statements.

Interest Rate Risk Management

Asset/liability management is the bank's process for directing and controlling the composition, level and flow of funds related to the bank's and district's interest-rate-sensitive assets and liabilities. The bank is able to manage the balance sheet composition by using various debt issuance strategies and hedging transactions to match its asset cash flows. Management's objective is to generate adequate and stable net interest income in a changing interest rate environment.

The bank uses a variety of techniques to manage its financial exposure to changes in market interest rates. These include monitoring the difference in the maturities or repricing cycles of interest-rate-sensitive assets and liabilities; simulating changes in net interest income under various interest rate scenarios; and monitoring the change in the market value of interest-rate-sensitive assets and liabilities under various interest rate scenarios. The bank measures interest rate risk on a quarterly basis.

The interest rate risk inherent in a district association's loan portfolio is substantially mitigated through its funding relationship with the bank. The bank manages district interest rate risk through its direct loan pricing and funding processes. Under the Farm Credit Act of 1971, as amended, a district association is obligated to borrow only from the bank unless the bank approves borrowing from other funding sources. An association's indebtedness to the bank, under a general financing agreement between the bank and the association, represents demand borrowings by the association to fund the majority of its loan advances to association members and is secured by the total assets of the association.

The bank's net interest income is determined by the difference between income earned on loans and investments and the interest expense paid on funding sources, typically Systemwide bonds and discount notes. The bank's level of net interest income is affected by both changes in market interest rates and timing differences in the maturities or repricing cycles of interest-bearing assets and liabilities. Depending upon the direction and magnitude of changes in market interest rates, the bank's net interest income may be affected either positively or negatively by the mismatch in the maturity or the repricing cycle of interest-rate-sensitive assets and liabilities.

The bank maintains a loan pricing philosophy that loan rates should be based on competitive market rates of interest. The district associations offer a wide variety of products, including LIBOR- and prime-indexed variable-rate loans and loans with fixed-rate terms ranging from under one year to 30 years. The interest rates on these loans are directly related to the bank's cost to issue debt in the capital markets and a credit spread added for borrower risk.

The bank offers an array of loan programs to associations that are designed to meet the needs of the associations' borrowers. These loan programs have varying repayment terms, including fixed and level principal payments, and a choice of payment frequencies, such as monthly, quarterly, semi-annual and annual payments. Additionally, the bank offers a choice of prepayment options to meet customer needs.

In July 2017, the United Kingdom's Financial Conduct Authority, the authority regulating the London Inter-Bank Offered Rate (LIBOR) announced that it will stop persuading or compelling banks to submit rates for the calculation of the LIBOR after 2021. Since this announcement, central banks around the world, including the Federal Reserve, have commissioned working groups with the goal of finding suitable replacements for LIBOR. In the United

States, efforts to identify a set of alternative U.S. dollar reference interest rates include proposals by the Alternative Reference Rates Committee (ARRC) of the Federal Reserve Board and the Federal Reserve Bank of New York. Specifically, the ARRC has proposed the Secured Overnight Financing Rate (SOFR) as the recommended alternative to LIBOR. SOFR is based on a broad segment of the overnight Treasury repurchase market and is a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities. The bank and its affiliated associations are currently evaluating the impacts of a potential phase-out of the LIBOR benchmark interest rate, including the possibility of using SOFR as an alternative to LIBOR. The transition from LIBOR to SOFR is expected to be complex and to include the development of term and credit adjustments to minimize, to the extent possible, discrepancies between LIBOR and SOFR. Uncertainty as to the nature of such potential changes, alternative reference rates or other reforms may adversely affect the trading market for LIBOR-based instruments, including certain of the Farm Credit Systemwide debt securities, the bank's borrowings, loans, investments, derivatives, and other bank assets and liabilities that are indexed to LIBOR.

The bank established a LIBOR Workgroup, with cross-functional representation from the finance, operations, credit and legal departments. The LIBOR Workgroup is progressing in implementing its transition plan to an alternative benchmark rate. The LIBOR Workgroup coordinates outreach to our associations and with other Farm Credit System institutions, especially the Funding Corporation.

FCBT uses complex modeling tools to manage and measure the risk characteristics of its earning assets and liabilities, including gap and simulation analyses. The following interest rate gap analysis sets forth the bank's interest-earning assets and interest-bearing liabilities outstanding as of December 31, 2019, which are expected to mature or reprice in each of the future time periods shown:

Interest Rate Gap Analysis

as of December 31, 2019

	Interest-Sensitive Period						
	One Month or Less	More Than One Through Six Months	More Than Six Through Twelve Months	**Total Twelve Months or Less**	More Than One Year but Less Than Five Years	More Than Five Years Non-Rate-Sensitive	**Total**
Interest-Earning Assets							
Total loans	$ 3,793,778	$ 2,766,425	$ 2,154,075	**$ 8,714,278**	$ 8,451,235	$ 2,332,780	**$ 19,498,293**
Total investments	2,228,623	629,319	403,064	**3,261,006**	1,885,810	522,671	**5,669,487**
Total interest-earning assets	6,022,401	3,395,744	2,557,139	**11,975,284**	10,337,045	2,855,451	**25,167,780**
Interest-Bearing Liabilities							
Total interest-bearing funds	5,535,418	2,763,946	1,828,852	**10,128,216**	11,862,966	1,482,724	**23,473,906**
Excess of interest-earning assets over interest-bearing liabilities	-	-	-	**-**	-	1,693,874	**1,693,874**
Total interest-bearing liabilities	5,535,418	2,763,946	1,828,852	**10,128,216**	11,862,966	3,176,598	**$ 25,167,780**
Interest rate sensitivity gap	$ 486,983	$ 631,798	$ 728,287	**$ 1,847,068**	$ (1,525,921)	$ (321,147)	
Cumulative interest rate sensitivity gap	$ 486,983	$ 1,118,781	$ 1,847,068	**$ 1,847,068**	$ 321,147		

The amount of assets or liabilities shown in each of the time periods was determined based on the earlier of repricing date, contractual maturity or anticipated loan payments, or projected exercise date on callable debt. To reflect the expected cash flow and repricing characteristics of the bank's balance sheet, an estimate of expected prepayments on loans and mortgage-related investments is used to adjust the maturities of the loans and investments in the earning assets section of the gap analysis. Changes in market interest rates will affect the volume of prepayments on loans. Correspondingly, adjustments have been made to reflect the characteristics of callable debt instruments and the effect derivative financial instruments have on the repricing structure of the bank's balance sheet. The "interest rate sensitivity gap" line reflects the mismatch, or gap, in the maturity or repricing of interest-rate-sensitive assets and liabilities. A gap position can be either positive or negative. A positive gap indicates that a greater volume of assets than liabilities reprices or matures in a given time period, and conversely, a negative gap indicates that a greater volume of liabilities than assets reprices or matures in a given time period. On a 12-month cumulative basis, the bank has a positive gap position, indicating that the bank has an exposure to decreasing interest rates. This would occur when interest income on maturing or repricing interest-bearing assets decrease sooner than interest expense on maturing repricing interest-bearing liabilities.

The cumulative gap, which is a static measure, does not take into consideration the changing value of options available to the bank in order to manage this exposure, specifically the ability to exercise or not exercise options on callable debt. These options are considered when projecting the effects of interest rate changes on net interest income and on the market value of equity in the following tables.

Interest rate risk exposure as measured by simulation modeling calculates the bank's expected net interest income and market value of equity based upon projections of interest-rate-sensitive assets, liabilities, derivative financial instruments and interest rate scenarios. The bank monitors its financial exposure to multiple interest rate scenarios. The bank's policy guideline for the maximum negative impact as a result of a 200-basis-point change in interest rates is 16% for net interest income and 20% for market value of equity. The bank manages its interest rate risk exposure within these guidelines. In the current, relatively low interest rate environment, the downward shock is based on one-half of the three-month Treasury bill rate, which was 78 basis points at December 31, 2019. As of December 31, 2019, projected annual net interest income would increase by 2.59%, if interest rates were to increase by 100 basis points, and would increase by 3.43%, if interest rates were to increase by 200 basis points. As of December 31, 2019, projected annual net interest income would increase by 10.19% if interest rates were to decrease by 78 basis points. Market value of equity is projected to decrease by 4.95% as a result of a 100-basis-point increase in interest rates, and to decrease by 14.99% if interest rates were to increase by 200 basis points as of December 31, 2019. Market value of equity is projected to increase by 0.88% if interest rates were to decline by 78 basis points as of December 31, 2019.

The following tables set forth the bank's projected sensitivity to interest rate movements as prescribed by policy as of December 31, 2019, based on the bank's interest-earning assets and interest-bearing liabilities:

	December 31, 2019		
	-78	+100	+200
Change in net interest income	10.19%	2.59%	3.43%
Change in market value of equity	0.88	-4.95	-14.99

The bank may use derivative financial instruments to manage its interest rate risk and liquidity position. Fair value and cash flow interest rate swaps for asset/liability management purposes may be used to change the repricing characteristics of liabilities to match the repricing characteristics of the assets they support. The bank does not hold, and is restricted by policy from holding, derivative financial instruments for trading purposes and is not a party to leveraged derivative transactions.

At December 31, 2019, the bank held interest rate caps with a notional amount of $195.0 million and a net fair value asset of $98, pay fixed interest rate swap contracts with a notional amount of $825.0 million and a net fair value liability of $53.3 million, and pay floating interest rate swaps with a notional amount of $150.0 million and a net fair value asset of $95. See Note 17, "Derivative Instruments and Hedging Activity," to the accompanying financial statements for further discussion. For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings. For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item (principally, debt securities) attributable to the hedge risk are recognized in current earnings. The bank includes the gain or loss on the hedged items in the same line item (interest expense) as the offsetting loss or gain on the related pay floating interest rate swaps. To the extent that the derivatives have a negative fair value, the bank has a payable on the instrument and the counterparty is exposed to the credit risk of the bank. To the extent that the derivatives have a positive fair value, the bank has a receivable on the instrument and is therefore exposed to credit risk from the counterparty. To manage this credit risk, the bank monitors the credit ratings of its counterparties and has bilateral collateral agreements with counterparties. At December 31, 2019, five counterparties' credit risk exposure to the bank was $35.5 million, which included $17.7 million cash collateral posted.

The bank's activity in derivative financial instruments for 2019 is summarized in the table below:

Activity in Derivative Financial Instruments
(Notional Amounts)

(in millions)	Pay Floating Swaps	Pay Fixed Swaps	Interest Rate Caps	Total
Balance at January 1, 2019	$ -	$ 825	$ 195	$ 1,020
Additions	150	-	-	150
Maturities/amortizations	-	-	-	-
Balance at December 31, 2019	**$ 150**	**$ 825**	**$ 95**	**$ 1,170**

Liquidity Risk Management

The bank's liquidity risk management practices ensure the district's ability to meet its financial obligations. These obligations include the repayment of Systemwide debt securities as they mature, the ability to fund new and existing loan and other funding commitments, and the ability to fund operations in a cost-effective manner. A primary objective of liquidity risk management is to plan for unanticipated changes in the capital markets.

The bank's primary source of liquidity is the ability to issue Systemwide debt securities, which are the general unsecured joint and several obligations of the System banks as discussed below. As a secondary source of liquidity, the bank maintains an investment portfolio composed primarily of high-quality liquid securities. The securities provide a stable source of income for the bank, and their high quality ensures the portfolio can quickly be converted to cash should the need arise.

While the bank's primary source of liquidity is the ability to access the capital markets to issue Systemwide debt, the bank also maintains other contingency funding sources including repurchase agreements with several commercial banks, a $75 million uncommitted Federal Funds line of credit and reciprocal emergency lending agreements with other System entities. These alternative funding sources are subject to various terms and conditions, and as a result, there can be no assurance that funding will be available if needed by the bank. In addition, the Funding Corporation provides contingency financing mechanisms which include emergency and non-emergency purchases of federal funds from counterparties and direct issuance of Systemwide debt securities to institutional investors.

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

FCSIC 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 FCSIC. Under its existing statutory authority, FCSIC may use these funds to provide assistance to the System banks in demanding market circumstances which threaten the banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10.00 billion and terminates on September 30, 2020, unless otherwise renewed. The decision whether to seek funds from the Federal Financing Bank is at the discretion of FCSIC, 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 will be available if needed by the System.

FCA regulations require each bank to maintain a minimum of 90 days of liquidity coverage on a continuous basis, assuming no access to the capital markets. Liquidity coverage is defined as the number of days that maturing Systemwide debt securities could be funded with cash and eligible liquidity investments maintained by the bank. Regulations on liquidity reserve requirement divided the existing eligible liquidity reserve requirement into three levels: Level 1 consists of cash and cash-like instruments and must provide 15 days of coverage; Level 2 consists primarily of government guaranteed securities and must provide 30 days of coverage (combined with Level 1); and Level 3 consists primarily of agency guaranteed securities and must provide a total of 90 days of coverage (combined with Level 1 and Level 2). Additionally, regulations require the bank to maintain a supplemental liquidity reserve above the 90-day minimum to cover cash flow requirements unique to the bank. At December 31, 2019, the bank met all individual level criteria and had a total of 211 days of liquidity coverage, as compared with 241 days at December 31, 2018.

Funding Sources

The bank continually raises funds to support its mission to provide credit and related services to the rural and agricultural sectors, repay maturing Systemwide debt securities and meet other obligations. As a government-sponsored enterprise, the bank has had access to the nation's and world's capital markets. This access has provided us with a dependable source of competitively priced debt that is critical to support our mission of providing funding to the rural and agricultural sectors. Moody's Investors Service and Standard & Poor's rate the System's long-term debt as Aaa and AA+, respectively. These rating agencies base their ratings on many quantitative and qualitative factors, including the System's government-sponsored enterprise status. Standard and Poor's rating on long-term debt of AA+ is in concert with its sovereign credit rating on the United States of America at AA+. Material changes to the factors considered could result in a different debt rating. However, as a result of the System's financial performance, credit quality and standing in the capital markets, we anticipate continued access to funding necessary to support System needs. The U.S. government does not guarantee, directly or indirectly, Systemwide debt securities.

The types and characteristics of securities are described in Note 10, "Bonds and Notes," to the accompanying financial statements. As a condition of the bank's participation in the issuance of Systemwide debt securities, the bank is required by regulation to maintain specified eligible assets as collateral in an amount equal to or greater than the total amount of bonds and notes outstanding for which the bank is liable. At December 31, 2019, the bank had excess collateral of $1.70 billion. Management expects the bank to maintain sufficient collateral to permit its continued participation in Systemwide debt issuances in the foreseeable future.

The bank receives ratings from two rating agencies:

- On April 3, 2019, Fitch Ratings affirmed the bank's long-term and short-term issuer default ratings (IDRs) at "AA-" and "F1+," respectively, with a stable outlook. Fitch also affirmed the bank's noncumulative perpetual preferred stock rating at "BBB" and its support floor at "AA-." Fitch affirmed the Farm Credit System's long-term and short-term IDRs at "AAA" and "F1+," respectively, with a stable outlook, and its support floor at "AAA." As a government-sponsored entity, the System benefits from implicit government support. The ratings and rating outlook are directly linked to the U.S. sovereign rating. The affirmation of the System banks' IDRs reflect their prudent, conservative credit culture, their unique funding advantage and their structural second-loss position on the majority of their loan portfolio.
- On September 18, 2019, Moody's Investors Service affirmed the bank's issuer rating at "Aa3" and its noncumulative preferred stock rating at "Baa1 (hyb)," with a stable outlook. The Aa3 issuer rating reflects the bank's "a1" baseline credit assessment (BCA), very high cooperative support from the other Federal Farm Credit banks and moderate support from the U.S. government, which has an "Aaa" stable outlook. The bank's preferred stock rating incorporated the bank's BCA, very high cooperative support from the other Federal Farm Credit banks and notching reflecting the debt's relative positions in the bank's capital structure. The bank's BCA incorporates its solid capital levels, adequate risk-adjusted profitability and liquidity as well as the benefits associated with its lending to related associations and their strong capital levels. The "a1" BCA is one of Moody's highest assessments of any financial institution, both domestically and globally.

The following table provides a summary of the period-end balances of the debt obligations of the bank:

	December 31,		
(dollars in thousands)	**2019**	2018	2017
Bonds outstanding	**$ 22,172,811**	$ 20,992,624	$ 18,615,696
Average effective interest rates	**2.02%**	2.27%	1.69%
Average remaining life (years)	**2.3**	2.6	2.9
Discount notes outstanding	**$ 1,301,095**	$ 1,504,740	$ 2,335,527
Average effective interest rates	**1.89%**	2.44%	1.27%
Average remaining life (days)	**136**	143	135

During 2019, the bank called debt totaling $7.18 billion, resulting in $12.7 million in concession expense. During 2018, the bank extinguished approximately $356 million par value in noncallable, fixed rate bonds, with other System banks assuming the remaining obligations of the extinguished debt. The debt extinguishment resulted in $3.6 million in gains recognized as noninterest income for the year ended December 31, 2018.

The following table provides a summary of the average balances of the debt obligations of the bank:

	For the years ended December 31,		
	2019	2018	2017
Average interest-bearing liabilities outstanding	**$ 22,920,650**	$ 21,646,707	$ 20,146,249
Average interest rates on interest-bearing liabilities	**2.32%**	2.00%	1.47%

Investments

As permitted under FCA regulations, a bank is authorized to hold eligible investments for the purposes of maintaining a diverse source of liquidity, profitably managing short-term surplus funds and managing interest rate risk. The bank is authorized to hold an amount not to exceed 35.0% of loans outstanding. The bank's holdings are within this limit as of December 31, 2019.

FCA regulations also define eligible investments by specifying credit criteria and percentage of investment portfolio limit for each investment type. If an investment no longer meets eligibility criteria, the investment becomes ineligible for inclusion in the liquidity portfolio. On January 1, 2019, the Farm Credit Administration's revised investment regulations became effective and, among other things, removed references to credit ratings and substituted the eligibility requirements with appropriate standards of creditworthiness.

At December 31, 2019, the bank had no investments which were ineligible for liquidity purposes.

At December 31, 2019 and December 31, 2018, the bank held no securities that were designated as other-than-temporarily impaired investments (OTTI) and the bank recognized no credit losses related to OTTI securities.

The bank's investments are all considered available for sale, and include a liquidity portfolio and a portfolio of other investments. The liquidity portfolio had a fair value of $5.27 billion at December 31, 2019, and consisted primarily of federal agency-guaranteed collateralized mortgage-backed securities (MBS), corporate debt, agency-guaranteed debt, U.S. Treasury securities and asset-backed securities (ABS). The majority of the liquidity portfolio's MBS includes Government National Mortgage Association (GNMA), Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corporation (FHLMC) securities.

The bank's liquidity investment portfolio consisted of the following at December 31:

	2019		2018	
	Amortized Cost	**Fair Value**	Amortized Cost	Fair Value
Agency-guaranteed debt	**$ 139,016**	**$ 138,933**	$ 170,800	$ 167,923
Corporate debt	**454,963**	**457,045**	365,382	363,537
Federal agency collateralized mortgage-backed securities:				
GNMA	**2,165,953**	**2,170,985**	2,671,043	2,630,995
FNMA and FHLMC	**2,139,207**	**2,136,020**	2,157,582	2,130,136
U.S. Treasury securities	**200,088**	**200,114**	298,300	298,083
Asset-backed securities	**162,837**	**162,995**	88,292	88,257
Total liquidity investments	**$ 5,262,064**	**$ 5,266,092**	$ 5,751,399	$ 5,678,931

During the year ended December 31, 2019, six investment securities were sold for total proceeds of $415.1 million with a combined book value of $403.0 million, resulting in gains of $12.1 million recognized in noninterest income and previously reflected in accumulated other comprehensive loss.

The bank's other investments consisted of Federal Agricultural Mortgage Corporation (Farmer Mac) guaranteed agricultural mortgage-backed securities (AMBS), purchased from district associations as part of the bank's CPP program. The Farmer Mac AMBS are not included in the bank's liquidity portfolio. The Farmer Mac securities are backed by loans originated by the associations and previously held by the associations under the Farmer Mac long-term standby commitments to purchase agreements. As a part of the CPP program, any positive impact to the net income of the bank can be returned as patronage to the association if declared by the bank's board of directors. The declared patronage approximates the net earnings of the respective pool.

Farmer Mac is a government-sponsored enterprise and is examined and regulated by FCA. It provides secondary market arrangements for agricultural and rural home mortgage loans that meet certain underwriting standards. Farmer Mac is authorized to provide loan guarantees or be a direct pooler of agricultural mortgage loans. Farmer Mac is owned by both System and non-System investors and its board of directors has both System and non-System representation. Farmer Mac is not liable for any debt or obligation of any System institution and no System institution other than Farmer Mac is liable for any debt or obligation of Farmer Mac.

The bank's other investment portfolio consisted of Farmer Mac AMBS securities at December 31:

	2019		2018	
	Amortized Cost	**Fair Value**	Amortized Cost	Fair Value
Agricultural mortgage-backed securities	**$ 29,867**	**$ 29,051**	$ 37,781	$ 35,707

Capital Adequacy

Total shareholders' equity at December 31, 2019, was $1.84 billion compared to $1.78 billion and $1.67 billion at December 31, 2018 and 2017, respectively. The total shareholders' equity increase of $67.3 million during 2019 was due primarily to net income of $203.0 million, a decrease of $30.1 million in accumulated other comprehensive loss and $18.8 million net issuance of capital stock, offset by $134.9 million in patronage declared, and $56.5 million in dividends paid on preferred stock. The bank declared patronage of $134.9 million which included $76.7 million in direct loan patronage, $40.4 million in patronage on certain participations, $9.5 million in patronage based on the associations' and OFIs' stock investment in the bank, and $8.3 million in CPP and NCPP patronage. The bank's goal is to provide direct loan patronage at a level that would result in a cost of funds to district associations equal to the bank's marginal cost of funds, which was achieved for the year ended 2019.

Preferred stock totaled $700.0 million at December 31, 2019 and 2018, and $600.0 million at December 31, 2016. Class B noncumulative subordinated perpetual preferred stock included $300.0 million of Class B Series 1, issued in 2010 (Class B-1 preferred stock), $300.0 million of Class B Series 2 issued in July 2013 (Class B-2 preferred stock), and $100.0 million of Class B Series 3 issued in June 2018 (Class B-3 preferred stock).

Dividends on the Class B-1 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable semi-annually in arrears on the fifteenth day of June and December in each year, commencing December 15, 2010, at an annual fixed rate of 10% of par value of $1,000 per share. Dividends on the Class B-2 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2013, at an annual fixed rate of 6.75% of par value of $100 per share, up to, but excluding September 15, 2023, from and after which date will be paid at an annual rate of the 3-Month USD LIBOR plus 4.01%. Dividends on the Class B-3 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2018, at an annual fixed rate of 6.20% of par value of $1,000 per share up to, but excluding June 15, 2028, from and after which date will be paid at an annual rate of the 3-Month USD LIBOR plus 3.223%.

The Class B preferred stock ranks senior to all of our outstanding common stock. "Dividend/patronage stopper" clauses in the preferred stock offerings require the payment or declaration of current period dividends on the preferred stock issuances before any other patronage can be declared, and were required before payment of the December 31, 2019, bank investment and direct note patronage to associations and OFIs could be paid.

Accumulated other comprehensive loss decreased $30.1 million, or 36.80%, to a $51.6 million loss at December 31, 2019, from an $81.7 million loss at December 31, 2018, due to an increase of $77.8 million in unrealized net gains on the bank's investments, offset by an increase of $46.9 million in unrealized losses on the bank's cash flow hedges and a $774 decrease related to retirement benefits. The increase in unrealized net gains on investments was primarily attributable to net unrealized gains on available-for-sale investments as a result of declines in interest rates. The $46.9 million increase in unrealized losses on cash flow hedges is the result of changes in the valuation of interest rate swaps the bank held during 2019 as a result of declines in interest rates.

Capital adequacy is evaluated using various ratios for which the FCA has established regulatory minimums. Effective January 1, 2017, the new regulatory capital ratios were implemented by the bank. Regulatory ratios remained well above regulatory minimums, including the conservation and leverage buffers at December 31, 2019. The following table reflects the bank's capital ratios at December 31:

	2019	2018	2017	Total Regulatory Requirement
Permanent capital ratio	**16.03%**	16.31%	16.60%	7.00%
Common equity tier 1 ratio	**9.91**	9.92	10.52	7.00
Tier 1 capital ratio	**16.01**	16.29	16.59	8.50
Total capital ratio	**16.12**	16.42	16.68	10.50
Tier 1 leverage ratio	**7.26**	7.39	7.33	5.00
UREE leverage ratio	**3.06**	3.08	3.08	1.50

	2016	2015	2014	2013	2012	Regulatory Minimum
Total surplus ratio	14.98%	15.48%	15.86%	17.29%	15.92%	7.00%
Core surplus ratio	9.97	9.88	10.07	10.12	9.92	3.50
Net collateral ratio*	107.35	107.70	108.00	108.67	107.94	103.00

*The bank's minimum net collateral ratio for regulatory purposes while any subordinated debt was outstanding was 104.00. The bank redeemed all of its outstanding subordinated debt in June 2016.

Operational Risk Management

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

- direction to management that assigns responsibility for the internal control function to an officer of the institution;
- adoption of internal audit and control procedures;
- direction for the operation of a program to review and assess its assets;
- adoption of loan, loan-related assets and appraisal review standards, including standards for scope of review selection and standards for work papers and supporting documentation;
- adoption of asset quality classification standards;
- adoption of standards for assessing credit administration, including the appraisal of collateral; and
- adoption of standards for the training required to initiate a program.

In general, we address operational risk through the organization's internal governance structure. Exposure to operational risk is typically identified with the assistance of senior management, and internal audit plans are risk-based and are re-evaluated on an annual basis, or more frequently, if necessary. The board of directors is responsible for defining the role of the audit committee in providing oversight and review of the institution's internal controls.

Reputational Risk Management

Reputational risk is defined as the negative impact resulting from events, real or perceived, that shape the image of the bank, the System or any of its entities. The bank and its affiliated associations could be harmed if its reputation were impacted by negative publicity about the System as a whole, an individual System entity or the agriculture industry in general.

Reputational risk is the direct responsibility of each System entity. For reputational issues that have broader consequences for the System as a whole, System governance will communicate guidance to the System supporting those business practices that are consistent with our mission.

Political Risk Management

We, as part of the System, are an instrumentality of the federal government and are intended to further governmental policy concerning the extension of credit to or for the benefit of agricultural and rural America. The System and its borrowers may be significantly affected by federal legislation that affects the System directly, such as changes to the Farm Credit Act, or indirectly, such as agricultural appropriations bills. Political risk to the System is the risk of loss of support for the System or agriculture by the U.S. government.

We manage political risk by actively supporting The Farm Credit Council (Council), which is a full-service, federal trade association representing the System before Congress, the executive branch and others. The Council provides the mechanism for "grassroots" involvement in the development of System positions and policies with respect to federal legislation and government actions that impact the System. Additionally, we take an active role in representing the individual interests of System institutions and their borrowers before Congress. In addition to the Council, each district has its own council, which is a member of the Council. The district councils represent the interests of their members on a local and state level, as well as on a federal level.

Recent Accounting Pronouncements

The recent accounting pronouncements are described in Note 2, "Summary of Significant Accounting Policies," to the accompanying financial statements.

Regulatory Matters

At December 31, 2019, there were no district associations under written agreements with the Farm Credit Administration.

On June 12, 2018, the Farm Credit Administration (FCA) published a final rule revising the requirements governing the eligibility of investments for System banks and associations. The stated objectives of the final rule were as follows:

- To strengthen investment practices at System banks and associations to enhance their safety and soundness;
- To ensure that System banks hold sufficient high-quality liquid investments for liquidity purposes;
- To enhance the ability of the System banks to supply credit to agricultural and aquatic producers and their cooperatives in times of financial stress;
- To comply with the requirements of section 939A of the Dodd-Frank Act;
- To modernize the investment eligibility criteria for System banks; and
- To revise the investment regulation for System associations to improve their investment management practices so they are more resilient to risk.

The regulation became effective January 1, 2019.

On January 22, 2019, the Farm Credit Administration issued an information memorandum citing the fact that effective December 20, 2018, the Agriculture Improvement Act of 2018 repealed the limitations on bank director compensation contained in section 4.21 of the Farm Credit Act of 1971, as amended. As a result, beginning in 2019, the Farm Credit Administration will no longer calculate the maximum annual compensation adjustments in FCA regulation § 611.400(b)(c), but will continue to review System bank director compensation to ensure that pay levels do not adversely affect the safety and soundness of System institutions.

On February 21, 2019, an advance notice of proposed rulemaking on ways to collect, evaluate and report data on the System's service to young, beginning and small (YBS) farmers was published in the Federal Register. The purpose of the advance notice of proposed rulemaking is to gather public input on how FCA might:

- Improve the accuracy, transparency and process by which FCA ensures that YBS farmer data is properly collected and reported by the System;
- Clarify the definitions of terms related to the collection, reporting and identification of YBS farmer data;
- Ensure the definitions of YBS farmers and related terms remain relevant and reflective of the evolving agricultural economy; and
- Evaluate the effectiveness of each System institution's YBS program to achieve its mission of serving YBS farmers.

The comment period ended on May 22, 2019.

On March 19, 2019, an interim final rule on margin and capital requirements for covered swap entities was published in the Federal Register. Five federal agencies acted to ensure that qualifying swaps may be transferred from a United Kingdom (UK) entity to an affiliate in the European Union (EU) or the United States without triggering new margin requirements. The interim final rule adopted would ensure that any legacy swap currently exempt from the agencies' rule on margin for non-cleared swaps would not become subject to the rule if such swap is amended solely for the purpose of transferring it to an affiliate as a result of a non-negotiated UK withdrawal from the EU. The comment period ended on April 18, 2019.

On April 3, 2019, a proposed rule was published in the Federal Register on the criteria for reinstating nonaccrual loans. The objectives of the proposed rule are to:

- Enhance the usefulness of high-risk loan categories;
- Replace the subjective measure of "reasonable doubt" used for reinstating loans to accrual status with a measurable standard;
- Improve the timely recognition of a change in a loan's status; and
- Update existing terminology and make other grammatical changes.

The comment period ended on June 3, 2019.

On September 18, 2019, a proposed rule was published in the Federal Register proposing to amend its investment regulations to allow Farm Credit System (FCS or System) associations to purchase and hold the portion of certain loans that non-FCS lenders originate and sell in the secondary market, and that the United States Department of Agriculture (USDA) unconditionally guarantees or insures as to the timely payment of principal and interest. The objectives of the proposed rule are to authorize FCS associations to buy as investments for risk management purposes, portions of certain loans that non-System lenders originate, and the USDA fully guarantees as to principal and interest to:

- Augment the liquidity of rural credit markets;
- Reduce the capital burden on community banks and other non-System lenders who choose to sell their USDA guaranteed portions of loans, so they may extend additional credit in rural areas; and
- Enhance the ability of associations to manage risk.

The comment period ended on November 18, 2019.

On September 23, 2019, a proposed rule was published in the Federal Register to address changes to our capital and other regulations, including certain regulatory disclosure requirements, in response to recent changes in the U.S. generally accepted accounting principles (U.S. GAAP). The objectives of the proposed rule are to:

- Ensure that the System's capital requirements, including certain regulatory disclosures, reflect the current expected credit losses methodology, which revises the accounting for credit losses under U.S. GAAP; and
- Ensure that conforming amendments to other regulations accurately reference credit losses.

The comment period ended on November 22, 2019.

On November 7, 2019, a proposed rule was published in the Federal Register wherein the OCC, Board of Governors of the Federal Reserve System, FDIC, FCA and FHFA (each, an agency, and collectively, the agencies) request comment on a proposed rule that would amend the agencies' regulations that require swap dealers and security-based swap dealers under the agencies' respective jurisdictions to exchange margin with their counterparties for swaps that are not centrally cleared (Swap Margin Rule). The Swap Margin Rule as adopted in 2015 takes effect under a phased compliance schedule spanning from 2016 through 2020, and the dealers covered by the rule continue to hold swaps in their portfolios that were entered into before the effective dates of the rule. Such swaps are grandfathered from the Swap Margin Rule's requirements until they expire according to their terms. The proposed rule would:

- Permit swaps entered into prior to an applicable compliance date (legacy swaps) to retain their legacy status in the event that they are amended to replace an interbank offered rate (IBOR) or other discontinued rate;
- Repeal the inter-affiliate initial margin provisions;
- Introduce an additional compliance date for initial margin requirements;
- Clarify the point in time at which trading documentation must be in place;
- Permit legacy swaps to retain their legacy status in the event that they are amended due to technical amendments, notional reductions, or portfolio compression exercises; and
- Make technical changes to relocate the provision addressing amendments to legacy swaps that are made to comply with the Qualified Financial Contract Rules, as defined in the Supplementary Information section.

The comment period ended on December 9, 2019.

As published in the Federal Register on January 7, 2020 (Vol. 85, No. 4), FCA is proposing revising§ 620.2(g)(2) to allow a Farm Credit Bank to use either a footnote or a supplement to provide financial information on its related associations. The comment period ends March 9, 2020.

Other

New U.S. tax laws resulting from legislation commonly known as the Tax Cuts and Jobs Acts of 2017 (TCJA) were enacted in late 2017. Among other things, the TCJA changed the federal corporate tax rate from 35% to 21%. The bank is exempt from federal and certain other income taxes as provided by the Farm Credit Act. However, the TCJA created a new excise tax on excess tax-exempt organization executive compensation effective for tax years beginning after December 31, 2017. The new excise tax had a minimal impact on the bank's financial results.

Report of Management

The financial statements of the Farm Credit Bank of Texas (bank) are prepared by management, which is 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 generally accepted accounting principles appropriate in the circumstances, except as noted. Other financial information included in this annual report is consistent with that in the financial statements.

To meet its responsibility for reliable financial information, management depends on the bank's accounting and internal control systems, which have been designed to provide reasonable, but not absolute, assurance that assets are safeguarded and transactions are properly authorized and recorded. The systems have been designed to recognize that the cost of controls must be related to the benefits derived. To monitor compliance, the internal audit staff of the Farm Credit Bank of Texas audits the accounting records, reviews accounting systems and internal controls, and recommends improvements as appropriate. The financial statements are audited by PricewaterhouseCoopers LLP (PwC), independent auditors. In addition, our independent auditors have audited our internal accounting controls as of December 31, 2019 to establish a basis for reliance thereon in determining the nature, extent and timing of the audit tests applied in the examination of the financial statements. In addition, the bank is examined by the Farm Credit Administration.

In the opinion of management, the financial statements are true and correct and fairly state the financial position of the Farm Credit Bank of Texas at December 31, 2019, 2018 and 2017. The independent auditors have direct access to the audit committee, which is composed solely of directors who are not officers or employees of the bank.

The FCA has authorized the bank to replace the required footnote inclusion of condensed, unaudited districtwide statements of condition and statements of income with a separate document containing this same districtwide financial information which deviates from the requirements of §620.2(g)(2). Additional information is included in Note 19, "Combined Districtwide Financial Statements."

The undersigned certify that we have reviewed the December 31, 2019, annual report of the Farm Credit Bank of Texas, that the report has been prepared in accordance with all applicable statutory or regulatory requirements, and that the information included herein is true, accurate and complete to the best of our knowledge and belief.

James F. Dodson
Chairman of the Board

Larry R. Doyle
Chief Executive Officer

Amie Pala
Senior Vice President, Chief Financial Officer

February 28, 2020

Report of Audit Committee

The audit committee (committee) is composed of the entire board of directors of the Farm Credit Bank of Texas (bank). The committee oversees the bank's system of internal controls and the adequacy of management's action with respect to recommendations arising from those internal control activities. The committee's approved responsibilities are described more fully in the Audit Committee Charter, which is available on request or on the bank's website at *www.farmcreditbank.com*. In 2019, 13 committee meetings were held, with some of these meetings including executive sessions between the committee and Pricewaterhouse-Coopers LLP (PwC) and the bank's internal auditor. The committee approved the appointment of PwC as independent auditors for 2019.

Management is responsible for the bank's internal controls and for the preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America. PwC is responsible for performing an independent audit of the bank's financial statements in accordance with auditing standards generally accepted in the United States of America in addition to the bank's internal control over financial reporting and to issue a report thereon. The committee's responsibilities include monitoring and overseeing these processes.

In this context, the committee reviewed and discussed the bank's audited financial statements for the year ended December 31, 2019, with management and PwC. The committee also reviewed with PwC the matters required to be discussed by Auditing Standard No. 16 (Communications with Audit Committees).

PwC has provided to the committee the written communications regarding their independence. The committee discussed with appropriate representatives of PwC the firm's independence from the bank. The committee also approved the non-audit services provided by PwC and concluded that these services were not incompatible with maintaining the auditor's independence. Furthermore, throughout 2019 the committee has discussed with management and PwC such other matters and received such assurances from them as the committee deemed appropriate. Both PwC and the bank's internal auditor directly provided reports on significant matters to the committee.

M. Philip Guthrie, Chair
John L. Dailey, Vice Chair
Ralph W. Cortese
James F. Dodson
Linda C. Floerke
Lester Little
Dorothy Nichols

Audit Committee Members

February 28, 2020

Report on Internal Control Over Financial Reporting

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

The bank's management has completed an assessment of the effectiveness of internal controls over financial reporting as of December 31, 2019. In making the assessment, management used the updated Internal Control – Integrated Framework promulgated by the Committee of Sponsoring Organizations of the Treadway Commission on May 14, 2013, commonly referred to as the "COSO 2013 Framework."

Based on the assessment performed, the bank concluded that as of December 31, 2019, the internal control over financial reporting was effective based upon the COSO criteria. Additionally, based on this assessment, the bank determined that there were no material weaknesses in the internal control over financial reporting as of December 31, 2019. A review of the assessment performed was reported to the bank's audit committee.

The effectiveness of the bank's internal control over financial reporting as of December 31, 2019, has been audited by PricewaterhouseCoopers LLP, independent auditors, which expresses an unqualified opinion on the effectiveness of the bank's internal control over financial reporting as of December 31, 2019.

Evaluation of Disclosure Controls and Procedures

As of December 31, 2019, management of the Farm Credit Bank of Texas (bank) carried out an evaluation with the participation of the bank's management, including the chief executive officer (CEO) and chief financial officer (CFO), of the effectiveness of the design and operation of their respective disclosure controls and procedures [(1)] with respect to this annual stockholder report. This evaluation is based on testing of the design and effectiveness of key internal controls, certifications and other information furnished by the principal executive officer and principal financial officer of the bank, as well as incremental procedures performed by the bank. Based upon and as of the date of the bank's evaluation, the CEO and the CFO concluded that the disclosure controls and procedures are effective in alerting them on a timely basis of any material information relating to the bank that is required to be disclosed by the bank in the annual and quarterly stockholder reports it files or submits to the Farm Credit Administration. There have been no significant changes in the bank's internal control over financial reporting[(2)] that occurred during the quarter ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, the bank's internal control over financial reporting.

[(1)] For purposes of this discussion, "disclosure controls and procedures" are defined as controls and procedures of the bank that are designed to ensure that the financial information required to be disclosed by the bank in this annual stockholder report is recorded, processed, summarized and reported, within the time periods specified under the rules and regulations of the Farm Credit Administration.

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

Certification

I, Larry R. Doyle, certify that:

1. I have reviewed the 2019 Annual Report of the Farm Credit Bank of Texas (bank).

2. Based on my knowledge, this annual stockholder report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual stockholder report.

3. Based on my knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the bank as of, and for, the periods presented in this report.

4. The bank's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures[1] and internal control over financial reporting[2] for the bank and have:
   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the bank is made known to us, particularly during the period in which this annual stockholder report is being prepared;
   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) evaluated the effectiveness of the bank's disclosure controls and procedures and presented in this annual stockholder report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual stockholder report based on such evaluation; and
   (d) disclosed in this annual stockholder report any change in the bank's internal control over financial reporting that occurred during the bank's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the bank's internal control over financial reporting.

5. The bank's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the bank's auditors and the bank's audit committee:

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the bank's ability to record, process, summarize and report financial information; and
   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the bank's internal control over financial reporting.

Larry R. Doyle
Chief Executive Officer

February 28, 2020

(1) See footnote 1 on evaluation of disclosure controls and procedures report

(2) See footnote 2 on evaluation of disclosure controls and procedures report

Certification

I, Amie Pala, certify that:

1. I have reviewed the 2019 Annual Report of the Farm Credit Bank of Texas (bank).
2. Based on my knowledge, this annual stockholder report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual stockholder report.
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the bank as of, and for, the periods presented in this report.
4. The bank's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures[1] and internal control over financial reporting[2] for the bank and have:
   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the bank is made known to us, particularly during the period in which this annual stockholder report is being prepared;
   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) evaluated the effectiveness of the bank's disclosure controls and procedures and presented in this annual stockholder report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual stockholder report based on such evaluation; and
   (d) disclosed in this annual stockholder report any change in the bank's internal control over financial reporting that occurred during the bank's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the bank's internal control over financial reporting.
5. The bank's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the bank's auditors and the bank's audit committee:
   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the bank's ability to record, process, summarize and report financial information; and
   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the bank's internal control over financial reporting.

Amie Pala

Amie Pala
Senior Vice President, Chief Financial Officer

February 28, 2020

[1] See footnote 1 on evaluation of disclosure controls and procedures report

[2] See footnote 2 on evaluation of disclosure controls and procedures report

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Farm Credit Bank of Texas

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying balance sheets of Farm Credit Bank of Texas (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

PricewaterhouseCoopers LLP, 835 West 6th Street, Suite 1600 Austin, TX 787013
T: (512) 477 1300, F: (512) 477 8681, www.pwc.com/us

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.

PricewaterhouseCoopers LLP

February 28, 2020

We have served as the Company's auditor since at least 2002. We have not been able to determine the specific year we began serving as auditor of the Company.

Balance Sheets

Farm Credit Bank of Texas

(dollars in thousands)	December 31, **2019**	2018	2017
Assets			
Cash	**$ 47,606**	$ 129,478	$ 56,183
Federal funds sold and overnight investments	**374,344**	281,131	246,888
Investment securities	**5,295,143**	5,714,638	5,144,985
Loans (includes $0, $9,345 and $9,908 held at fair value)	**19,498,293**	18,056,686	17,085,177
Less allowance for loan losses	**11,487**	11,974	7,639
Net loans	**19,486,806**	18,044,712	17,077,538
Accrued interest receivable	**79,901**	76,134	58,330
Premises and equipment, net	**108,857**	72,746	49,405
Other assets	**271,159**	210,311	203,276
Total assets	**$ 25,663,816**	$ 24,529,150	$ 22,836,605
Liabilities and Shareholders' Equity			
Liabilities			
Bonds and notes, net	**$ 23,473,906**	$ 22,497,364	$ 20,951,223
Accrued interest payable	**84,661**	86,699	63,809
Reserve for credit losses	**1,809**	1,900	1,433
Preferred stock dividends payable	**21,613**	21,613	20,063
Patronage payable	**33,609**	29,561	31,418
Other liabilities	**204,035**	115,080	100,775
Total liabilities	**23,819,633**	22,752,217	21,168,721
Commitments and Contingencies (Note 14)			
Shareholders' Equity			
Preferred stock	**700,000**	700,000	600,000
Capital stock	**335,262**	316,463	301,239
Allocated retained earnings	**52,451**	45,685	39,144
Unallocated retained earnings	**808,101**	796,478	779,403
Accumulated other comprehensive loss	**(51,631)**	(81,693)	(51,902)
Total shareholders' equity	**1,844,183**	1,776,933	1,667,884
Total liabilities and shareholders' equity	**$ 25,663,816**	$ 24,529,150	$ 22,836,605

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

Statements of Comprehensive Income

Farm Credit Bank of Texas

(dollars in thousands)	Year Ended December 31, **2019**	2018	2017
Interest Income			
Loans	**$ 661,515**	$ 563,495	$ 462,765
Investment securities	**142,203**	127,070	84,755
Total interest income	**803,718**	690,565	547,520
Interest Expense			
Bonds and notes	**532,107**	433,729	296,199
Net Interest Income	**271,611**	256,836	251,321
(Loan loss reversal) provision for credit losses	**(588)**	4,671	(1,673)
Net interest income after (loan loss reversal) provision for credit losses	**272,199**	252,165	252,994
Noninterest Income			
Patronage income	**24,079**	25,130	26,414
Fees for services to associations	**3,903**	3,740	3,889
Fees for loan-related services	**8,412**	9,599	10,944
Refunds from Farm Credit System Insurance Corporation	**2,507**	8,397	-
Loss on loans held under fair value option	**(40)**	(256)	(300)
Gain on sale of investments	**12,126**	-	-
Other income (loss), net	**(1,740)**	940	4,257
Total noninterest income	**49,247**	47,550	45,204
Noninterest Expense			
Salaries and employee benefits	**43,815**	42,091	39,402
Occupancy and equipment	**22,271**	19,611	17,470
FCSIC premiums	**7,933**	7,300	11,724
Other components of net periodic postretirement benefit cost	**439**	446	311
Other operating expenses	**44,034**	39,737	33,305
Total noninterest expense	**118,492**	109,185	102,212
Net Income	**$ 202,954**	$ 190,530	$ 195,986
Other comprehensive income (loss)			
Change in postretirement benefit plans	**(774)**	1,788	(1,344)
Change in unrealized gain (loss) on investments	**77,753**	(17,728)	(18,284)
Change in cash flow derivative instruments	**(46,917)**	(13,851)	305
Total other comprehensive income (loss)	**30,062**	(29,791)	(19,323)
Comprehensive Income	**$ 233,016**	$ 160,739	$ 176,663

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

Statements of Changes In Shareholders' Equity

Farm Credit Bank of Texas

(dollars in thousands)	Preferred Stock	Capital Stock	Retained Earnings Allocated	Retained Earnings Unallocated	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
Balance at December 31, 2016	$ 600,000	$ 284,038	$ 33,171	$ 737,622	$ (32,579)	$ 1,622,252
Net income	-	-	-	195,986	-	195,986
Other comprehensive loss	-	-	-	-	(19,323)	(19,323)
Capital stock and allocated retained earnings issued	-	18,312	-	-	-	18,312
Capital stock and allocated retained earnings retired	-	(1,111)	-	-	-	(1,111)
Preferred stock dividends	-	-	-	(50,250)	-	(50,250)
Patronage distributions						
Cash	-	-	-	(97,982)	-	(97,982)
Shareholders' equity	-	-	5,973	(5,973)	-	-
Balance at December 31, 2017	$ 600,000	$ 301,239	$ 39,144	$ 779,403	$ (51,902)	$ 1,667,884
Net income	-	-	-	190,530	-	190,530
Other comprehensive loss	-	-	-	-	(29,791)	(29,791)
Capital stock and allocated retained earnings issued	-	29,675	-	-	-	29,675
Capital stock and allocated retained earnings retired	-	(14,451)	-	-	-	(14,451)
Preferred stock issued	100,000	-	-	-	-	100,000
Issuance cost on preferred stock	-	-	-	(1,334)	-	(1,334)
Preferred stock dividends	-	-	-	(54,727)	-	(54,727)
Patronage distributions						
Cash	-	-	-	(110,853)	-	(110,853)
Shareholders' equity	-	-	6,541	(6,541)	-	-
Balance at December 31, 2018	$ 700,000	$ 316,463	$ 45,685	$ 796,478	$ (81,693)	$ 1,776,933
Net income	-	-	-	202,954	-	202,954
Other comprehensive income	-	-	-	-	30,062	30,062
Capital stock and allocated retained earnings issued	-	21,450	-	-	-	21,450
Capital stock and allocated retained earnings retired	-	(2,651)	-	-	-	(2,651)
Issuance cost on preferred stock	-	-	-	(3)	-	(3)
Preferred stock dividends	-	-	-	(56,450)	-	(56,450)
Patronage distributions						
Cash	-	-	-	(128,112)	-	(128,112)
Shareholders' equity	-	-	6,766	(6,766)	-	-
Balance at December 31, 2019	**$ 700,000**	**$ 335,262**	**$ 52,451**	**$ 808,101**	**$ (51,631)**	**$ 1,844,183**

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

Statements of Cash Flows

Farm Credit Bank of Texas

	Year Ended December 31,		
(dollars in thousands)	**2019**	2018	2017
Cash Flows From Operating Activities			
Net income	**$ 202,954**	$ 190,530	$ 195,986
Reconciliation of net income to net cash provided by operating activities			
(Loan loss reversal) provision for credit losses	**(588)**	4,671	(1,673)
Depreciation and amortization on premises and equipment	**8,741**	8,005	6,930
(Premium amortization) discount accretion on loans	**(914)**	109	2,514
Amortization and accretion on debt instruments	**46,836**	41,975	26,208
Premium amortization on investments	**1,404**	1,722	5,518
Decrease in fair value of loans held under fair value option	**40**	258	300
Gain on sale of investment securities	**(12,126)**	-	-
Loss (gain) on sale of loans	**1**	106	(3,575)
Allocated equity patronage from System bank	**(7,231)**	(14,789)	(14,583)
Loss (gain) on other earning assets	**2,181**	2,684	(305)
Gain on sales of premises and equipment	**(80)**	(77)	(60)
Increase in accrued interest receivable	**(3,768)**	(17,804)	(8,139)
(Increase) decrease in other assets, net	**(1,706)**	10,363	(279)
(Decrease) increase in accrued interest payable	**(2,038)**	22,890	13,555
Increase (decrease) in other liabilities, net	**2,236**	(6,518)	(1,027)
Net cash provided by operating activities	**235,942**	244,125	221,370
Cash Flows From Investing Activities			
Net increase in federal funds sold and overnight investments	**(93,213)**	(34,243)	(223,988)
Investment securities			
Purchases	**(1,566,645)**	(1,932,968)	(1,498,827)
Proceeds from maturities, calls and prepayments	**1,659,463**	1,343,864	1,161,416
Proceeds from sales	**415,154**	-	-
Increase in loans, net	**(1,439,889)**	(1,066,881)	(1,209,906)
Proceeds from sale of loans	**6,254**	101,897	28,657
Proceeds from sale of premises and equipment	**195**	183	126
Expenditures for premises and equipment	**(44,966)**	(31,452)	(18,402)
Distributions in excess of cumulative equity earnings	**86**	271	224
Investment in other earning assets	**(4,540)**	(3,388)	(4,934)
Net cash used in investing activities	**(1,068,101)**	(1,622,717)	(1,765,634)
Cash Flows From Financing Activities			
Bonds and notes issued	**24,257,010**	14,511,288	11,863,920
Bonds and notes retired	**(23,327,304)**	(13,007,268)	(10,331,274)
Increase in cash collateral posted with a counterparty	**(17,700)**	-	-
Prepayments on debt extinguishment costs	**-**	146	1,708
Preferred stock issued	**-**	100,000	-
Issuance costs on preferred stock	**(3)**	(1,334)	-
Repayments on capital lease obligation	**-**	(281)	(374)
Capital stock issued	**21,450**	29,675	18,312
Capital stock retired and allocated retained earnings distributed	**(2,651)**	(14,451)	(1,111)
Cash dividends on preferred stock	**(56,450)**	(53,177)	(50,250)
Cash patronage distributions paid	**(124,065)**	(112,711)	(95,963)
Net cash provided by financing activities	**750,287**	1,451,887	1,404,968
Net (decrease) increase in cash	**(81,872)**	73,295	(139,296)
Cash at beginning of year	**129,478**	56,183	195,479
Cash at End of Year	**$ 47,606**	$ 129,478	$ 56,183
Supplemental Schedule of Noncash Investing and Financing Activities			
Net increase (decrease) in unrealized gains on investment securities	**$ 77,754**	$ (17,729)	$ (18,284)
Preferred stock dividends payable	**21,613**	21,613	20,063
Patronage distributions cash payable	**33,609**	29,561	31,418
Patronage distribution allocated equities	**6,766**	6,541	5,973
Right-of-use asset recognized in exchange for operating lease liabilities	**39,871**	-	-
Capital lease obligation	**-**	-	281
Supplemental Schedule of Noncash Increase in Bonds and Notes Related to Hedging Activities	**95**	-	-
Supplemental Disclosure of Cash Flow Information			
Interest paid	**$ 534,145**	$ 410,839	$ 282,645

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

Notes to Financial Statements

Farm Credit Bank of Texas

(dollars in thousands, except per share amounts and as otherwise noted)

Note 1 — Organization and Operations

A. Organization:

The Farm Credit Bank of Texas (FCBT or bank) is one of the banks of the Farm Credit System (System), a nationwide system of cooperatively owned banks and associations established by acts of Congress. The System is subject to the provisions of the Farm Credit Act of 1971, as amended (Farm Credit Act). The System specializes in providing financing and related services to qualified borrowers for agricultural and rural purposes.

As of December 31, 2019, the nation was served by three Farm Credit Banks (FCBs), each of which has specific lending authority within its chartered territory, and one Agricultural Credit Bank (ACB) — collectively, the "System banks" — which has nationwide lending authority for lending to cooperatives. The ACB also has the lending authorities of an FCB within its chartered territories. The bank is chartered to serve the states of Alabama, Louisiana, Mississippi, New Mexico and Texas.

Each FCB and the ACB serves one or more Federal Land Credit Associations (FLCAs) and/or Agricultural Credit Associations (ACAs). The bank and its related associations collectively are referred to as the Farm Credit Bank of Texas and affiliated associations (district). The district's one FLCA, 13 ACA parent associations, each containing two wholly-owned subsidiaries (an FLCA and a Production Credit Association [PCA]), certain Other Financing Institutions (OFIs) and preferred stockholders jointly owned the bank at December 31, 2019. The FLCA and ACAs collectively are referred to as associations.

Each FCB and the ACB provides funding for its district associations and is responsible for supervising their activities. The FCBs and/or associations make loans to or for the benefit of eligible borrower-stockholders for qualified agricultural and rural purposes. District associations borrow the majority of their funds from their related bank. The System banks obtain a substantial majority of funds for their lending operations through the sale of consolidated Systemwide bonds and notes to the public, but also obtain a portion of their funds from internally generated earnings and from the issuance of common and preferred stock.

The Farm Credit Administration (FCA) is delegated authority by Congress to regulate the bank and associations. The FCA examines the activities of System institutions to ensure their compliance with the Farm Credit Act, FCA regulations, and safe and sound banking practices.

The Farm Credit Act established the Farm Credit System Insurance Corporation (FCSIC) to administer the Insurance Fund. The Insurance Fund is required to be used to (1) insure the timely payment of principal and interest on Systemwide debt obligations (insured debt), (2) ensure the retirement of protected borrower capital at par or stated value and (3) for other specified purposes. The Insurance Fund is also available for the discretionary uses, by FCSIC, of providing assistance to certain troubled System institutions and to cover the operating expenses of FCSIC. Each System bank has been required to pay premiums, which may be passed on to the associations, into the Insurance Fund based on its annual average adjusted outstanding insured debt until the assets in the Insurance Fund reach the "secure base amount," which is defined in the Farm Credit Act as 2.0% of the aggregate insured obligations (adjusted to reflect the reduced risk on loans or investments guaranteed by federal or state governments) or such other percentage of the aggregate obligations as FCSIC in its sole discretion determines to be actuarially sound. When the amount in the Insurance Fund exceeds the secure base amount, FCSIC is required to reduce premiums and may return excess funds above the secure base amount to System institutions.

B. Operations:

The Farm Credit Act sets forth the types of authorized lending activities, persons eligible to borrow and financial services which can be offered by the bank.

The bank lends primarily to the district associations in the form of revolving lines of credit (direct notes) to fund the associations' loan portfolios. These direct notes are collateralized by a pledge of substantially all of each association's assets. The terms of the revolving direct notes are governed by a general financing agreement between the bank and each association. Each advance is structured so that the principal cash flow, repricing characteristics and underlying index (if any) of the advance match those of the assets being funded. By match-funding the association loans, the interest rate risk is effectively transferred to the bank.

Advances are also made to fund general operating expenses of the associations. The FLCA borrows money from the bank and, in turn, originates and services long-term real estate and agribusiness loans to their members. ACAs borrow from the bank and in turn originate and service long-term mortgage loans through the FLCA subsidiary and short- and intermediate-term loans through the PCA subsidiary. The OFIs borrow from the bank and in turn originate and service short- and intermediate-term loans to their members. An association's indebtedness to the bank, under a general financing agreement between the bank and the association, represents demand borrowings by the association to fund the majority, but not all, of its loan advances to association member-borrowers.

In addition to providing loan funds to district associations, the bank also provides banking and support services to them, such as accounting, information systems, human resources and marketing. The fees charged by the bank for these services are included in the bank's noninterest income.

The bank is also authorized to provide, either directly or in participation with other lenders, credit, credit commitments and related services to eligible borrowers. Eligible borrowers include farmers, ranchers, producers or harvesters of aquatic products, their cooperatives, rural residents and farm-related businesses. The bank may also lend to qualifying financial institutions engaged in lending to eligible borrowers.

The bank, in conjunction with other System banks, jointly owns service organizations which were created to provide a variety of services for the System. The bank has ownership interests in the following service organizations:

- Federal Farm Credit Banks Funding Corporation (Funding Corporation) — provides for the issuance, marketing and processing of Systemwide debt securities using a network of investment dealers and dealer banks. The Funding Corporation also provides financial management and reporting services.
- Farm Credit System Building Association — leases premises and equipment to the FCA, as required by the Farm Credit Act.
- Farm Credit System Association Captive Insurance Company —reciprocal insurer that provides insurance services to its member organizations.

In addition, The Farm Credit Council acts as a full-service, federated trade association which 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

The accounting and reporting policies of the bank conform to generally accepted accounting principles in the United States of America (GAAP) and prevailing practices within the banking industry. The preparation of financial statements in conformity with GAAP requires the management of the bank to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Significant estimates are discussed in these notes as applicable. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the financial statements. Actual results could differ from these estimates. Material estimates that are particularly susceptible to significant change in the near term relate to the determination of the allowance for loan losses, the determination of fair value of financial instruments and subsequent impairment analysis.

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

The accompanying financial statements include the accounts of the bank and reflect the investments in and allocated earnings of the service organizations in which the bank has partial ownership interests.

The multiemployer structure of certain retirement and benefit plans of the district results in the recording of these plans only in the combined financial statements of the district.

A. Cash:

Cash, as included in the financial statements, represents cash on hand and on deposit at banks and the Federal Reserve.

B. Federal Funds Sold and Overnight Investments:

The bank holds federal funds sold and other overnight funds primarily to maintain a liquidity reserve and manage short-term surplus funds. Securities purchased under agreements to resell and securities sold under agreements to repurchase are treated as collateralized financing transactions.

C. Investment Securities:

The bank, as permitted under FCA regulations, holds eligible investments for purposes of maintaining a liquidity reserve, managing short-term surplus funds and managing interest rate risk in an amount not to exceed 35% of its total outstanding loans.

The bank's investments are to be held for an indefinite time period and, accordingly, have been classified as available for sale at December 31, 2019, 2018 and 2017. These investments are reported at fair value, and unrealized holding gains and losses on investments are netted and reported as a separate component of members' equity on the balance sheets (accumulated other comprehensive gain/loss). Changes in the fair value of these investments are reflected as direct charges or credits to other comprehensive income, unless the investment is deemed to be other-than-temporarily impaired.

The bank reviews all investments that are in a loss position in order to determine whether the unrealized loss, which is considered an impairment, is temporary or other-than-temporary. Impairment is considered to be other-than-temporary if the present value of cash flows expected to be collected from the debt security is less than the amortized cost basis of the security (any such shortfall is referred to as a "credit loss"). If an entity intends to sell an impaired debt security or is more likely than not to be required to sell the security before recovery of its amortized cost basis less any current-period credit loss, the impairment is other-than-temporary and should be recognized currently in earnings in an amount equal to the entire difference between fair value and amortized cost. If a credit loss exists, but an entity does not intend to sell the impaired debt security and is not more likely than not to be required to sell before recovery, the impairment is other-than-temporary and should be separated into (i) the estimated amount relating to credit loss, and (ii) the amount relating to all other factors. Only the estimated credit loss amount is recognized currently in earnings, with the remainder of the loss amount recognized in other comprehensive income. In subsequent periods, if the present value of cash flows expected to be collected is less than the amortized cost basis, the bank would record an additional other-than-temporary impairment and adjust the yield of the security prospectively. The amount of total other-than-temporary impairment for an available-for-sale security that previously was impaired is determined as the difference between its carrying amount prior to the determination of other-than-temporary impairment and its fair value.

Gains and losses on the sales of investments available for sale are determined using the specific identification method. Premiums and discounts are amortized or accreted into interest income over the term of the respective issues. The bank does not hold investments for trading purposes.

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

The bank may also hold additional investments in accordance with other investment programs approved by the FCA. These programs allow the bank to make investments that further the System's mission to serve rural America. These other investments are not included in the bank's liquidity calculations and are not covered by the eligible investment limitations specified by the FCA regulations. Agricultural mortgage-backed securities (AMBS) issued by the Federal Agricultural Mortgage Corporation (Farmer Mac) are considered other investments in the available-for-sale portfolio and are also excluded from the limitation and the bank's liquidity calculations.

The bank's holdings in investment securities are more fully described in Note 3, "Investment Securities."

D. Loans and Reserves for Credit Losses:

Long-term real estate mortgage loans can have maturities ranging from five to 40 years. Substantially all short- and intermediate-term loans for agricultural production or operating purposes have maturities of 10 years or less.

Loans are carried at their principal amount outstanding adjusted for charge-offs and any unearned income or unamortized premium or discount. Interest on loans is accrued and credited to interest income based on the daily principal amount outstanding. Funds which are held by the bank on behalf of the borrowers, where legal right of setoff exists and which can be used to reduce outstanding loan balances at the bank's discretion, are netted against loans on the balance sheets.

Loan origination fee income is capitalized and the fee is amortized over the life of the related loans as an adjustment to yield.

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

A restructured loan constitutes a troubled debt restructuring if for economic or legal reasons related to the debtor's financial difficulties the bank or association grants a concession to the debtor that it would not otherwise consider. A concession is generally granted in order to minimize the bank's economic loss and avoid foreclosure. Concessions vary by program, are borrower-specific and may include interest rate reductions, term extensions, payment deferrals or the acceptance of additional collateral in lieu of payments. In limited circumstances, principal may be forgiven. A loan restricted in a troubled debt restructuring is an impaired loan.

Impaired loans are generally placed in nonaccrual status when principal or interest is delinquent for 90 days (unless adequately secured and in the process of collection) or circumstances indicate that collection of principal and/or interest is in doubt. In accordance with FCA regulations, all loans over 180 days past due are placed in nonaccrual status. When a loan is placed in nonaccrual status, accrued interest that is considered uncollectible is either reversed (if accrued in the current year) or charged against the allowance for loan losses (if accrued in the prior year). Loans are charged off at the time they are determined to be uncollectible.

When loans are in nonaccrual status, the interest portion of payments received in cash are recognized as interest income if collection of the recorded investment in the loan is fully expected and the loan does not have a remaining unrecovered prior charge-off associated with it. Otherwise, loan payments received are applied against the recorded investment in the loan. Nonaccrual loans may be returned to accrual status when contractual principal and interest are current, the borrower has demonstrated payment performance, there are no unrecovered prior charge-offs and collection of future payments is no longer in doubt. If previously unrecognized interest income exists at the time the loan is transferred to accrual status, cash received at the time of or subsequent to the transfer is first recorded as interest income until such time as the recorded balance equals the contractual indebtedness of the borrower.

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

Each of the probability of default categories carries a distinct percentage of default probability. The 14-point risk-rating scale provides for granularity of the probability of default, especially in the acceptable ratings. There are nine acceptable categories that range from a borrower of the highest quality to a borrower of minimally acceptable quality. The probability of default between 1 and 9 is very narrow and would reflect almost no default to a minimal default percentage. The probability of default grows more rapidly as a loan moves from a 9 to other assets especially mentioned and grows significantly as a loan moves to a substandard (viable) level. A substandard (nonviable) rating indicates that the probability of default is almost certain.

The credit risk-rating methodology is a key component of the bank's allowance for loan losses evaluation, and is generally incorporated into the bank's loan underwriting standards and internal lending limit. The allowance for loan losses is maintained at a level considered adequate by management to provide for probable and estimated losses inherent in the loan portfolio. The allowance is based on a periodic evaluation of the loan portfolio by management in which numerous factors are considered, including economic conditions, loan portfolio composition, collateral value, portfolio quality, current production conditions and economic conditions, and prior loan loss experience.

The allowance for loan losses is a valuation account used to reasonably estimate loan losses as of the financial statement date. The allowance is increased through provisions for loan losses and loan recoveries and is decreased through loan loss reversals and loan charge-offs. Determining the appropriate allowance for loan losses balance involves significant judgment about when a loss has been incurred and the amount of that loss. The determination of the allowance for loan losses is based on management's current judgments about the credit quality of its loan portfolio. A specific allowance may be established for impaired loans under authoritative accounting guidance. Impairment of these loans is measured based on the present value of expected future cash flows discounted at the loan's effective interest rate or, as practically expedient, at the loan's observable market price or fair value of the collateral if the loan is collateral-dependent.

The allowance for loan losses encompasses various judgments, evaluations and appraisals with respect to the loans and their underlying security that, by their nature, contain elements of uncertainty and imprecision. Changes in the agricultural economy and their impact on borrower repayment capacity will cause these various judgments, evaluations and appraisals to change over time. Management considers the following factors in determining and supporting the levels of allowances for loan losses: the concentration of lending in agriculture, combined with uncertainties associated with farmland values, commodity prices, exports, government assistance programs, regional economic effects and weather-related influences.

The allowance for loan losses includes components for loans individually evaluated for impairment, loans collectively evaluated for impairment and loans acquired with deteriorated credit quality. Generally, for loans individually evaluated, the allowance for loan losses represents the difference between the recorded investment in the loan and the present value of the cash flows expected to be collected discounted at the loan's effective interest rate, or at the fair value of the collateral, if the loan is collateral-dependent. For those loans collectively evaluated for impairment, the allowance for loan losses is determined using the risk-rating model.

E. Other Property Owned:

Other property owned (OPO), consisting of real and personal property acquired through foreclosure or deed in lieu of foreclosure, is recorded at fair value, based on appraisal, less estimated selling costs upon acquisition and is included in other assets on the balance sheets. Any initial reduction in the carrying amount of a loan to the fair value of the collateral received is charged to the allowance for loan losses. On at least an annual basis, revised estimates to the fair value, established by appraisal, less cost to sell are reported as adjustments to the carrying amount of the asset, provided that such adjusted value is not in excess of the carrying amount at acquisition. Income and expenses from operations and carrying value adjustments are included in net losses (gains) on OPO in the statements of comprehensive income.

F. Premises and Equipment:

Premises and equipment are carried at cost less accumulated depreciation. Depreciation expense is calculated using the straight-line method over the estimated useful lives of three years for automobiles, and three to 10 years for furniture, equipment and certain leasehold improvements. Computer software and hardware are amortized over three to 10 years. Gains and losses on dispositions are reflected in current operating results. Maintenance and repairs are charged to operating expense, and improvements are capitalized and amortized over the remaining useful life of the asset.

G. Other Assets and Other Liabilities:

The bank is a limited partner in certain Rural Business Investment Companies (RBICs) for various relationship and strategic reasons. These RBICs facilitate equity and debt investments in agriculture-related businesses that create growth and job opportunities in rural America. These investments are accounted for under the equity method as the bank is considered to have significant influence.

The bank is authorized under the Farm Credit Act to accept "advance conditional payments" (ACPs) from borrowers. To the extent the borrower's access to such ACPs is restricted and the legal right of setoff exists, the ACPs are netted against the borrower's related loan balance. Unrestricted advance conditional payments are included in other liabilities. ACPs are not insured, and interest is generally paid by the bank on such balances. There were no significant balances of ACPs at December 31, 2019, 2018 and 2017.

Investment in other System Bank represents nonmarketable investments consisting of stock in another institution regulated by the FCA. This investment is carried at cost and evaluated for impairment based on the ultimate recoverability of the par value rather than by recognizing temporary declines in value.

Derivative financial instruments are included on the balance sheets at fair value, as either other assets or other liabilities.

H. Employee Benefit Plans:

Employees of the bank participate in one of two districtwide retirement plans (a defined benefit plan and a defined contribution plan) and are eligible to participate in the 401(k) plan of the district. Within the 401(k) plan, a certain percentage of employee contributions is matched by the bank. The 401(k) plan costs are expensed as incurred. Additionally, certain qualified individuals in the bank may participate in a separate, nonqualified 401(k) plan.

The structure of the district's defined benefit plan (DB plan) is characterized as multiemployer, since neither the assets, liabilities nor cost of the plan is segregated or separately accounted for by participating employers (bank and associations). No portion of any surplus assets is available to any participating employer. Participating employers are jointly and severally liable for the plan obligations. Upon withdrawal or termination of their participation in the plan, a participating employer must pay all associated costs of its withdrawal from the plan, including its unfunded liability (the difference between replacement annuities and the withdrawing employer's share of allocated plan assets). As a result, participating employers of the plan only recognize as cost the required contributions for the period and a liability for any unpaid contributions required for the period of their financial statements. Plan obligations, assets and the components of annual benefit expenses are recorded and reported upon combination at the district level only. The bank records current contributions to the DB plan as an expense in the current year.

In addition to pension benefits, the bank provides certain health care benefits to qualifying retired employees (other postretirement benefits). These benefits are not characterized as multiemployer and, consequently, the liability for these benefits is included in other liabilities. Bank employees hired after January 1, 2004, will be eligible for retiree medical benefits for themselves and their spouses but will be responsible for 100% of the related premiums.

Authoritative accounting guidance requires the accrual of the expected cost of providing postretirement benefits other than pensions (primarily health care benefits) to an employee and an employee's beneficiaries and covered dependents during the years that the employee renders service necessary to become eligible for these benefits.

I. Income Taxes:

The bank is exempt from federal and certain other income taxes as provided in the Farm Credit Act. However, the TCJA created a new excise tax on excess tax-exempt organization executive compensation effective for tax years beginning after December 31, 2017.

J. Derivative Instruments and Hedging Activity:

In the normal course of business, the bank may enter into derivative financial instruments, including interest rate swaps and caps, which are principally used to manage interest rate risk on assets, liabilities and anticipated transactions. Derivatives are recorded on the balance sheets as assets and liabilities at fair value.

Changes in the fair value of derivatives are recorded in current period earnings or accumulated other comprehensive income (loss) depending on the use of the derivative and whether it qualifies for hedge accounting. For fair-value hedge transactions, which hedge changes in the fair value of assets, liabilities or firm commitments, changes in the fair value of the derivative are recorded in earnings and will generally be offset by changes in the hedged item's fair value. For cash flow hedge transactions, which hedge the exposure to variability in expected future cash flows, changes in the fair value of the derivative will generally be offset by an entry to accumulated other comprehensive income (loss) in shareholders' equity. The ineffective portion of all hedges is recorded in current period earnings. For derivatives not designated as a hedging instrument, the related change in fair value is recorded in current period earnings.

The bank formally documents all relationships between hedging instruments and hedged items, as well as its risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value or cash flow hedges to (1) specific assets or liabilities on the balance sheets or (2) firm commitments or forecasted transactions. The bank also formally assesses (both at the hedge's inception and on an ongoing basis) whether the derivatives that are used in hedging transactions have been highly effective in offsetting changes in the fair value or cash flows of hedged items and whether those derivatives may be expected to remain highly effective in future periods. The bank uses regression analysis (or other statistical analysis) to assess the effectiveness of its hedges. The bank discontinues hedge accounting prospectively when the bank determines that 1) a derivative is no longer effective in offsetting changes in the fair value or cash flows of a hedged item; 2) the derivative expires or is sold, terminated, or exercised; 3) it is no longer probable that the forecasted transaction will occur; 4) a hedged firm commitment no longer meets the definition of a firm commitment; or 5) management determines that designating the derivative as a hedging instrument is no longer appropriate. For cash flow hedges, when the bank discontinues hedge accounting, any remaining accumulated other comprehensive income (loss) would be amortized into earnings over the remaining life of the original hedged item. For fair value hedges, when the bank discontinues hedge accounting, changes in fair value of the derivative will be recorded in current period earnings. The bank may use interest rate swaps whose critical terms match the corresponding hedged item, thereby qualifying for short-cut treatment under the provisions of authoritative accounting guidance, and are presumed to be highly effective in offsetting changes in the fair value. The bank would discontinue hedge accounting prospectively if it were determined that a hedge had not been or is not expected to be effective as a hedge. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the bank will carry the derivative at its fair value on the balance sheets, recognizing changes in fair value in current period earnings. See Note 17, "Derivative Instruments and Hedging Activity," for additional disclosures about derivative instruments.

K. Fair Value Measurements:

The Financial Accounting Standards Board (FASB) guidance defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements.

It describes three levels of inputs that may be used to measure fair value:

Level 1 — Quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 1 assets include assets held in trust funds, which relate to our supplemental retirement plan. The trust funds include investments that are actively traded and have quoted net asset values that are observable in the marketplace.

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

Level 3 — Unobservable inputs are those that are supported by little or no market activity and that are significant to the determination of the fair value of the assets or liabilities. These unobservable inputs reflect the reporting entity's own assumptions about assumptions that market participants would use in pricing the asset or liability. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation. This category generally includes the bank's Federal Agricultural Mortgage Corporation (Farmer Mac) guaranteed agricultural mortgage-backed securities (AMBS), certain loans and OPO.

The fair value disclosures are presented in Note 16, "Fair Value Measurements."

L. Off-Balance-Sheet Credit Exposures:

Commitments to extend credit are agreements to lend to customers, generally having fixed expiration dates or other termination clauses that may require payment of a fee. Commercial letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party. These letters of credit are issued to facilitate commerce and typically result in the commitment being funded when the underlying transaction is consummated between the customer and the third party. The credit risk associated with commitments to extend credit and commercial letters of credit is essentially the same as that involved with extending loans to customers and is subject to normal credit policies. Collateral may be obtained based on management's assessment of the customer's creditworthiness.

M. Recently Issued or Adopted Accounting Pronouncements:

In August 2018, the Financial Accounting Standards Board (FASB) issued guidance entitled "Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Cost." The guidance aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by this guidance. This guidance became effective for interim and annual periods beginning after December 15, 2019. The guidance also requires an entity (customer) to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement. It further specifies where to present expense and payments in the financial statements. Early adoption is permitted. The guidance will be applied on a retrospective or prospective basis to all implementation costs incurred after the date of adoption. Based on our preliminary review and analysis, the new guidance will have an insignificant impact on the bank's financial condition and results of operations, and will have no impact on the bank's statement of cash flows.

In August 2018, the FASB issued guidance entitled "Disclosure Framework — Changes to the Disclosure Requirements for Defined Benefit Plans." The guidance modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. This guidance becomes effective for fiscal years ending after December 15, 2020. Early adoption is permitted. The guidance is to be applied on a retrospective basis for all periods. The adoption of this guidance will not impact the bank's financial condition or its results of operations, but will impact the employee benefit plan disclosures.

In August 2018, the FASB issued guidance entitled "Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurement." The guidance modifies the requirements on fair value measurements by removing, modifying or adding to the disclosures. This guidance became effective for interim and annual periods beginning after December 15, 2019. Early adoption is permitted and an entity is permitted to early adopt any removal or modified disclosures and delay adoption of the additional disclosures until their effective date. The adoption of this guidance will not impact the bank's financial condition or its results of operations but will impact the fair value measurements disclosures. The bank early adopted the removal and modified disclosures during the fourth quarter of 2019.

In August 2017, the FASB issued guidance entitled "Targeted Improvements to Accounting for Hedging Activities." The guidance better aligns an entity's risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The amendments in this guidance require an entity to present the earnings effect of the hedging instrument in the same income statement line item in which the earnings effect of the hedged item is reported. This guidance also addresses the timing of effectiveness testing, qualitative and quantitative effectiveness testing, and components that can be excluded from effectiveness testing. This guidance became effective for interim and annual periods beginning after December 15, 2018. The adoption of this guidance did not materially impact the bank's financial condition or its results of operations but did impact the derivative disclosures.

In June 2016, the FASB issued guidance entitled "Measurement of Credit Losses on Financial Instruments." The guidance replaces the current incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. Credit losses relating to available-for-sale securities would also be recorded through an allowance for credit losses. For public business entities that are not U.S. Securities and Exchange Commission filers, this guidance becomes effective for interim and annual periods beginning after December 15, 2020, with early application permitted. In November 2019, the FASB issued an update that amends the mandatory effective date for this guidance for certain institutions. The change resulted from a change in the effective date philosophy that extends and simplifies the adoption by staggering the dates between large public entities and other entities. As a result of the change, the new credit loss standard becomes effective for interim and annual reporting periods beginning after December 15, 2022, with early adoption permitted. The bank qualifies for the delay in the adoption date and continues to evaluate the impact of adoption on the bank's financial condition and its results of operations.

In February 2016, the FASB issued guidance entitled "Leases." The guidance requires recognition by lessees of lease assets and lease liabilities on the balance sheet for the rights and obligations created by those leases. Leases with lease terms of more than 12 months are impacted by this guidance, which became effective for interim and annual periods beginning after December 15, 2018. The adoption of this guidance did not materially impact the bank's financial condition or its results of operations but did impact the lease disclosures. The bank adopted this guidance on January 1, 2019 and upon adoption, recorded a $10.9 million right of use asset and a $14.2 million lease liability. The bank elected the hindsight and certain practical expedients, which among other things, allowed for the carry forward of the historical lease classification and the determination of the lease term for existing leases. Refer to Note 5, "Leases," of the accompanying financial statements for additional information.

Note 3 — Investment Securities

The bank's available-for-sale investments include a liquidity portfolio and a portfolio of other investments. The liquidity portfolio consists primarily of agency-guaranteed debt instruments, mortgage-backed investment securities (MBS), U.S. Treasury securities, asset-backed investment securities (ABS) and corporate debt. The liquidity portfolio's MBS were federal agency-guaranteed collateralized MBS, including the Government National Mortgage Association (GNMA), Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corporation (FHLMC) securities. The bank's other investments portfolio consists of Federal Agricultural Mortgage Corporation (Farmer Mac) guaranteed agricultural mortgage-backed securities (AMBS) purchased from district associations in 2010, 2012 and 2014, as a part of the bank's Capitalized Participation Pool (CPP) program. In accordance with this program, any positive impact to the net income of the bank can be returned as patronage to the association if declared by the bank's board of directors. The declared patronage approximates the net earnings of the respective pool. The Farmer Mac securities are backed by loans originated by the associations and previously held by the associations under the Farmer Mac long-term standby commitments to purchase agreements.

During the year ended December 31, 2019, six investment securities were sold for total proceeds of $415.1 million with a combined book value of $403.0 million, resulting in gains of $12.1 million recognized in noninterest income and previously reflected in accumulated other comprehensive loss. The bank uses the specific identification method to determine the cost of securities sold.

Investments in the available-for-sale liquidity portfolio at December 31:

	2019				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Agency-guaranteed debt	$ 139,016	$ 480	$ (563)	$ 138,933	2.06%
Corporate debt	454,963	2,122	(40)	457,045	2.34
Federal agency collateralized mortgage-backed securities:					
GNMA	2,165,953	14,236	(9,204)	2,170,985	2.40
FNMA and FHLMC	2,139,207	5,898	(9,085)	2,136,020	2.12
U.S. Treasury securities	200,088	43	(17)	200,114	1.79
Asset-backed securities	162,837	367	(209)	162,995	2.29
Total liquidity investments	$ 5,262,064	$ 23,146	$ (19,118)	$ 5,266,092	2.25%

	2018				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Agency-guaranteed debt	$ 170,800	$ 96	$ (2,973)	$ 167,923	2.23%
Corporate debt	365,382	51	(1,896)	363,537	2.84
Federal agency collateralized mortgage-backed securities:					
GNMA	2,671,043	5,172	(45,220)	2,630,995	2.74
FNMA and FHLMC	2,157,582	2,124	(29,570)	2,130,136	2.47
U.S. Treasury securities	298,300	28	(245)	298,083	2.38
Asset-backed securities	88,292	42	(77)	88,257	2.72
Total liquidity investments	$ 5,751,399	$ 7,513	$ (79,981)	$ 5,678,931	2.61%

	2017				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Agency-guaranteed debt	$ 198,246	$ 30	$ (3,028)	$ 195,248	1.94%
Corporate debt	252,482	556	(429)	252,609	1.84
Federal agency collateralized mortgage-backed securities:					
GNMA	2,012,484	706	(28,528)	1,984,662	1.99
FNMA and FHLMC	2,395,248	2,061	(25,256)	2,372,053	1.91
U.S. Treasury securities	249,860	-	(653)	249,207	0.90
Asset-backed securities	47,914	18	(43)	47,889	1.61
Total liquidity investments	$ 5,156,234	$ 3,371	$ (57,937)	$ 5,101,668	1.88%

Investments in the available-for-sale other investments portfolio at December 31:

	2019				
	Amortized Cost	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Fair Value**	**Weighted Average Yield**
Agricultural mortgage-backed securities	**$ 29,867**	**$ -**	**$ (816)**	**$ 29,051**	**4.96%**

	2018				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Agricultural mortgage-backed securities	$ 37,781	$ -	$ (2,074)	$ 35,707	4.90%

	2017				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Agricultural mortgage-backed securities	$ 45,564	$ -	$ (2,247)	$ 43,317	4.46%

There were no investments in the held-to-maturity portfolio at December 31, 2019, December 31, 2018 or December 31, 2017.

A summary of contractual maturity, amortized cost, estimated fair value and weighted average yield of the available-for-sale liquidity portfolio at December 31, 2019:

	Due in One Year Or Less	**Due After One Year Through Five Years**	**Due After Five Years Through 10 Years**	**Due After 10 Years**	**Total**
Agency-guaranteed debt	$ -	$ 47,956	$ 90,977	$ -	$ 138,933
Corporate debt	199,202	257,843	-	-	457,045
Federal agency collateralized mortgage-backed securities					
GNMA	-	-	99,375	2,071,610	2,170,985
FNMA and FHLMC	3,777	96,291	515,181	1,520,771	2,136,020
U.S. Treasury securities	200,114	-	-	-	200,114
Asset-backed securities	8,149	28,735	55,544	70,567	162,995
Total fair value	$ 411,242	$ 430,825	$ 761,077	$ 3,662,948	$ 5,266,092
Total amortized cost	$ 411,083	$ 429,435	$ 761,704	$ 3,659,842	$ 5,262,064
Weighted average yield	2.02%	2.28%	2.09%	2.30%	2.25%

Collateralized mortgage obligations (CMOs) have stated contractual maturities in excess of 15 years. However, the security structure of the CMOs is designed to produce a relatively short-term life. At December 31, 2019, the CMO portfolio had a weighted average remaining life of 3.5 years.

Investments in the available-for-sale other investments portfolio at December 31, 2019:

	Due After One Year Through Five Years	**Due After Five Years Through 10 Years**	**Total**
Fair value of agricultural mortgage-backed securities	$ 11,921	$ 17,130	$ 29,051
Total amortized cost	$ 12,230	$ 17,637	$ 29,867
Weighted average yield	4.83%	5.06%	4.96%

The ratings of the eligible investments held for maintaining a liquidity reserve, managing short-term surplus funds and managing interest rate risk must meet the applicable regulatory guidelines, which require these securities to be high quality and senior class at the time of purchase.

To achieve the ratings, these securities have a guarantee of timely payment of principal and interest or credit enhancement achieved through overcollateralization and the priority of payments of senior classes over junior classes. The bank performs analysis based on expected behavior of the loans, whereby these loan performance scenarios are applied against each security's credit-support structure to monitor credit-enhancement sufficiency to protect the investment. The model output includes projected cash flows, including any shortfalls in the capacity of the underlying collateral to fully return the original investment, plus accrued interest.

If an investment no longer meets the credit criteria, the investment becomes ineligible for inclusion in the liquidity portfolio. The bank must dispose of an investment that becomes ineligible within six months, unless the FCA approves, in writing, a plan that authorizes the bank to divest over a longer period of time. At December 31, 2019, the bank held no investments that were ineligible for liquidity purposes by FCA standards.

The following table shows the fair value and gross unrealized losses for investments in a loss position aggregated by investment category, and the length of time the securities have been in a continuous unrealized loss position. The continuous loss position is based on the date the impairment occurred.

	December 31, 2019					
	Less Than 12 Months		Greater Than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Agency-guaranteed debt	**$ 19,825**	**$ (135)**	**$ 56,907**	**$ (428)**	**$ 76,732**	**$ (563)**
Corporate debt	**9,938**	**(40)**	**-**	**-**	**9,938**	**(40)**
Federal agency collateralized mortgage-backed securities						
GNMA	**531,068**	**(1,904)**	**794,460**	**(7,300)**	**1,325,528**	**(9,204)**
FNMA and FHLMC	**753,788**	**(3,232)**	**776,603**	**(5,853)**	**1,530,391**	**(9,085)**
U.S. Treasury securities	**100,106**	**(17)**	**-**	**-**	**100,106**	**(17)**
Asset-backed securities	**34,111**	**(209)**	**-**	**-**	**34,111**	**(209)**
Total	**$ 1,448,836**	**$ (5,537)**	**$ 1,627,970**	**$ (13,581)**	**$ 3,076,806**	**$ (19,118)**

	December 31, 2018					
	Less Than 12 Months		Greater Than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Agency-guaranteed debt	$ 12,571	$ (76)	$ 121,927	$ (2,898)	$ 134,498	$ (2,974)
Corporate debt	274,317	(1,082)	39,219	(813)	313,536	(1,895)
Federal agency collateralized mortgage-backed securities						
GNMA	312,108	(2,000)	1,407,873	(43,220)	1,719,981	(45,220)
FNMA and FHLMC	239,890	(687)	1,332,521	(28,883)	1,572,411	(29,570)
U.S. Treasury securities	248,732	(245)	-	-	248,732	(245)
Asset-backed securities	51,411	(74)	3,027	(3)	54,438	(77)
Total	$ 1,139,029	$ (4,164)	$ 2,904,567	$ (75,817)	$ 4,043,596	$ (79,981)

	December 31, 2017					
	Less Than 12 Months		Greater Than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Agency-guaranteed debt	$ 68,088	$ (460)	$ 112,869	$ (2,568)	$ 180,957	$ (3,028)
Corporate debt	64,635	(427)	14,998	(2)	79,633	(429)
Federal agency collateralized mortgage-backed securities						
GNMA	848,826	(9,518)	880,604	(19,010)	1,729,430	(28,528)
FNMA and FHLMC	692,020	(5,917)	1,045,992	(19,339)	1,738,012	(25,256)
U.S. Treasury securities	-	-	249,207	(653)	249,207	(653)
Asset-backed securities	28,999	(42)	2,072	(1)	31,071	(43)
Total	$ 1,702,568	$ (16,364)	$ 2,305,742	$ (41,573)	$ 4,008,310	$ (57,937)

Other-Than-Temporarily Impaired Investments Evaluation

As more fully discussed in Note 2, "Summary of Significant Accounting Policies," the guidance for other-than-temporary impairment contemplates numerous factors in determining whether an impairment is other-than-temporary, including: (i) whether or not an entity intends to sell the security, (ii) whether it is more likely than not that an entity would be required to sell the security before recovering its costs or (iii) whether or not an entity expects to recover the security's entire amortized cost basis (even if it does not intend to sell). The bank performs a quarterly evaluation on a security-by-security basis considering all available information. If the bank intends to sell the security or it is more likely than not that it would be required to sell the security, the impairment loss equals the full difference between amortized cost and fair value of the security. When the bank does not intend to sell securities in an unrealized loss position, other-than-temporary impairment is considered using various factors, including the length of time and the extent to which the fair value is less than cost; adverse conditions specifically related to the industry, geographic area and the condition of the underlying collateral; payment structure of the security; ratings by rating agencies; the creditworthiness of bond insurers; and volatility of the fair value changes. The bank uses estimated cash flows over the remaining lives of the underlying collateral to assess whether credit losses exist. In estimating cash flows, the bank considers factors such as expectations of relevant market and economic data, including underlying loan level data for mortgage-backed and asset-backed securities and credit enhancements.

There were no other-than-temporarily impaired (OTTI) securities at December 31, 2019, 2018 or 2017.

Note 4 — Loans and Reserves for Credit Losses

Loans comprised the following categories at December 31:

	2019	2018	2017
Direct notes receivable from district associations and OFIs	**$ 12,976,399**	$ 11,823,267	$ 11,584,236
Participations purchased	**6,521,665**	6,233,167	5,500,659
Other bank-owned loans	**229**	252	282
Total loans	**$ 19,498,293**	$ 18,056,686	$ 17,085,177

A summary of the bank's loan types at December 31 follows:

	2019	2018	2017
Direct notes receivable from district associations	**$ 12,935,229**	$ 11,786,926	$ 11,544,129
Real estate mortgage	**742,630**	709,274	445,116
Production and intermediate term	**744,869**	731,302	631,148
Agribusiness			
Loans to cooperatives	**354,303**	321,233	332,664
Processing and marketing	**2,956,140**	2,658,208	2,361,426
Farm-related business	**70,383**	49,278	79,879
Communications	**455,696**	408,135	326,297
Energy (rural utilities)	**1,057,739**	1,199,509	1,188,465
Water and waste disposal	**111,830**	126,785	104,920
Mission-related	**16,195**	16,275	16,351
Lease receivables	**12,109**	13,420	14,675
Loans to other financing institutions	**41,170**	36,341	40,107
Total	**$ 19,498,293**	$ 18,056,686	$ 17,085,177

The bank's capital markets loan portfolio predominantly includes participations, syndications and purchased whole loans, along with other financing structures within our lending authorities. The bank also refers to the capital markets portfolio as participations purchased. In addition to purchasing loans from our district associations, which may exceed their hold limits, the bank seeks the purchase of participations and syndications originated outside of the district's territory by other System institutions, commercial banks and other lenders. These loans may be held as earning assets of the bank or subparticipated to the associations or to other System entities.

The bank purchases or sells participation interests with other parties in order to diversify risk, manage loan volume and comply with FCA regulations.

The following table presents information on loan participations, excluding syndications, at December 31, 2019:

	Other Farm Credit Institutions		Non–Farm Credit Institutions		Total	
	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold
Real estate mortgage	$ 1,038,219	$ 360,847	$ 41,897	$ -	$ 1,080,116	$ 360,847
Production and intermediate term	1,662,368	973,120	32,097	-	1,694,465	973,120
Agribusiness	2,214,382	956,729	-	-	2,214,382	956,729
Communications	636,805	180,748	-	-	636,805	180,748
Energy (rural utilities)	1,218,701	160,814	-	-	1,218,701	160,814
Water and waste disposal	129,732	17,755	-	-	129,732	17,755
Lease receivables	13,818	1,721	-	-	13,818	1,721
Direct note receivable from district associations	-	3,850,000	-	-	-	3,850,000
Mission-related	2,411	-	-	-	2,411	-
Total	**$ 6,916,436**	**$ 6,501,734**	**$ 73,994**	**$ -**	**$ 6,990,430**	**$ 6,501,734**

A substantial portion of the bank's loan portfolio consists of direct notes receivable from district associations. As described in Note 1, "Organization and Operations," these notes are used by the associations to fund their loan portfolios, and therefore the bank's implicit concentration of credit risk in various agricultural commodities approximates that of the district as a whole. Loan concentrations are considered to exist when there are amounts loaned to borrowers engaged in similar activities, which could cause them to be similarly impacted by economic or other conditions. A substantial portion of the associations' lending activities is collateralized and the associations' exposure to credit loss associated with lending activities is reduced accordingly. An estimate of the bank's credit risk exposure is considered in the bank's allowance for loan losses.

At December 31, 2019, the bank had a total of $3.85 billion of district association direct notes sold to another System bank. The sales included participations of 11 direct notes receivable from district associations. These sales provide diversification benefits among Farm Credit entities.

During 2012, the bank elected the fair value option for certain callable loans purchased on the secondary market at a significant premium. The fair value option provided an irrevocable option to elect fair value as an alternative measurement for selected financial assets. At December 31, 2018, the fair value and unpaid principal balance of the loans held under the fair value option were $9,345 and $9,160 respectively. The loans held under the fair value option matured during the second quarter of 2019 and thus no balance is reflected at December 31, 2019. Fair value was used for both the initial and subsequent measurement of the designated instrument, with the changes in fair value recognized in net income. The related contractual interest income and premium amortization of these instruments were recorded as interest income in the statements of comprehensive income. The remaining changes in fair value on these instruments were recorded as net gains (losses) in noninterest income on the statements of comprehensive income. The fair value of these instruments was included in Level 2 in the fair value hierarchy for assets recorded at fair value on a recurring basis at December 31, 2018 and 2017.

The following is a summary of the transactions on loans for which the fair value option has been elected for the twelve months ended December 31, 2019:

Balance at January 1, 2019	$ 9,345
Maturities, repayments and calls by issuers	(9,160)
Net losses on financial instruments under fair value option	(40)
Premium amortization	(145)
Balance at December 31, 2019	$ -

Impaired loans are loans for which it is probable that all principal and interest will not be collected according to the contractual terms of the loans. Interest income recognized and cash payments received on nonaccrual impaired loans are applied in a similar manner as for nonaccrual loans, as described in Note 2, "Summary of Significant Accounting Policies."

The bank has purchased loan participations and Farmer Mac guaranteed AMBS from associations in CPP transactions. As a condition of the transactions, the bank redeemed stock in the amount of 2.0% of the par value of the loans and AMBS purchased, and the associations bought bank stock equal to 8.0% of the purchased loans' par value and 1.6% of the Farmer Mac AMBS' par value. During 2019, the bank purchased $9.6 million in loan participations from associations, which resulted in net stock issuances of $578 thousand. CPP loans held at December 31, 2019, totaled $118.7 million and were included in loans on the balance sheets. The balance of the Farmer Mac AMBS CPP was $29.1 million at December 31, 2019, and is included in investment securities on the balance sheet.

The bank also purchased loans from district associations in Non-Capitalized Participation Pool (NCPP) transactions. As a condition of these transactions, the bank redeems common stock in the amount of 2.0% of the par value of the loans purchased. There were no NCPP loan purchases for the year ended December 31, 2019. NCPP loans held at December 31, 2019, totaled $144.0 million, and were included in loans on the balance sheet.

The following table presents information concerning nonaccrual loans, accruing restructured loans and accruing loans 90 days or more past due, collectively referred to as "impaired loans." Restructured loans are loans whose terms have been modified and where concessions have been granted because of borrower financial difficulties. The bank's impaired loans consisted of participations purchased; no direct notes to district associations were impaired at December 31, 2019, 2018 and 2017.

	December 31,		
	2019	2018	2017
Nonaccrual loans			
Current as to principal and interest	**$ 16,073**	$ 18,250	$ -
Past due	**692**	1,236	3,393
Total nonaccrual loans	**16,765**	19,486	3,393
Loans past due 90 days or more and still accruing interest	**229**	**-**	**-**
Impaired accrual loans			
Restructured accrual loans	**2,450**	2,531	2,607
Total impaired accrual loans	**2,450**	2,531	2,607
Total impaired loans	**$ 19,444**	$ 22,017	$ 6,000

The decrease in nonaccrual loans is attributable to repayments. The bank had $229 of accruing loans 90 days or more past due at December 31, 2019. The bank had no accruing loans 90 days or more past due at December 31, 2018 and 2017.

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

	December 31, 2019	2018	2017
Nonaccrual loans:			
Real estate mortgage	**$ 692**	$ 953	$ 3,393
Agribusiness	**6,866**	8,257	
Energy & water/waste disposal	**9,207**	10,276	-
Mission-related	**-**	-	-
Total nonaccrual loans	**16,765**	19,486	3,393
Accruing loans past due 90 days or more:			
Real estate mortgage	**229**	-	-
Accruing restructured loans:			
Mission-related	**2,450**	2,531	2,607
Total accruing restructured loans	**2,450**	2,531	2,607
Total nonperforming loans	**19,444**	22,017	6,000
Total nonperforming assets	**$ 19,444**	$ 22,017	$ 6,000

One credit quality indicator utilized by the bank is the Farm Credit Administration Uniform Loan Classification System that categorizes loans into five categories. The categories are defined as follows:

- Acceptable – assets are expected to be fully collectible and represent the highest quality;
- Other assets especially mentioned (OAEM) – assets are currently collectible but exhibit some potential weakness;
- Substandard – assets exhibit some serious weakness in repayment capacity, equity and/or collateral pledged on the loan;
- Doubtful – assets exhibit similar weaknesses to substandard assets; however, doubtful assets have additional weaknesses in existing factors, conditions and values that make collection in full highly questionable, and
- Loss – assets are considered uncollectible.

The following table presents loans and related accrued interest classified under the Farm Credit Administration Uniform Loan Classification System as a percentage of total loans and related accrued interest receivable by loan type as of December 31:

	2019	2018	2017
Real estate mortgage:			
Acceptable	**98.4%**	96.5%	94.2%
OAEM	**0.6**	1.1	3.0
Substandard/Doubtful	**1.0**	2.4	2.8
	100.0%	100.0%	100.0%
Production and intermediate term:			
Acceptable	**95.0%**	95.2%	93.4%
OAEM	**0.8**	-	5.7
Substandard/Doubtful	**4.2**	4.8	0.9
	100.0%	100.0%	100.0%
Agribusiness:			
Acceptable	**97.4%**	99.5%	99.5%
OAEM	**1.9**	0.2	-
Substandard/Doubtful	**0.7**	0.3	0.5
	100.0%	100.0%	100.0%
Energy & water/waste disposal:			
Acceptable	**97.0%**	98.8%	98.6%
OAEM	**-**	0.4	0.5
Substandard/Doubtful	**3.0**	0.8	0.9
	100.0%	100.0%	100.0%
Communications:			
Acceptable	**100.0%**	96.4%	100.0%
OAEM	**-**	3.6	-
Substandard/Doubtful	**-**	-	-
	100.0%	100.0%	100.0%
Direct notes to associations:			
Acceptable	**91.9%**	93.7%	92.3%
OAEM	**8.1**	6.3	7.7
Substandard/Doubtful	**-**	-	-
	100.0%	100.0%	100.0%
Loans to other financing institutions:			
Acceptable	**100.0%**	100.0%	100.0%
OAEM	**-**	-	-
Substandard/Doubtful	**-**	-	-
	100.0%	100.0%	100.0%
Mission-related:			
Acceptable	**100.0%**	100.0%	100.0%
OAEM	**-**	-	-
Substandard/Doubtful	**-**	-	-
	100.0%	100.0%	100.0%
Lease receivables:			
Acceptable	**100.0%**	100.0%	100.0%
OAEM	**-**	-	-
Substandard/Doubtful	**-**	-	-
	100.0%	100.0%	100.0%
Total loans:			
Acceptable	**93.8%**	95.3%	94.2%
OAEM	**5.7**	4.3	5.5
Substandard/Doubtful	**0.5**	0.4	0.3
	100.0%	100.0%	100.0%

The following tables provide an aging analysis of past due loans (including accrued interest) as of December 31, 2019, 2018 and 2017:

	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or Less Than 30 Days Past Due	Total Loans	Recorded Investment Greater Than 90 Days Past Due and Accruing
Real estate mortgage	**$ 2,963**	**$ 921**	**$ 3,884**	**$ 745,107**	**$ 748,991**	**$ 229**
Production and intermediate term	**-**	**-**	**-**	**748,771**	**748,771**	**-**
Agribusiness	**-**	**-**	**-**	**3,398,526**	**3,398,526**	**-**
Energy & water/waste disposal	**-**	**-**	**-**	**1,174,853**	**1,174,853**	**-**
Lease receivables	**-**	**-**	**-**	**12,150**	**12,150**	**-**
Communications	**-**	**-**	**-**	**455,974**	**455,974**	**-**
Direct notes to associations	**-**	**-**	**-**	**12,969,086**	**12,969,086**	**-**
Loans to OFIs	**-**	**-**	**-**	**41,270**	**41,270**	**-**
Mission-related	**-**	**-**	**-**	**16,439**	**16,439**	**-**
Total	**$ 2,963**	**$ 921**	**$ 3,884**	**$ 19,562,176**	**$ 19,566,060**	**$ 229**

	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or Less Than 30 Days Past Due	Total Loans	Recorded Investment Greater Than 90 Days Past Due and Accruing
Real estate mortgage	$ -	$ 1,236	$ 1,236	$ 713,882	$ 715,118	$ -
Production and intermediate term	-	-	-	734,377	734,377	-
Agribusiness	-	-	-	3,046,354	3,046,354	-
Energy & water/waste disposal	-	-	-	1,333,469	1,333,469	-
Lease receivables	-	-	-	13,463	13,463	-
Communications	-	-	-	408,266	408,266	-
Direct notes to associations	-	-	-	11,816,423	11,816,423	-
Loans to OFIs	-	-	-	36,435	36,435	-
Mission-related	-	-	-	16,520	16,520	-
Total	$ -	$ 1,236	$ 1,236	$ 18,119,189	$ 18,120,425	$ -

	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or Less Than 30 Days Past Due	Total Loans	Recorded Investment Greater Than 90 Days Past Due and Accruing
Real estate mortgage	$ -	$ 3,393	$ 3,393	$ 445,621	$ 449,014	$ -
Production and intermediate term	-	-	-	633,330	633,330	-
Agribusiness	-	-	-	2,785,593	2,785,593	-
Energy & water/waste disposal	-	-	-	1,300,418	1,300,418	-
Lease receivables	-	-	-	14,717	14,717	-
Communications	-	-	-	326,705	326,705	-
Direct notes to associations	-	-	-	11,568,693	11,568,693	-
Loans to OFIs	-	-	-	40,187	40,187	-
Mission-related	-	-	-	16,596	16,596	-
Total	$ -	$ 3,393	$ 3,393	$ 17,131,860	$ 17,135,253	$ -

Note: The recorded investment in the receivable is the face amount increased or decreased by applicable accrued interest and unamortized premium, discount, finance charges or acquisition costs and may also reflect a previous direct write-down of the investment.

A restructuring of a debt constitutes a troubled debt restructuring (TDR) if the creditor for economic or legal reasons related to the debtor's financial difficulties grants a concession to the debtor that it would not otherwise consider. TDRs are undertaken in order to improve the likelihood of recovery on the loan and may include, but are not limited to, forgiveness of principal or interest, interest rate reductions that are lower than the current market rate for new debt with similar risk, or significant term or payment extensions.

As of December 31, 2019, the total recorded investment of TDRs was $10,121, with $2,450 classified as accrual and $7,671 classified as nonaccrual, with specific allowance for loan losses of $2,058.

There were no payment defaults on TDRs that occurred within the previous 12 months. A payment default is defined as a payment that is 30 days past due after the date the loan was restructured.

At December 31, 2019, there were additional commitments of $1,558 to lend to borrowers whose loans have been modified in TDRs. There were no additional commitments to lend to borrowers whose loans have been modified in TDRs at December 31, 2018.

The following table presents additional information regarding TDRs, which includes both accrual and nonaccrual loans with TDR designation, that occurred during the year ended December 31, 2018. There were no new TDRs identified during the years ended December 31, 2019 and December 31, 2017. The premodification outstanding recorded investment represents the recorded investment of the loans as of the quarter end prior to the restructuring. The postmodification outstanding recorded investment represents the recorded investment of the loans as of the quarter end the restructuring occurred.

For the year ended December 31, 2018:

	Premodification Outstanding Recorded Investment*	Postmodification Outstanding Recorded Investment*
TDRs:		
Mission-related	$ 7,739	$ 8,588
Total	$ 7,739	$ 8,588

*The recorded investment is the face amount of the receivable increased or decreased by applicable accrued interest and unamortized premium, discount, finance charges, or acquisition costs and may also reflect a previous direct write-down of the investment.

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

	Total Loans Modified as TDRs			TDRs in Nonaccrual Status		
	December 31,			December 31,		
	2019	2018	2017	**2019**	2018	2017
Real estate mortgage	**$ 692**	$ 1,236	$ 3,393	**$ 692**	$ 1,236	$ 3,393
Agribusiness	**6,979**	7,684	-	**6,979**	7,684	-
Mission-related	**2,450**	2,531	2,607	**-**	-	-
Total	**$ 10,121**	$ 11,451	$ 6,000	**$ 7,671**	$ 8,920	$ 3,393

Additional impaired loan information at December 31, 2019, is as follows:

	Recorded Investment	Unpaid Principal Balance*	Related Allowance	Average Impaired Loans	Interest Income Recognized
Impaired loans with a related allowance for credit losses:					
Agribusiness	$ 6,219	$ 6,332	$ 2,006	$ 7,194	$ -
Energy & water/waste disposal	9,207	9,231	2,579	9,708	-
Mission-related	168	168	52	167	13
Total	$ 15,594	$ 15,731	$ 4,637	$ 17,069	$ 13
Impaired loans with no related allowance for credit losses:					
Real estate mortgage	$ 921	$ 921	$ -	$ 858	$ 8
Agribusiness	647	647	-	148	-
Processing and marketing	-	1,192	-	-	-
Energy & water/waste disposal	-	7,623	-	118	-
Mission-related	2,282	2,282	-	2,286	139
Total	$ 3,850	$ 12,665	$ -	$ 3,410	$ 147
Total impaired loans:					
Real estate mortgage	$ 921	$ 921	$ -	$ 858	$ 8
Agribusiness	6,866	6,979	2,006	7,342	-
Processing and marketing	-	1,192	-	-	-
Energy & water/waste disposal	9,207	16,854	2,579	9,826	-
Mission-related	2,450	2,450	52	2,453	152
Total	$ 19,444	$ 28,396	$ 4,637	$ 20,479	$ 160

Additional impaired loan information at December 31, 2018, is as follows:

	Recorded Investment	Unpaid Principal Balance*	Related Allowance	Average Impaired Loans	Interest Income Recognized
Impaired loans with a related allowance for credit losses:					
Agribusiness	$ 7,684	$ 7,684	$ 3,527	$ 5,896	$ -
Energy & water/waste disposal	10,277	10,277	2,679	8,177	-
Mission-related	172	172	50	178	14
Total	$ 18,133	$ 18,133	$ 6,256	$ 14,251	$ 14
Impaired loans with no related allowance for credit losses:					
Real estate mortgage	$ 953	$ 1,236	$ -	$ 1,832	$ -
Agribusiness	572	572	-	-	-
Processing and marketing	-	1,192	-	-	-
Energy & water/waste disposal	-	7,623	-	11	-
Mission-related	2,359	2,359	-	2,355	143
Total	$ 3,884	$ 12,982	$ -	$ 4,198	$ 143
Total impaired loans:					
Real estate mortgage	$ 953	$ 1,236	$ -	$ 1,832	$ -
Agribusiness	8,256	8,256	3,527	5,896	-
Processing and marketing	-	1,192	-	-	-
Energy & water/waste disposal	10,277	17,900	2,679	8,188	-
Mission-related	2,531	2,531	50	2,533	157
Total	$ 22,017	$ 31,115	$ 6,256	$ 18,449	$ 157

*Unpaid principal balance represents the recorded principal balance of the loans.

Additional impaired loan information at December 31, 2017, is as follows:

	Recorded Investment	Unpaid Principal Balance*	Related Allowance	Average Impaired Loans	Interest Income Recognized
Impaired loans with a related allowance for credit losses:					
Mission-related	$ 200	$ 200	$ 82	$ 205	$ 15
Total	$ 200	$ 200	$ 82	$ 205	$ 15
Impaired loans with no related allowance for credit losses:					
Real estate mortgage	$ 3,393	$ 3,393	$ -	$ 4,007	$ 632
Production and intermediate term	-	3,035	-	-	-
Processing and marketing	-	1,192	-	-	-
Energy & water/waste disposal	-	7,623	-	-	-
Mission-related	2,407	2,407	-	4,034	146
Total	$ 5,800	$ 17,650	$ -	$ 8,041	$ 778
Total impaired loans:					
Real estate mortgage	$ 3,393	$ 3,393	$ -	$ 4,007	$ 632
Production and intermediate term	-	3,035	-	-	-
Processing and marketing	-	1,192	-	-	-
Energy & water/waste disposal	-	7,623	-	-	-
Mission-related	2,607	2,607	82	4,239	161
Total	$ 6,000	$ 17,850	$ 82	$ 8,246	$ 793

*Unpaid principal balance represents the recorded principal balance of the loans.

Interest income on nonaccrual and accruing restructured loans that would have been recognized under the original terms of the loans were as follows at December 31:

	2019	2018	2017
Interest income which would have been recognized under the original loan terms	**$ 1,946**	$ 2,476	$ 1,732
Less: interest income recognized	**160**	157	793
Foregone interest income	**$ 1,786**	$ 2,319	$ 939

A summary of changes in the allowance and reserves for credit losses and period-end recorded investment (including accrued interest) in loans follows:

	Real Estate Mortgage	Production and Intermediate Term	Agribusiness	Communications	Energy and Water/Waste Disposal	Lease Receivables	Direct Notes to Associations	Loans to OFIs	Mission-Related	Total
Allowance for credit losses:										
Balance at December 31, 2018	$ 120	$ 799	$ 5,975	$ 364	$ 4,635	$ 29	$ -	$ -	$ 52	$ 11,974
Charge-offs	-	-	-	-	-	-	-	-	-	-
Recoveries	11	-	-	-	-	-	-	-	-	11
(Loan loss reversal) provision for credit losses	36	285	(49)	(11)	(863)	11	-	-	3	(588)
Other*	(1)	1	171	(8)	(73)	-	-	-	-	90
Balance at December 31, 2019	$ 166	$ 1,085	$ 6,097	$ 345	$ 3,699	$ 40	$ -	$ -	$ 55	$ 11,487
Individually evaluated for impairment	$ -	$ -	$ 2,006	$ -	$ 2,579	$ -	$ -	$ -	$ 52	$ 4,637
Collectively evaluated for impairment	166	1,085	4,091	345	1,120	40	-	-	3	6,850
Loans acquired with deteriorated credit quality	-	-	-	-	-	-	-	-	-	-
Balance at December 31, 2019	$ 166	$ 1,085	$ 6,097	$ 345	$ 3,699	$ 40	$ -	$ -	$ 55	$ 11,487
Recorded investments in loans outstanding:										
Balance at December 31, 2019	$ 748,991	$ 748,771	$ 3,398,526	$ 455,974	$ 1,174,853	$ 12,150	$ 12,969,086	$ 41,270	$ 16,439	$19,566,060
Ending balance for loans individually evaluated for impairment	$ 692	$ -	$ 6,866	$ -	$ 9,207	$ -	$ 12,969,086	$ -	$ 2,450	$12,988,301
Ending balance for loans collectively evaluated for impairment	$ 748,299	$ 748,771	$ 3,391,660	$ 455,974	$ 1,165,646	$ 12,150	$ -	$ 41,270	$ 13,989	$ 6,577,759
Ending balance for loans acquired with deteriorated credit quality	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

*Reserve for losses on letters of credit and unfunded commitments recorded in other liabilities

	Real Estate Mortgage	Production and Intermediate Term	Agribusiness	Communications	Energy and Water/Waste Disposal	Lease Receivables	Direct Notes to Associations	Loans to OFIs	Mission-Related	Total
Allowance for credit losses:										
Balance at December 31, 2017	$ 117	$ 954	$ 2,679	$ 364	$ 3,439	$ -	$ -	$ -	$ 86	$ 7,639
Charge-offs	-	-	-	-	-	-	-	-	-	-
Recoveries	11	-	-	120	-	-	-	-	-	131
Provision for credit losses (loan loss reversal)	(10)	(138)	3,846	(126)	1,132	29	-	-	(62)	4,671
Other*	2	(17)	(550)	6	64	-	-	-	28	(467)
Balance at December 31, 2018	$ 120	$ 799	$ 5,975	$ 364	$ 4,635	$ 29	$ -	$ -	$ 52	$ 11,974
Individually evaluated for impairment	$ -	$ -	$ 3,527	$ -	$ 2,680	$ -	$ -	$ -	$ 50	$ 6,257
Collectively evaluated for impairment	120	799	2,448	364	1,955	29	-	-	2	5,717
Loans acquired with deteriorated credit quality	-	-	-	-	-	-	-	-	-	-
Balance at December 31, 2018	$ 120	$ 799	$ 5,975	$ 364	$ 4,635	$ 29	$ -	$ -	$ 52	$ 11,974
Recorded investments in loans outstanding:										
Balance at December 31, 2018	$ 715,118	$ 734,377	$ 3,046,354	$ 408,266	$ 1,333,469	$ 13,463	$ 11,816,423	$ 36,435	$ 16,520	$18,120,425
Ending balance for loans individually evaluated for impairment	$ 953	$ -	$ 8,257	$ -	$ 10,277	$ -	$ 11,816,423	$ -	$ 2,531	$11,838,441
Ending balance for loans collectively evaluated for impairment	$ 714,165	$ 734,377	$ 3,038,097	$ 408,266	$ 1,323,192	$ 13,463	$ -	$ 36,435	$ 13,989	$ 6,281,984
Ending balance for loans acquired with deteriorated credit quality	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

*Reserve for losses on letters of credit and unfunded commitments recorded in other liabilities

	Real Estate Mortgage	Production and Intermediate Term	Agribusiness	Communications	Energy and Water/Waste Disposal	Agricultural Export Finance	Direct Notes to Associations	Loans to OFIs	Mission-Related	Total
Allowance for credit losses:										
Balance at December 31, 2016	$ 74	$ 712	$ 2,259	$ 526	$ 3,997	$ -	$ -	$ -	$ 82	$ 7,650
Charge-offs	-	-	-	-	-	-	-	-	-	-
Recoveries	24	-	5	-	1,420	-	-	-	-	1,449
Provision for credit losses	25	229	270	(185)	(2,016)	-	-	-	4	(1,673)
Other*	(6)	13	145	23	38	-	-	-	-	213
Balance at December 31, 2017	$ 117	$ 954	$ 2,679	$ 364	$ 3,439	$ -	$ -	$ -	$ 86	$ 7,639
Individually evaluated for impairment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 82	$ 82
Collectively evaluated for impairment	117	954	2,679	364	3,439	-	-	-	4	7,557
Loans acquired with deteriorated credit quality	-	-	-	-	-	-	-	-	-	-
Balance at December 31, 2017	$ 117	$ 954	$ 2,679	$ 364	$ 3,439	$ -	$ -	$ -	$ 86	$ 7,639
Recorded investments in loans outstanding:										
Balance at December 31, 2017	$ 449,014	$ 633,330	$ 2,785,593	$ 326,705	$ 1,300,418	$ 14,717	$ 11,568,693	$40,187	$ 16,596	$17,135,253
Ending balance for loans individually evaluated for impairment	$ 3,393	$ -	$ -	$ -	$ -	$ -	$ 11,568,693	$ -	$ 2,607	$11,574,693
Ending balance for loans collectively evaluated for impairment	$ 445,621	$ 633,330	$ 2,785,593	$ 326,705	$ 1,300,418	$ 14,717	$ -	$40,187	$ 13,989	$ 5,560,560
Ending balance for loans acquired with deteriorated credit quality	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

*Reserve for losses on letters of credit and unfunded commitments recorded in other liabilities

The bank's reserves for credit losses include the allowance for loan losses and a reserve for losses on unfunded commitments. The reserve for losses on unfunded commitments includes letters of credit and unused loan commitments, and is recorded in other liabilities on the balance sheets. At December 31, 2019, 2018 and 2017, the reserve totaled $1,809, $1,900 and $1,433, respectively, representing management's estimate of probable credit losses related to letters of credit and unfunded commitments.

Note 5 — Leases

The bank evaluates arrangements at inception to determine if they meet the criteria for a lease. Leases with an initial term of twelve months or less are not recorded on the balance sheet with lease expense recognized on a straight-line basis over the lease term. Operating leases are included in other assets for right-of-use (ROU) assets and other liabilities for lease liabilities on the balance sheet.

ROU assets represent the bank's right to use an underlying asset for the lease term and lease liabilities represent the bank's obligation to make lease payments arising from the lease. Operating ROU assets and liabilities are recognized based on the present value of the lease payments over the lease term. The bank's lease terms may include options to extend or terminate the lease when it is reasonably certain that the bank will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

The bank maintains a lease for its headquarters facility in Austin, Texas. The original lease was effective from September 2003 through August 2013. The bank has since entered into two lease amendments which extend the lease through December 2034. Lease expenses for the facility include certain operating expenses passed through from the landlord that were $4,437, $4,095 and $3,931 for the years ended December 31, 2019, 2018 and 2017, respectively.

The bank entered into a lease for copiers and a lease for postage machines on September 15, 2016, and June 1, 2017, respectively. The copier lease was effective September 15, 2016 and its term is from September 15, 2016 to March 15, 2020. The postage lease was effective June 1, 2017 and its term is from June 1, 2017 to August 31, 2020. Lease expenses for the copiers and postage were $263, $245 and $254 for the years ended December 31, 2019, 2018 and 2017, respectively.

Amounts presented on the balance sheet are as follows:

	Balance Sheet Classification	As of December 31, 2019	As Previously Reported December 31, 2018	Lease Standard Adjustment	As Adopted January 1, 2019
Operating leases	Operating lease right-of-use asset building	$ 39,808	$ -	$ 10,658	$ 10,658
	Operating lease right-of-use asset other	63	-	281	281
Total lease assets		$ 39,871	$ -	$ 10,939	$ 10,939
Operating leases	Operating lease right-of-use liabilities-building	$ 43,897	$ -	$ 13,942	$ 13,942
	Operating lease right-of-use liabilities-other	63	-	281	281
Total lease liabilities		$ 43,960	$ -	$ 14,223	$ 14,223

The components of lease expense were as follows:

	Classification on Statement of Comprehensive Income	Year Ended December 31, 2019
Operating lease cost	Occupancy and equipment	$ 4,700
Sublease income	Fees for services to associations	(135)
Net lease cost		$ 4,565

Other information related to leases was as follows:

	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows for operating leases	$ 1,860
Right-of-use assets obtained in exchange for new lease obligations:	
Operating leases	$ 29,882

The weighted-average remaining lease term for the building, copier and postage leases is 14.98 years and the weighted-average discount rate is 2.42%. The discount rates were determined using the bank's incremental borrowing rate for bonds for terms relative to the lease terms. The following are the undiscounted cash flows for the operating leases at December 31, 2019:

	Maturities of Lease Liabilities
2020	$ 2,619
2021	2,633
2022	2,712
2023	2,793
2024	3,051
Thereafter	38,117
Total undiscounted cash flows	51,925
Less interest expense	7,965
Lease liability	$ 43,960

The lease expense for leases with terms of 12 months or less was $139, $72 and $37 for the twelve months ended December 31, 2019, 2018 and 2017, respectively.

Note 6 — Premises and Equipment

Premises and equipment comprised the following at:

	December 31, 2019	2018	2017
Leasehold improvements	$ 3,090	$ 2,643	$ 2,519
Computer equipment and software	152,850	108,883	78,498
Furniture and equipment	3,874	3,835	3,364
	159,814	115,361	84,381
Accumulated depreciation	(50,957)	(42,615)	(34,976)
Total	$ 108,857	$ 72,746	$ 49,405

The increase in computer equipment and software is due to the bank's internally developed software for lending systems.

Note 7 — Asset/Liability Offsetting

Derivative transactions with swap dealers include bilateral collateral and netting agreements that require the net settlement of covered contracts. Notwithstanding collateral and netting provisions, our derivative assets and liabilities are not offset on the accompanying balance sheets. The amount of collateral received or pledged is calculated on a net basis by counterparty.

The following table summarizes overnight investments, derivative assets and liabilities and amounts of collateral exchanged pursuant to our agreements.

December 31, 2019	Gross Amounts of Assets/Liabilities Presented on the Balance Sheet	Amounts Not Offset on the Balance Sheet		Net Amount
		Cash Collateral Pledged	Investment Securities Received/Pledged as Collateral	
Assets:				
Interest rate swaps and other derivatives	$ 1,852	$ -	$ -	$ 1,852
Overnight repurchase agreements	$ 125,000	$ -	$ -	$ 125,000
Liabilities:				
Interest rate swaps and other derivatives	$ 54,919	$ (17,670)	$ -	$ 37,249

At December 31, 2018, we had no cash collateral or investment securities received or pledged as part of the agreements.

Note 8 — Other Property Owned

OPO, consisting of real and personal property acquired through foreclosure or deed in lieu of foreclosure, is recorded at fair value, based on appraisal, less estimated selling costs upon acquisition. There was no OPO at December 31, 2019, December 31, 2018 and December 31, 2017, respectively, and there were no sales of OPO during the last three years.

Note 9 — Other Assets and Other Liabilities

Other assets comprised the following at December 31:

	2019	2018	2017
Investment in other System bank	**$ 149,317**	$ 142,086	$ 127,297
Other accounts receivable	**40,180**	37,193	48,762
RBIC investments	**14,495**	12,222	11,789
Fair value of derivatives	**1,852**	10,700	8,932
Operating lease right-of-use asset	**39,871**	-	-
Cash collateral posted with derivative counterparties	**17,670**	-	-
Other	**7,774**	8,110	6,496
Total	**$ 271,159**	$ 210,311	$ 203,276

Other liabilities comprised the following at December 31:

	2019	2018	2017
Payable to associations for cash management services	**$ 40,075**	$ 33,654	$ 27,795
Accounts payable – participations	**1,499**	969	-
Accounts payable – other	**32,660**	33,136	35,617
Fair value of derivatives	**54,919**	16,143	248
Operating lease liabilities	**43,959**	-	-
Obligation for nonpension postretirement benefits	**12,231**	11,085	12,521
Mortgage life additional reserve	**4,238**	4,107	4,068
FCSIC premium payable	**7,933**	7,300	11,724
Accrued building lease payable	**-**	2,885	3,154
Other	**6,521**	5,801	5,648
Total	**$ 204,035**	$ 115,080	$ 100,775

Note 10 — Bonds and Notes

Systemwide Debt Securities:

The System, unlike commercial banks and other depository institutions, obtains funds for its lending operations primarily from the sale of Systemwide debt securities issued by the banks through the Funding Corporation. Systemwide bonds and discount notes (Systemwide debt securities) are the joint and several liability of the System banks. Certain conditions must be met before the bank can participate in the issuance of Systemwide debt securities. As one condition of participation, the bank is required by the Farm Credit Act and FCA regulations to maintain specified eligible assets, at least equal in value to the total amount of debt obligations outstanding for which it is primarily liable. This requirement does not provide holders of Systemwide debt securities, or bank and other bonds, with a security interest in any assets of the banks. In general, each bank determines its participation in each issue of Systemwide debt securities based on its funding and operating requirements, subject to the availability of eligible assets as described above and subject to Funding Corporation determinations and FCA approval. At December 31, 2019, the bank had such specified eligible assets totaling $25.26 billion and obligations and accrued interest payable totaling $23.56 billion, resulting in excess eligible assets of $1.70 billion.

The System banks and the Funding Corporation have entered into the Market Access Agreement (MAA), which establishes criteria and procedures for the banks to provide certain information to the Funding Corporation and, under certain circumstances, for restricting or prohibiting an individual bank's participation in Systemwide debt issuances, thereby reducing other System banks' exposure to statutory joint and several liability. At December 31, 2019, the bank was and currently remains in compliance with the conditions and requirements of the System banks' and the Funding Corporation's MAA.

Each issuance of Systemwide debt securities ranks equally, in accordance with the FCA regulations, with other unsecured Systemwide debt securities. Systemwide debt securities are not issued under an indenture, and no trustee is provided with respect to these securities. Systemwide debt securities are not subject to acceleration prior to maturity upon the occurrence of any default or similar event.

The bank's participation in Systemwide debt securities at December 31, 2019, follows (dollars in thousands):

	Bonds		Systemwide Discount Notes		Total	
Year of Maturity	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate
2020	$ 8,013,684	1.78%	$ 1,301,095	1.89%	$ 9,314,779	1.80%
2021	4,586,031	1.98	-	-	4,586,031	1.98
2022	3,105,635	2.00	-	-	3,105,635	2.00
2023	2,314,917	2.19	-	-	2,314,917	2.19
2024	1,954,779	2.22	-	-	1,954,779	2.22
Subsequent years	2,197,765	2.64	-	-	2,197,765	2.64
Total	$ 22,172,811	2.02%	$ 1,301,095	1.89%	$ 23,473,906	2.01%

In the preceding table, the weighted average interest rate reflects the effects of interest rate caps and interest rate swaps used to manage the interest rate risk on the bonds and notes issued by the bank. The bank's interest rate swap strategy is discussed more fully in Note 2, "Summary of Significant Accounting Policies," and Note 17, "Derivative Instruments and Hedging Activity."

Discount notes are issued with maturities ranging from one to 365 days. The average maturity of discount notes at December 31, 2019, was 136 days.

The bank's Systemwide debt, including callable debt, consisted of the following at December 31, 2019 (dollars in thousands):

Year of Maturity	Amount (Par)	Range of First Call
2020	$ 1,833,644	1/1/2020-1/30/2020
2021	1,429,941	1/1/2020-5/26/2020
2022	1,168,122	1/1/2020-3/18/2020
2023	819,658	1/1/2020-11/27/2020
2024	920,000	1/2/2020-11/27/2020
Subsequent years	1,820,000	1/2/2020-12/2/2020
Total	$ 7,991,365	1/1/2020-12/2/2020

Callable debt may be called on the first call date and, generally, every day thereafter with seven days' notice. Expenses associated with the exercise of call options on debt issuances are included in interest expense.

As described in Note 1, "Organization and Operations," the Insurance Fund is available to insure the timely payment of principal and interest on Systemwide debt securities (insured debt) of insured System banks to the extent net assets are available in the Insurance Fund. All other liabilities in the financial statements are uninsured. At December 31, 2019, the assets of the Insurance Fund aggregated $5.20 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 and interest on an insured debt obligation in the event of a default by any System bank having primary liability thereon.

FCSIC 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 FCSIC. Under its existing statutory authority, FCSIC may use these funds to provide assistance to the System banks in demanding market circumstances which threaten the banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10.00 billion and terminates on September 30, 2020, unless otherwise renewed. The decision whether to seek funds from the Federal Financing Bank is in the discretion of FCSIC, 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 will be available if needed by the System.

While the bank's primary source of liquidity is the ability to access the capital markets to issue Systemwide debt, the bank also maintains other contingency funding sources including repurchase agreements with several commercial banks, a $75 million uncommitted Federal Funds line of credit and reciprocal emergency lending agreements with other System entities. These alternative funding sources are subject to various terms and conditions, and as a result, there can be no assurance that funding will be available if needed by the bank. In addition, the Funding Corporation provides contingency financing mechanisms which include emergency and non-emergency purchases of federal funds from counterparties and direct issuance of Systemwide debt securities to institutional investors.

Note 11 — Shareholders' Equity

During the third quarter of 2017, the association Class A Common Stockholders approved an amendment to the bank's capitalization bylaws. The amended bylaws became effective September 15, 2017, resulting in updates to certain sections of the bylaws to conform to the FCA's updated capital adequacy regulations. The amendments did not result in significant changes to the regulatory capital requirements of the bank as of December 31, 2017.

Descriptions of the bank's equities, capitalization requirements, and regulatory capitalization requirements and restrictions are provided below.

A. Description of Bank Equities:

Class B Series 1 Noncumulative Subordinated Perpetual Preferred Stock (Class B-1 preferred stock) – On August 26, 2010, the bank issued $300.0 million of Class B noncumulative subordinated perpetual preferred stock, representing 300,000 shares at $1,000 per share par value for net proceeds of $296.6 million. Dividends on the preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable semi-annually in arrears on the fifteenth day of June and December in each year, commencing December 15, 2010, at an annual fixed rate of 10% of par value of $1,000 per share. The Class B-1 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the bank after the dividend payment date in June 2020. The Class B-1 preferred stock ranks, both as to dividends and upon liquidation, senior to all outstanding capital stock. Class B-1 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of bank investment and direct note patronage to associations and OFIs can be paid. In 2019, 2018 and 2017, Class B-1 preferred stock dividends totaling $30.0 million were declared and paid. At December 31, 2019, dividends payable on Class B-1 preferred stock totaled $15.0 million.

Class B Series 2 Noncumulative Subordinated Perpetual Preferred Stock (Class B-2 preferred stock) – On July 23, 2013, the bank issued $300.0 million of Class B noncumulative subordinated perpetual preferred stock, Series 2, representing three million shares at $100 per share par value, for net proceeds of $296.0 million. Dividends on the Class B-2 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2013, at an annual fixed rate of 6.75% of par value of $100 per share up to, but excluding September 15, 2023, from and after which date will be paid at an annual rate of the 3-Month USD LIBOR plus 4.01%. The Class B-2 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the bank on any dividend payment date on or after September 15, 2023. The Class B-2 preferred stock ranks, both as to dividends and upon liquidation, pari passu with respect to the existing Class B-1 preferred stock, and senior to all other classes of the bank's outstanding capital stock. Class B-2 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of bank investment and direct note patronage to associations and OFIs can be paid. In 2019, 2018 and 2017, Class B-2 preferred stock dividends totaling $20.2 million were declared and paid. At December 31, 2019, dividends payable on Class B-2 preferred stock totaled $5.0 million.

Class B Series 3 Noncumulative Subordinated Perpetual Preferred Stock (Class B-3 preferred stock) – On June 25, 2018, the bank issued $100.0 million of Class B noncumulative subordinated perpetual preferred stock, Series 3 (Class B-3 preferred stock), representing one hundred thousand shares at $1,000 per share par value, for net proceeds of $98.7 million. Dividends on the Class B-3 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2018, at an annual fixed rate of 6.20% of par value of $1,000 per share up to, but excluding June 15, 2028, from and after which date will be paid at an annual rate of the 3-Month USD LIBOR plus 3.223%. The Class B-3 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the bank on any dividend payment date on or after June 15, 2028. The Class B-3 preferred stock ranks pari passu with respect to the existing Class B-1 and Class B-2 preferred stock, and senior to all of the bank's outstanding capital stock. In 2018, Class B-3 preferred stock dividends totaling $2.9 million were declared and paid. In 2019, Class B-3 preferred stock dividends totaling $6.2 million were declared and paid. At December 31, 2019, dividends payable on Class B-3 preferred stock totaled $1.6 million.

Class A Voting Common Stock – According to the bank's bylaws, the minimum and maximum stock investments that the bank may require of the ACAs and FLCA are 2% (or one thousand dollars, whichever is greater) and 5%. The investments in the bank are required to be in the form of Class A voting common stock (with a par value of $5 per share) and allocated retained earnings. The current investment required of the associations is 2% of their average borrowings from the bank. Under the CPP program, the stock investment that the bank requires is 1.6% of each Farmer Mac AMBS pool and 8% of each loan pool. Under the NCPP program, the bank redeems stock in the amount of 2.0% of the par value of the loans purchased. No Class A voting common stock may be retired except at the sole discretion of the bank's board of directors, and provided that after such retirement, the bank shall meet minimum capital adequacy standards as may from time to time be promulgated by the FCA or such higher level as the board may from time to time establish in the bank's Capital Plan. There were 66.9 million shares, 63.1 million shares and 60.1 million shares of Class A voting common stock issued and outstanding at December 31, 2019, 2018 and 2017, respectively.

Class A Nonvoting Common Stock – The bank requires OFIs to make cash purchases of Class A nonvoting common stock (with a par value of $5 per share) in the bank based on a minimum stock investment of 2% (or one thousand dollars, whichever is greater) and on a maximum of 5%. The current investment required of the OFIs is 2% of their average borrowings from the bank. No Class A nonvoting common stock may be retired except at the sole discretion of the bank's board of directors, and provided that after such retirement, the bank shall meet minimum capital adequacy standards as may from time to time be promulgated by the FCA or such higher level as the board may from time to time establish in the bank's Capital Plan. The bank has a first lien on these equities for the repayment of any indebtedness to the bank. There were 163 thousand shares, 163 thousand shares and 196 thousand shares of Class A nonvoting common stock issued and outstanding at December 31, 2019, 2018 and 2017, respectively.

Allocated retained earnings of $52,451, $45,685 and $39,144 at December 31, 2019, 2018 and 2017, respectively, consisted of allocated equity for the payment of patronage on loans participated with another System bank.

At December 31, the bank's equities included the following:

	2019	2018	2017
Class A voting common stock – associations	$ 334,446	$ 315,646	$ 300,261
Class A nonvoting common stock – Other Financing Institutions	816	817	978
Total common stock	335,262	316,463	301,239
Preferred stock	700,000	700,000	600,000
Allocated retained earnings			
Associations	-	-	-
Other entities	52,451	45,685	39,144
Total allocated retained earnings	52,451	45,685	39,144
Total capital stock and allocated retained earnings	$ 1,087,713	$ 1,062,148	$ 940,383

Patronage may be paid to the holders of Class A voting common stock, Class A nonvoting stock and allocated retained earnings of the bank, as the board of directors may determine by resolution, subject to the capitalization requirements defined by the FCA. During 2019, $128,112 in cash patronage was declared to district associations, OFIs and other entities, compared to $110,853 in 2018 and $97,982 in 2017. Cash patronage in 2019 consisted of direct loan patronage of $76,708, patronage on certain participations of $33,634, patronage on association and OFI investment in the bank of $9,479, and capitalized and noncapitalized participation pool patronage of $8,291.

B. Regulatory Capitalization Requirements and Restrictions:

The Farm Credit Administration (FCA) sets minimum regulatory capital requirements for banks and associations. Effective January 1, 2017, new regulatory capital requirements for banks and associations were adopted. These new requirements replaced the core surplus and total surplus requirements with common equity tier 1, tier 1 capital and total capital risk-based capital ratio requirements. The new requirements also replaced the existing net collateral ratio for System banks with a tier 1 leverage ratio and an unallocated retained earnings (URE) and URE equivalents (UREE) leverage ratio that are applicable to both the banks and associations. The permanent capital ratio continues to remain in effect; however, the risk-adjusted assets are calculated differently than in the past.

The Farm Credit Act has defined permanent capital to include all capital except stock and other equities that may be retired upon the repayment of the holder's loan or otherwise at the option of the holder, or is otherwise not at risk. Risk-adjusted assets have been defined by regulations as the balance sheet assets and off-balance sheet commitments adjusted by various percentages ranging from 0 to 1,250%, depending on the level of risk inherent in the various types of assets. The primary changes which generally have the impact of increasing risk-adjusted assets (decreasing risk-based regulatory capital ratios) were as follows:

- Inclusion of off-balance sheet commitments less than 14 months
- Increased risk-weighting of most loans 90 days past due or in nonaccrual status
- Inclusion of unfunded commitments for direct notes receivable from district associations

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

- Common equity tier 1 ratio is statutory minimum purchased borrower stock, other required borrower stock held for a minimum of 7 years, allocated equities held for a minimum of 7 years or not subject to revolvement, unallocated retained earnings, paid-in capital, less certain regulatory required deductions including the amount of allocated investments in other System institutions, and the amount of purchased investments in other System institutions under the corresponding deduction approach, divided by average risk-adjusted assets.
- Tier 1 capital ratio is common equity tier 1 plus noncumulative perpetual preferred stock, divided by average risk-adjusted assets.
- Total capital is tier 1 capital plus other required borrower stock held for a minimum of 5 years, allocated equities held for a minimum of 5 years, subordinated debt and limited-life preferred stock greater than 5 years to maturity at issuance subject to certain limitations, allowance and reserve for credit losses under certain limitations less certain investments in other System institutions under the corresponding deduction approach, divided by average risk-adjusted assets.
- Permanent capital ratio (PCR) is all at-risk borrower stock, any allocated excess stock, unallocated retained earnings, paid-in capital, subordinated debt and preferred stock subject to certain limitations, less certain allocated and purchased 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, paid-in capital, allocated surplus not subject to revolvement less certain regulatory required deductions including the amount of allocated investments in other System institutions divided by average assets less regulatory deductions subject to tier 1 capital.

If the capital ratios fall below the total requirements, including the buffer amounts, capital distributions (equity redemptions, dividends and patronage) and discretionary executive bonuses are restricted or prohibited without prior FCA approval.

The following table reflects the bank's capital ratios at December 31:

	2019*	2018*	2017*	Regulatory Minimums	Conservation Buffers	Total Regulatory Minimums
Permanent capital ratio	**16.03%**	16.31%	16.60%	7.00%	0.0%	7.00%
Common equity tier 1 ratio	**9.91**	9.92	10.52	4.50	2.5*	7.00
Tier 1 capital ratio	**16.01**	16.29	16.59	6.00	2.5*	8.50
Total capital ratio	**16.12**	16.42	16.68	8.00	2.5*	10.50
Tier 1 leverage ratio	**7.26**	7.39	7.33	4.00	1.0	5.00
UREE leverage ratio	**3.06**	3.08	3.08	1.50	0.0	1.50

*The capital conservation buffers have a 3 year phase-in period and became fully effective January 1, 2020. There is no phase-in period for the tier 1 leverage ratio. Amounts shown reflect the full capital conservation buffers.

The components of the bank's risk-adjusted capital, based on 90-day average balances, were as follows at December 31, 2019:

	Common Equity Tier 1 Ratio	Tier 1 Capital Ratio	Total Capital Ratio	Permanent Capital Ratio
Numerator:				
Unallocated retained earnings	**$ 924,451**	**$ 924,451**	**$ 924,451**	**$ 924,451**
Common Cooperative Equities:				
Purchased other required stock ≥ 7 years	**281,395**	**281,395**	**281,395**	**281,395**
Allocated stock ≥7 years	**36,042**	**36,042**	**36,042**	**36,042**
Allocated equities:				
Allocated equities held ≥7 years	**45,746**	**45,746**	**45,746**	**45,746**
Noncumulative perpetual preferred stock	**-**	**700,000**	**700,000**	**700,000**
Allowance for loan losses and reserve for credit losses subject to certain limitations	**-**	**-**	**12,525**	**-**
Regulatory Adjustments and Deductions:				
Amount of allocated investments in other System institutions	**(149,553)**	**(149,553)**	**(149,553)**	**(149,553)**
Other regulatory required deductions	**(297)**	**(297)**	**(297)**	**(297)**
Total	**$ 1,137,784**	**$ 1,837,784**	**$ 1,850,309**	**$ 1,837,784**
Denominator:				
Risk-adjusted assets excluding allowance	**$ 11,477,211**	**$ 11,477,211**	**$ 11,477,211**	**$ 11,477,211**
Regulatory Adjustments and Deductions:				
Allowance for loan losses	**-**	**-**	**-**	**(10,845)**
Total	**$ 11,477,211**	**$ 11,477,211**	**$ 11,477,211**	**$ 11,466,366**

The components of the bank's non-risk-adjusted capital, based on 90-day average balances, were as follows at December 31, 2019:

	Tier 1 Leverage Ratio	UREE Leverage Ratio
Numerator:		
Unallocated retained earnings	**$ 924,451**	**$ 924,451**
Common Cooperative Equities:		
Purchased other required stock ≥ 7 years	**281,395**	**-**
Allocated stock ≥7 years	**36,042**	**-**
Allocated equities:		
Allocated equities held ≥7 years	**45,746**	**-**
Noncumulative perpetual preferred stock	**700,000**	**-**
Regulatory Adjustments and Deductions:		
Amount of allocated investments in other System institutions	**(149,553)**	**(149,553)**
Other regulatory required deductions	**(297)**	**-**
Total	**$ 1,837,784**	**$ 774,898**
Denominator:		
Total Assets	**$ 25,488,006**	**$ 25,488,006**
Regulatory Adjustments and Deductions:		
Regulatory deductions included in tier 1 capital	**(160,010)**	**(160,010)**
Total	**$ 25,327,996**	**$ 25,327,996**

The components of the bank's risk-adjusted capital, based on 90-day average balances, were as follows at December 31, 2018:

	Common Equity Tier 1 Ratio	Tier 1 Capital Ratio	Total Capital Ratio	Permanent Capital Ratio
Numerator:				
Unallocated retained earnings	$ 889,359	$ 889,359	$ 889,359	$ 889,359
Common Cooperative Equities:				
Purchased other required stock ≥ 7 years	267,785	267,785	267,785	267,785
Allocated stock ≥7 years	36,042	36,042	36,042	36,042
Allocated equities:				
Allocated equities held ≥7 years	39,429	39,429	39,429	39,429
Noncumulative perpetual preferred stock	-	700,000	700,000	700,000
Allowance for loan losses and reserve for credit losses subject to certain limitations	-	-	14,155	-
Regulatory Adjustments and Deductions:				
Amount of allocated investments in other System institutions	(142,322)	(142,322)	(142,322)	(142,322)
Other regulatory required deductions	(256)	(256)	(256)	(256)
Total	$ 1,090,037	$ 1,790,037	$ 1,804,192	$ 1,790,037
Denominator:				
Risk-adjusted assets excluding allowance	$ 10,988,322	$ 10,988,322	$ 10,988,322	$ 10,988,322
Regulatory Adjustments and Deductions:				
Allowance for loan losses	-	-	-	(12,317)
Total	$ 10,988,322	$ 10,988,322	$ 10,988,322	$ 10,976,005

The components of the bank's non-risk-adjusted capital, based on 90-day average balances, were as follows at December 31, 2018:

	Tier 1 Leverage Ratio	UREE Leverage Ratio
Numerator:		
Unallocated retained earnings	$ 889,359	$ 889,359
Common Cooperative Equities:		
Purchased other required stock ≥ 7 years	267,785	-
Allocated stock ≥7 years	36,042	-
Allocated equities:		
Allocated equities held ≥7 years	39,429	-
Noncumulative perpetual preferred stock	700,000	-
Regulatory Adjustments and Deductions:		
Amount of allocated investments in other System institutions	(142,322)	(142,322)
Other regulatory required deductions	(256)	-
Total	$ 1,790,037	$ 747,037
Denominator:		
Total Assets	$ 24,382,460	$ 24,382,460
Regulatory Adjustments and Deductions:		
Regulatory deductions included in tier 1 capital	(154,254)	(154,254)
Total	$ 24,228,206	$ 24,228,206

C. Accumulated Other Comprehensive Income (Loss):

Following is a summary of the components of accumulated other comprehensive income (loss) and the changes occurring during the year ended December 31, 2019:

	Total	Unrealized Gain (Loss) on Investments	Postretirement Benefit Plans	Cash Flow Derivative Instruments
Balance, January 1, 2019	**$ (81,693)**	**$ (74,541)**	**$ (27)**	**$ (7,125)**
Change in unrealized gains (losses) on available-for-sale (AFS) securities:				
Change in net unrealized gains	**89,879**	**89,879**		
Gain on sale reclassifications to net income	**(12,126)**	**(12,126)**		
Net change in unrealized gains on AFS securities	**77,753**	**77,753**		
Change in postretirement benefit plans:				
Actuarial losses	**(697)**		**(697)**	
Amounts amortized into net periodic expense:				
Amortization of prior service credits	**(77)**		**(77)**	
Net change in postretirement benefit plans	**(774)**		**(774)**	
Change in cash flow derivative instruments:				
Unrealized loss on cash flow derivative instruments	**(48,444)**			**(48,444)**
Reclassification of gain recognized in interest expense	**1,527**			**1,527**
Net change in cash flow derivative instruments	**(46,917)**			**(46,917)**
Total other comprehensive income (loss)	**30,062**	**77,753**	**(774)**	**(46,917)**
Balance, December 31, 2019	**$ (51,631)**	**$ 3,212**	**$ (801)**	**$ (54,042)**

Following is a summary of the components of accumulated other comprehensive income (loss) and the changes occurring during the year ended December 31, 2018:

	Total	Unrealized Loss on Investments	Postretirement Benefit Plans	Cash Flow Derivative Instruments
Balance, January 1, 2018	$ (51,902)	$ (56,813)	$ (1,815)	$ 6,726
Change in unrealized losses on AFS securities:				
Change in unrealized losses on AFS securities	(17,728)	(17,728)		
Net change in unrealized losses on AFS securities	(17,728)	(17,728)		
Change in postretirement benefit plans:				
Actuarial losses	1,835		1,835	
Amounts amortized into net periodic expense:				
Amortization of prior service credits	(47)		(47)	
Net change in postretirement benefit plans	1,788		1,788	
Change in cash flow derivative instruments:				
Unrealized loss on cash flow derivative instruments	(13,814)			(13,814)
Reclassification of loss recognized in interest expense	(37)			(37)
Net change in cash flow derivative instruments	(13,851)			(13,851)
Total other comprehensive income (loss)	(29,791)	(17,728)	1,788	(13,851)
Balance, December 31, 2018	$ (81,693)	$ (74,541)	$ (27)	$ (7,125)

Following is a summary of the components of accumulated other comprehensive income (loss) and the changes occurring during the year ended December 31, 2017:

	Total	Unrealized Loss on Investments	Postretirement Benefit Plans	Cash Flow Derivative Instruments
Balance, January 1, 2017	$ (32,579)	$ (38,529)	$ (471)	$ 6,421
Change in unrealized losses on AFS securities				
Change in unrealized losses on AFS securities	(18,284)	(18,284)		
Net change in unrealized losses on AFS securities	(18,284)	(18,284)		
Change in postretirement benefit plans				
Actuarial losses	(1,158)		(1,158)	
Amounts amortized into net periodic expense:				
Amortization of prior service credits	(186)		(186)	
Net change in postretirement benefit plans	(1,344)		(1,344)	
Change in cash flow derivative instruments:				
Unrealized losses on interest rate caps	(666)			(666)
Reclassification of gain recognized in interest expense	971			971
Net change in cash flow derivative instruments	305			305
Total other comprehensive income (loss)	(19,323)	(18,284)	(1,344)	305
Balance, December 31, 2017	$ (51,902)	$ (56,813)	$ (1,815)	$ 6,726

The following table summarizes amounts reclassified out of accumulated other comprehensive income (loss) to current earnings:

Description	Amount Reclassified From Accumulated Other Comprehensive Loss			Location of Gain (Loss) Recognized in Statements of Comprehensive Income
	2019	2018	2017	
Unrealized gain on securities				
Gain on sale reclassifications to net income	**$ 12,126**	$ -	$ -	Gain on sale of investments
Postretirement benefit plans				
Amortization of prior service credits	**77**	47	186	Salaries and employee benefits
Cash flow derivative instruments				
(Gains) losses on cash flow derivatives	**(1,527)**	37	(971)	Interest expense
	$ 10,676	$ 84	$ (785)	

Note 12 — Employee Benefit Plans

Employees of the bank participate in either the district's defined benefit retirement plan (DB plan) or in a nonelective defined contribution feature (DC plan) within the Farm Credit Benefits Alliance 401(k) plan. In addition, all benefits-eligible employees are qualified to participate in the Farm Credit Benefits Alliance 401(k) plan.

The structure of the district's DB plan is characterized as multiemployer, since neither the assets, liabilities nor cost of any plan is segregated or separately accounted for by participating employers (bank and associations). No portion of any surplus assets is available to any participating employer. As a result, participating employers of the plan only recognize as cost the required contributions for the period and a liability for any unpaid contributions required for the period of their financial statements. Plan obligations, assets and the components of annual benefit expenses are recorded and reported upon district combination only. The bank records current contributions to the DB plan as an expense in the current year.

The DB plan is noncontributory, and benefits are based on salary and years of service. As of January 1, 1996, the bank and associations froze participation in their defined benefit pension plan and offered defined contribution retirement plans to all employees hired subsequent to the freeze. The legal name of the plan is Farm Credit Bank of Texas Pension Plan; its employer identification number is 74-1110170. The DB plan is not subject to any contractual expiration dates. The DB plan's funding policy is to fund current year benefits expected to be earned by covered employees. The plan sponsor is the board of directors of the bank. The "projected unit credit" actuarial method is used for both financial reporting and funding purposes. District employers have the option of providing enhanced retirement benefits, under certain conditions, within the DB plan, to facilitate reorganization and/or restructuring. Actuarial information regarding the DB pension plan accumulated benefit obligation and plan asset is calculated for the district as a whole and is presented in the district's unaudited 2019 Annual Report. The actuarial present value of vested and nonvested accumulated benefit obligation exceeded the net assets of the DB plan as of December 31, 2019.

The risks of participating in this multiemployer plan are different from single-employer plans in the following aspects:

a. Assets contributed to the multiemployer plan by one employer may be used to provide benefits to employees of other participating employers.

b. If a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers.

c. If the participating employer chooses to stop participating in the multiemployer plan, it may be required to pay the plan an amount based on the underfunded status of the plan, referred to as a withdrawal liability.

The following table includes additional information regarding the funded status of the plan, the bank's contributions and the percent of bank contribution to total plan contributions for the years ended December 31, 2019, 2018 and 2017:

	2019	2018	2017
Funded status of plan	**66.2%**	68.0%	69.7%
Bank's contribution	**$ 744**	$ 706	$ 610
Percent of bank's contribution to total contributions	**9.1%**	7.2%	5.3%

The funded status presented above is based on the percent of plan assets to projected benefit obligations. DB plan funding is based on the percent of plan assets to the accumulated benefit obligation, which was 68.0%, 70.1% and 73.4% at December 31, 2019, 2018 and 2017, respectively.

The expected long-term rate of return assumption is determined independently for each defined benefit pension plan. Generally, plan trustees use historical return information to establish a best-estimate range for each asset class in which the plan is invested. Plan trustees select the most appropriate rate for the plan from the best-estimate range, taking into consideration the duration of the benefit liabilities and plan sponsor investment policies.

Actuarial information regarding the DB pension plan accumulated benefit obligation and plan assets is calculated for the district as a whole and is presented in the district's unaudited 2019 Annual Report.

Participants in the DC plan generally include employees who elected to transfer from the DB plan prior to January 1, 1996, and all employees hired on or after January 1, 1996. Participants in the non-elective pension feature of the DC plan direct the placement of their employers' contributions (5% of eligible compensation during 2019) made on their behalf into various investment alternatives.

The district also participates in the Farm Credit Benefits Alliance 401(k) plan, which offers a pre-tax and after-tax Roth compensation deferral feature. Employers match 100% of employee contributions for the first 3% of eligible compensation and then match 50% of employee contributions on the next 2% of eligible compensation, for a maximum employer contribution of 4% of eligible compensation.

Certain executive or highly compensated employees in the bank are eligible to participate in a separate nonqualified supplemental 401(k) plan, named the Farm Credit Benefits Alliance Nonqualified Supplemental 401(k) Plan (Supplemental 401(k) Plan). This plan allows district employers to elect to participate in any or all of the following benefits:

- Restored Employer Contributions – to allow "make-up" contributions for eligible employees whose benefits to the qualified 401(k) plan were limited by the Internal Revenue Code during the year
- Elective Deferrals – to allow eligible employees to make pre-tax deferrals of compensation above and beyond any deferrals into the qualified 401(k) plan
- Discretionary Contributions – to allow participating employers to make a discretionary contribution to an eligible employee's account in the plan, and to designate a vesting schedule

Contributions of $171, $159 and $104 were made to this plan for the years ended December 31, 2019, 2018 and 2017. There were no distributions from the plan in 2019, 2018 and 2017. The fair value of accumulated benefits and funded balance in the plan totaled $992 at December 31, 2019.

The following table presents the bank's retirement benefit expenses for the years ended:

	2019	2018	2017
District DB plan	**$ 744**	$ 706	$ 610
DC plan	**1,574**	1,522	1,395
401(k) plan	**1,210**	1,159	1,088
Supplemental 401(k) plan	**171**	159	104
Total	**$ 3,699**	$ 3,546	$ 3,197

The bank provides certain health care benefits to qualifying retired employees (other postretirement benefits). These benefits are not characterized as multiemployer and, consequently, the liability for these benefits is included in other liabilities on the balance sheets. Bank employees hired on or after January 1, 2004, may be eligible for retiree medical benefits for themselves and their spouses at their expense and will be responsible for 100% of the related premiums.

The following tables reflect the benefit obligation, cost, funded status and actuarial assumptions for the bank's other postretirement benefits:

	Other Postretirement Benefits		
	2019	2018	2017
Change in projected benefit obligation			
Projected benefit obligation, beginning of year	**$ 11,085**	$ 12,521	$ 10,967
Service cost	**222**	274	242
Interest cost	**516**	493	496
Plan participants' contributions	**76**	65	69
Plan amendments	**-**	(466)	-
Actuarial (gain) loss	**697**	(1,370)	1,158
Benefits paid	**(365)**	(432)	(411)
Projected benefit obligation, end of year	**$ 12,231**	$ 11,085	$ 12,521
Change in plan assets			
Plan assets at fair value, beginning of year	**-**	-	-
Actual return on plan assets	**-**	-	-
Company contributions	**289**	367	342
Plan participants' contributions	**76**	65	69
Benefits paid	**(365)**	(432)	(411)
Plan assets at fair value, end of year	**-**	-	-
Unfunded status at end of year	**$ (12,231)**	$ (11,085)	$ (12,521)
Amounts recognized on the balance sheets consist of:			
Other postretirement liabilities	**$ (12,231)**	$ (11,085)	$ (12,521)
Accumulated other comprehensive loss	**801**	27	1,815
Amounts recognized in accumulated other comprehensive loss			
Net actuarial loss	**$ 1,189**	$ 493	$ 1,954
Prior service credit	**(388)**	(466)	(139)
Total accumulated other comprehensive loss	**$ 801**	$ 27	$ 1,815
Net periodic benefit cost			
Service cost	**$ 222**	$ 274	$ 242
Interest cost	**516**	493	496
Expected return on plan assets	**-**	-	-
Amortization of:			
Prior service cost credit	**(77)**	(139)	(186)
Net actuarial loss	**-**	92	-
Total periodic benefit cost	**$ 661**	$ 720	$ 552
Other changes to plan assets and projected benefit obligations recognized in other comprehensive (income) loss			
Net actuarial (gain) loss	**$ 697**	$ (1,370)	$ 1,158
Amortization of net actuarial gain	**-**	(92)	-
Prior service costs	**77**	(466)	-
Amortization of prior service costs	**-**	140	186
Net change	**$ 774**	$ (1,788)	$ 1,344
AOCI amounts expected to be amortized in 2019			
Prior service (credit) cost	**$ (77)**	$ (77)	
Net actuarial loss (gain)	**-**	-	
Net amount recognized	**$ (77)**	$ (77)	

	Other Postretirement Benefits		
	2019	2018	2017
Weighted-average assumptions used to determine benefit obligation at year end			
Measurement date	**12/31/2019**	12/31/2018	12/31/2017
Discount rate	**3.45%**	4.75%	4.00%
Health care cost trend rate assumed for next year (pre/post-65)	**6.90%/6.40%**	7.30%/6.90%	7.70%/6.90%
Ultimate health care cost trend rate	**4.50%**	4.50%	4.50%
Year that the rate reaches the ultimate trend rate	**2029**	2027	2026
Weighted-average assumptions used to determine net periodic cost for the year			
Measurement date	**12/31/2018**	12/31/2017	12/31/2016
Discount rate	**4.75%**	4.00%	4.60%
Expected return on plan assets	**N/A**	N/A	N/A
Health care cost trend rate assumed for next year (pre/post-65)	**7.30%/6.90%**	7.70%/6.90%	6.75%/6.50%
Ultimate health care cost trend rate	**4.50%**	4.50%	4.50%
Year that the rate reaches the ultimate trend rate	**2027**	2026	2024

Expected Future Cash Flow Information

Expected Benefit Payments		
Fiscal 2020	**$**	**376**
Fiscal 2021		**417**
Fiscal 2022		**444**
Fiscal 2023		**448**
Fiscal 2024		**488**
Fiscal 2025 - 2029		**2,822**
Expected Contributions		
Fiscal 2020	**$**	**376**

The bank's plan for other postretirement benefits does not have plan assets.

Note 13 — Related Party Transactions

As discussed in Note 1, "Organization and Operations," the bank lends funds to the district associations to fund their loan portfolios. Interest income recognized on direct notes receivable from district associations was $379,104, $319,224 and $269,064 for 2019, 2018 and 2017, respectively. Further disclosure regarding these related party transactions is found in Note 4, "Loans and Reserves for Credit Losses," and Note 11, "Shareholders' Equity."

In addition to providing loan funds to district associations, the bank also provides banking and support services to them, such as accounting, information systems, marketing and other services. Income derived by the bank from these activities was $3,903, $3,740 and $3,889 for 2019, 2018 and 2017, respectively, and was included in the bank's noninterest income.

The bank had no transactions with nor loans to directors or senior officers, their immediate family members, or any organizations with which such senior officers or directors are affiliated, during 2019, 2018 and 2017.

Note 14 — Commitments and Contingencies

The district has various outstanding commitments and contingent liabilities as discussed elsewhere in these notes.

The bank is primarily liable for its portion of Systemwide debt obligations. Additionally, the bank is jointly and severally liable for the consolidated Systemwide bonds and notes of other System banks. The total bank and consolidated Systemwide debt obligations of the System at December 31, 2019, were approximately $293.54 billion.

In the normal course of business, the bank incurs a certain amount of claims, litigation, and other legal and administrative proceedings, all of which are considered incidental to the normal conduct of business. The bank believes it has meritorious defenses to the claims currently asserted against it, and, with respect to such legal proceedings, intends to defend itself vigorously, litigating or settling cases according to management's judgment as to what is in the best interest of the bank and its shareholders.

On at least a quarterly basis, the bank assesses its liabilities and contingencies in connection with outstanding legal proceedings utilizing the latest information available. For those matters where it is probable that the bank would incur a loss and the amount of the loss could be reasonably estimated, the bank would record a liability in its financial statements. These liabilities would be increased or decreased to reflect any relevant developments on a quarterly basis. For other matters, where a loss is not probable or the amount of the loss is not estimable, the bank does not record a liability.

Currently, other actions are pending against the bank in which claims for monetary damages are asserted. Upon the basis of current information, management and legal counsel are of the opinion that any resulting losses are not probable, and that the ultimate liability, if any, resulting from a lawsuit and other pending actions will not be material in relation to the financial position, results of operations or cash flows of the bank.

Note 15 — Financial Instruments With Off-Balance Sheet Risk

The bank may participate in financial instruments with off-balance sheet risk to satisfy the financing needs of its borrowers and to manage its exposure to interest rate risk. These financial instruments include commitments to extend credit and commercial letters of credit. The instruments involve, to varying degrees, elements of credit risk in excess of the amount recognized in the financial statements. Commitments to extend credit are agreements to lend to a borrower as long as there is not a violation of any condition established in the contract. Commercial letters of credit are agreements to pay a beneficiary under conditions specified in the letter of credit. Commitments and letters of credit generally have fixed expiration dates or other termination clauses and may require payment of a fee. At December 31, 2019, the bank had $2.92 billion of commitments to extend credit and $79.1 million of letters of credit were outstanding.

Since many of these commitments are expected to expire without being drawn upon, the total commitments do not necessarily represent future cash requirements. However, these credit-related financial instruments have off-balance sheet credit risk because their amounts are not reflected on the balance sheet until funded or drawn upon.

The bank provides letters of credit, which are irrevocable agreements to guarantee payments of specified financial obligations. As a guarantor, the bank recognizes a liability for the fair value of the obligation undertaken in issuing the guarantee. The bank's liability for the fair value of these obligations is determined by applying a risk-adjusted spread percentage to these obligations. As of December 31, 2019, the maximum potential amount of future payments that the bank may be required to make under the bank's outstanding letters of credit was $79.1 million, with a fair value of $830 thousand, which is included in other liabilities on the balance sheet. These outstanding letters of credit have expiration dates ranging from 2020 to 2024.

The credit risk involved in issuing commitments and letters of credit is essentially the same as that involved in extending loans to customers, and the same credit policies are applied by management. In the event of funding, the credit risk amounts are equal to the contract amounts, assuming that counterparties fail completely to meet their obligations and the collateral or other security is of no value. The amount of collateral obtained, if deemed necessary upon extension of credit, is based on management's credit evaluation of the counterparty. At December 31, 2019, 2018 and 2017, the bank had a reserve for losses on letters of credit and unfunded commitments of $1,809, $1,900 and $1,433, respectively, representing management's estimate of probable credit losses related to letters of credit and unfunded commitments.

Note 16 — Fair Value Measurements

Authoritative accounting guidance defines fair value as the exchange price that would be received for an asset or paid to transfer a liability in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability. See Note 2, "Summary of Significant Accounting Policies," for additional information and "Valuation Techniques" at the end of this note.

Assets and liabilities measured at fair value on a recurring basis at December 31, 2019, for each of the fair value hierarchy values are summarized below:

	Fair Value Measurement			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Federal funds and other overnight funds	$ 374,344	$ -	$ 374,344	$ -
Available-for-sale investments				
Corporate debt	457,045	-	457,045	-
U.S. Treasury securities	200,114	-	200,114	-
Agency-guaranteed debt	138,933	-	138,933	-
Mortgage-backed securities	4,307,005	-	4,307,005	-
Asset-backed securities	162,995	-	162,995	-
Other available-for-sale investments	29,051	-	-	29,051
Derivative assets	1,853	-	1,853	-
Assets held in nonqualified benefit trusts	890	890	-	-
Collateral assets	17,670	17,670	-	-
Total assets	$ 5,689,900	$ 18,560	$ 5,642,289	$ 29,051
Liabilities:				
Letters of credit	$ 830	$ -	$ -	$ 830
Derivative liabilities	54,919	-	54,919	-
Total liabilities	$ 55,749	$ -	$ 54,919	$ 830

The table below represents a reconciliation of all Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2019:

	Assets			Liabilities	
	Asset-Backed Securities	Mortgage-Backed Securities	Agricultural Mortgage-Backed Securities	Letters of Credit	Total
Balance at January 1, 2019	$ -	$ -	$ 35,708	$ 676	$ 35,032
Net gains included in other comprehensive income	16	218	1,258	-	1,492
Purchases, issuances and settlements	25,000	92,550	(7,915)	154	109,481
Transfers out of Level 3 into Level 2	(25,016)	(92,768)	-	-	(117,784)
Balance at December 31, 2019	$ -	$ -	$ 29,051	$ 830	$ 28,221

There were transfers of assets or liabilities into or out of Level 3 from other levels during the year ended December 31, 2019. Transfers of asset-backed and mortgage-backed securities from Level 3 into Level 2 were the result of market pricing becoming subsequently available. Agricultural mortgage-backed securities are included in Level 3 due to limited activity or less transparency around inputs to their valuation. The liability for letters of credit is included in Level 3 because their valuation, based on fees currently charged for similar agreements, may not closely correlate to a fair value for instruments that are not regularly traded in the secondary market.

Assets and liabilities measured at fair value on a nonrecurring basis at December 31, 2019 for each of the fair value hierarchy values are summarized below:

	Fair Value Measurement			
	Total	Quoted Price in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Loans	$ 11,093	$ -	$ -	$ 11,093
Total assets	$ 11,093	$ -	$ -	$ 11,093

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

	Fair Value Measurement			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Federal funds and other overnight funds	$ 281,131	$ -	$ 281,131	$ -
Available-for-sale investments				
Corporate debt	363,537	-	363,537	-
U.S. Treasury securities	298,083	-	298,083	-
Agency-guaranteed debt	167,923	-	167,923	-
Mortgage-backed securities	4,761,131	-	4,761,131	-
Asset-backed securities	88,257	-	88,257	-
Other available-for-sale investments	35,708	-	-	35,708
Loans valued under the fair value option	9,345	-	9,345	-
Derivative assets	10,700	-	10,700	-
Assets held in nonqualified benefit trusts	682	682	-	-
Total assets	$ 6,016,497	$ 682	$ 5,980,107	$ 35,708
Liabilities:				
Letters of credit	$ 676	$ -	$ -	$ 676
Derivative liabilities	16,143	-	16,143	-
Total liabilities	$ 16,819	$ -	$ 16,143	$ 676

The table below represents a reconciliation of all Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2018:

	Assets	Liabilities	
	Agricultural Mortgage-Backed Securities	Letters of Credit	Total
Balance at January 1, 2018	$ 43,317	$ 846	$ 42,471
Net gains included in other comprehensive income	173	-	173
Purchases, issuances and settlements	(7,782)	(170)	(7,612)
Balance at December 31, 2018	$ 35,708	$ 676	$ 35,032

There were no transfers of assets or liabilities into or out of Level 3 from other levels during the year ended December 31, 2018. Agricultural mortgage-backed securities are included in Level 3 due to limited activity or less transparency around inputs to their valuation. The liability for letters of credit is included in Level 3 because their valuation, based on fees currently charged for similar agreements, may not closely correlate to a fair value for instruments that are not regularly traded in the secondary market.

Assets and liabilities measured at fair value on a nonrecurring basis at December 31, 2018, for each of the fair value hierarchy values are summarized below:

	Fair Value Measurement			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Loans	$ 11,875	$ -	$ -	$ 11,875
Total assets	$ 11,875	$ -	$ -	$ 11,875

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

	Fair Value Measurement			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Federal funds and other overnight funds	$ 246,888	$ -	$ 246,888	$ -
Available-for-sale investments				
Corporate debt	252,609	-	252,609	-
U.S. Treasury securities	249,207	-	249,207	-
Agency-guaranteed debt	195,248	-	195,248	-
Mortgage-backed securities	4,356,715	-	4,356,715	-
Asset-backed securities	47,889	-	47,889	-
Other available-for-sale investments	43,317	-	-	43,317
Loans valued under the fair value option	9,908	-	9,908	-
Derivative assets	8,932	-	8,932	-
Assets held in nonqualified benefit trusts	551	551	-	-
Total assets	$ 5,411,264	$ 551	$ 5,367,396	$ 43,317
Liabilities:				
Letters of credit	$ 846	$ -	$ -	$ 846
Derivative liabilities	248	-	248	-
Total liabilities	$ 1,094	$ -	$ 248	$ 846

The table below represents a reconciliation of all Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2017:

	Assets	Liabilities	
	Agricultural Mortgage-Backed Securities	Letters of Credit	Total
Balance at January 1, 2017	$ 53,335	$ 594	$ 52,741
Net losses included in other comprehensive loss	(106)	-	(106)
Purchases, issuances and settlements	(9,912)	252	(10,164)
Balance at December 31, 2017	$ 43,317	$ 846	$ 42,471

There were no transfers of assets or liabilities into or out of Level 3 from other levels during the year ended December 31, 2017. Agricultural mortgage-backed securities are included in Level 3 due to limited activity or less transparency around inputs to their valuation. The liability for letters of credit is included in Level 3 because their valuation, based on fees currently charged for similar agreements, may not closely correlate to a fair value for instruments that are not regularly traded in the secondary market.

Assets and liabilities measured at fair value on a nonrecurring basis at December 31, 2017, for each of the fair value hierarchy values are summarized below:

	Fair Value Measurement			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Loans	$ 119	$ -	$ -	$ 119
Total assets	$ 119	$ -	$ -	$ 119

Financial assets and financial liabilities measured at carrying amounts and not measured at fair value on the balance sheet for each of the fair value hierarchy values are summarized as follows:

	December 31, 2019				
	Fair Value Measurements Using				
	Total Carrying Amount	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Assets:					
Cash	**$ 47,606**	**$ 47,606**	**$ -**	**$ -**	**$ 47,606**
Net loans	**19,486,806**	**-**	**-**	**19,725,502**	**19,725,502**
Total assets	**$ 19,534,412**	**$ 47,606**	**$ -**	**$ 19,725,502**	**$ 19,773,108**
Liabilities:					
Systemwide debt securities	**$ 23,473,906**	**-**	**-**	**$ 23,656,235**	**$ 23,656,235**
Total liabilities	**$ 23,473,906**	**$ -**	**$ -**	**$ 23,656,235**	**$ 23,656,235**

	December 31, 2018				
	Fair Value Measurements Using				
	Total Carrying Amount	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Assets:					
Cash	$ 129,478	$ 129,478	$ -	$ -	$ 129,478
Net loans	18,044,712	-	-	17,860,769	17,860,769
Total assets	$ 18,174,190	$ 129,478	$ -	$ 17,860,769	$ 17,990,247
Liabilities:					
Systemwide debt securities	$ 22,497,364	-	-	$ 22,367,133	$ 22,367,133
Total liabilities	$ 22,497,364	$ -	$ -	$ 22,367,133	$ 22,367,133

	December 31, 2017				
	Fair Value Measurements Using				
	Total Carrying Amount	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Assets:					
Cash	$ 56,183	$ 56,183	$ -	$ -	$ 56,183
Net loans	17,077,538	-	-	16,994,401	16,994,401
Total assets	$ 17,133,721	$ 56,183	$ -	$ 16,994,401	$ 17,050,584
Liabilities:					
Systemwide debt securities	$ 20,951,223	$ -	$ -	$ 20,902,279	$ 20,902,279
Total liabilities	$ 20,951,223	$ -	$ -	$ 20,902,279	$ 20,902,279

VALUATION TECHNIQUES

As more fully discussed in Note 2, "Summary of Significant Accounting Policies," authoritative accounting guidance establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Fair values of financial instruments represent the estimated amount to be received to sell an asset or paid to transfer or extinguish a liability in active markets among willing participants at the reporting date. Due to the uncertainty of expected cash flows resulting from financial instruments, the use of different assumptions and valuation methodologies could significantly affect the estimated fair value amounts. Accordingly, certain of the estimated fair values may not be indicative of the amounts for which the financial instruments could be exchanged in a current or future market transaction. The following represent a brief summary of the valuation techniques used by the bank for assets and liabilities:

Investment Securities

Where quoted prices are available in an active market, available-for-sale securities would be classified as Level 1. If quoted prices are not available in an active market, the fair value of securities is estimated using quoted prices for similar securities received from pricing services or discounted cash flows. Generally, these securities would be classified as Level 2. Among other securities, this would include certain mortgage-backed securities. Where there is limited activity or less transparency around inputs to the valuation, the securities are classified as Level 3. Level 3 assets at December 31, 2019, included the bank's Farmer Mac AMBS portfolio.

To estimate the fair value of the majority of the investments held, including certain non-agency securities, the bank obtains prices from third-party pricing services.

Assets Held in Nonqualified Benefits Trusts

Assets held in trust funds related to supplemental retirement plans are classified within Level 1. The trust funds include investments that are actively traded and have quoted net asset values that are observable in the marketplace.

Derivatives

Derivative positions are valued using internally developed models that use as their basis quoted prices and would be classified within Level 1 of the valuation hierarchy. However, few classes of derivative contracts are listed on an exchange; thus, the majority of the derivative positions are valued using internally developed models that use as their basis readily observable market parameters and are classified within Level 2 of the valuation hierarchy. Such derivatives include interest rate caps and interest rate swaps.

The models used to determine the fair value of derivative assets and liabilities use an income approach based on observable market inputs, including the LIBOR and Overnight Index Swap curves and volatility assumptions about future interest rate movements.

Collateral Assets (Cash Collateral Posted with a Counterparty)

Derivative contracts are supported by bilateral collateral agreements with counterparties requiring the bank to post collateral in the event certain dollar thresholds of credit exposure are reached. The market value of cash collateral posted with a counterparty is its face value plus accrued interest, as that approximates fair value.

Letters of Credit

The fair value of letters of credit approximates the fees currently charged for similar agreements or the estimated cost to terminate or otherwise settle similar obligations.

Loans

Fair value is estimated by discounting the expected future cash flows using the banks' and/or the associations' current interest rates at which similar loans would be made to borrowers with similar credit risk. The discount rates are based on the banks' and/or the associations' current loan origination rates as well as management's estimates of credit risk. Management has no basis to determine whether the fair values presented would be indicative of the value negotiated in an actual sale and could be less.

For purposes of estimating fair value of accruing loans, the loan portfolio is segregated into pools of loans with homogeneous characteristics. Expected future cash flows, primarily based on contractual terms, and interest rates reflecting appropriate credit risk are separately determined for each individual pool.

The fair value of loans in nonaccrual status that are current as to principal and interest is estimated as described above, with appropriately higher interest rates which reflect the uncertainty of continued cash flows. For collateral-dependent impaired loans, it is assumed that collection will result only from the disposition of the underlying collateral.

Loans Evaluated for Impairment

For certain loans individually evaluated for impairment under accounting impairment guidance, the fair value is based upon the underlying collateral since the loans are collateral-dependent loans for which real estate is the collateral. The fair value measurement process uses independent appraisals and other market-based information, but in many cases it also requires significant input based on management's knowledge of and judgment about current market conditions, specific issues relating to the collateral and other matters. As a result, a majority of these loans have fair value measurements that fall within Level 3 of the fair value hierarchy. When the value of the real estate, less estimated costs to sell, is less than the principal balance of the loan, a specific reserve is established.

Bonds and Notes

Systemwide debt securities are not all traded in the secondary market and those that are traded may not have readily available quoted market prices. Therefore, the fair value of the instruments is estimated by calculating the discounted value of the expected future cash flows. The discount rates used are based on the sum of quoted market yields for the Treasury yield curve and an estimated yield-spread relationship between System debt instruments and Treasury securities. We estimate an appropriate yield-spread taking into consideration selling group member (banks and securities dealers) yield indications, observed new government-sponsored enterprise debt security pricing and pricing levels in the related U.S. dollar interest rate swap market.

Other Property Owned

OPO is generally classified as Level 3 of the fair value hierarchy. The process for measuring the fair value of OPO involves the use of independent appraisals or other market-based information. Costs to sell represent transaction costs and are not included as a component of the asset's fair value.

Uncertainty of Fair Value Measurements

For recurring fair value measurements categorized within Level 3 of the fair value hierarchy, the significant unobservable inputs used in the fair value measurement of the mortgage-backed securities are prepayment rates, probability of default and loss severity in the event of default inclusive of some uncertainty at the reporting date. Significant increases (decreases) in any of those inputs in isolation would have resulted in a significantly lower (higher) fair value measurement.

Generally, a change in the assumption used for the probability of default would have been accompanied by a directionally similar change in the assumption used for the loss severity and a directionally opposite change in the assumption used for prepayment rates.

Quoted market prices may not be available for the instruments presented below. Accordingly, fair values are based on internal models that consider judgments regarding anticipated cash flows, future expected loss experience, current economic conditions, risk characteristics of various financial instruments and other factors. These estimates involve uncertainties and matters of judgment, and therefore cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

Information About Recurring and Nonrecurring Level 3 Fair Value Measurements

	Valuation Technique(s)	Unobservable Input	Range of Inputs / Weighted Average
Mission-related investments	Discounted cash flow	Prepayment rates	2.4%-38.0% / 9.40%

With regard to non-recurring measurements for impaired loans and OPO, it is not practicable to provide specific information on inputs as each collateral property is unique. System institutions utilize appraisals to value these loans and OPO and take into account unobservable inputs such as income and expense, comparable sales, replacement cost and comparability adjustments.

Information About Recurring and Nonrecurring Level 2 Fair Value Measurements

	Valuation Technique(s)	Input
Federal funds sold	Carrying value	Par/principal
Available-for-sale investment securities	Quoted prices Discounted cash flow	Price for similar security Constant prepayment rate Appropriate interest rate yield curve
Loans held under the fair value option	Quoted prices Discounted cash flow	Price for similar security Constant prepayment rate Appropriate interest rate yield curve
Interest rate caps	Discounted cash flow	Appropriate interest rate yield curve Annualized volatility
Interest rate swaps	Discounted cash flow	Benchmark yield curve Counterparty credit risk Volatility

Information About Other Financial Instrument Fair Value Measurements

	Valuation Technique(s)	Input
Cash	Carrying value	Actual balance
Loans	Discounted cash flow	Prepayment forecasts Appropriate interest rate yield curve Probability of default Loss severity
Systemwide debt securities	Discounted cash flow	Benchmark yield curve Derived yield spread Own credit risk

Note 17 — Derivative Instruments and Hedging Activity

The bank maintains an overall interest rate risk management strategy that incorporates the use of derivative products to minimize significant unplanned fluctuations in earnings that are caused by interest rate volatility. The bank's goals are to manage interest rate sensitivity by modifying the repricing or maturity characteristics of certain balance sheet liabilities so that movements in interest rates do not adversely affect the net interest margin. The bank considers the strategic 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.

The bank may enter into derivative transactions to lower funding costs, diversify sources of funding, alter interest rate exposures arising from mismatches between assets and liabilities, or better manage liquidity. Interest rate swaps allow the bank to raise borrowings in the government-sponsored entities market and modify the repricing characteristics of that debt to better match those of the earning assets. Under interest rate swap arrangements, the bank agrees 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. The bank may purchase interest rate options, such as caps, in order to reduce the impact of rising interest rates on its floating-rate debt.

At December 31, 2019, the bank held interest rate caps with a notional amount of $195.0 million and a net fair value asset of $98, pay fixed interest rate swaps with a notional amount of $825.0 million and a net fair value liability of $53.3 million, and pay floating interest rate swaps with a notional amount of $150.0 million and a net fair value asset of $95. The primary types of derivative instruments used and the amount of activity (notional amount of derivatives) during the year ended December 31, 2019, is summarized in the following table:

	Pay Floating Swaps	Pay Fixed Swaps	Interest Rate Caps	Total
Balance at January 1, 2019	$ -	$ 825,000	$ 195,000	$ 1,020,000
Additions	150,000	-	-	150,000
Maturities/Amortizations	-	-	-	-
Balance at December 31, 2019	**$ 150,000**	**$ 825,000**	**$ 195,000**	**$ 1,170,000**

By using derivative instruments, the bank exposes itself to credit and market risk. If a counterparty fails to fulfill its performance obligations under a derivative contract, the bank's credit risk will equal the fair value gain of the derivative. Generally, when the fair value of a derivative contract is positive, this indicates that the counterparty owes the bank, thus creating a repayment risk for the bank. When the fair value of the derivative contract is negative, the bank owes the counterparty and, therefore, assumes no repayment risk.

To minimize the risk of credit losses from derivatives substantially all derivative contracts are supported by bilateral collateral agreements with counterparties requiring the posting of collateral in the event certain dollar thresholds of exposure of one party to the other are reached which thresholds may vary depending on the counterparty's credit rating from a major rating agency. The bank also monitors the credit standing of, and levels of exposure to, individual counterparties. The bank typically enters into master agreements that contain netting provisions. These provisions allow the bank 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. At December 31, 2019, and December 31, 2018, counterparties' credit exposure to the bank was $35.5 million and $5.4 million, respectively. At December 31, 2017, the bank had credit exposure to counterparties totaling $8.7 million. At December 31, 2019, the bank had cash collateral posted of $17.7 million.

The credit exposure represents the exposure to credit loss on derivative instruments, which is estimated by calculating the cost, on a present value basis, to replace all outstanding derivative contracts in a gain position.

The table below presents the credit ratings of counterparties to whom the bank had credit exposure at December 31, 2019:

	Remaining Years to Maturity						
	Less than One to Five Years	More than Five Years	Total	Maturity Distribution Netting	Exposure	Collateral Posted	Exposure Net of Collateral
Moody's Credit Rating							
Aa2	$ 1,274	$ (39,317)	$ (38,043)	$ -	$ (38,043)	$ (17,670)	$ (20,373)
Aa3	403	(15,509)	(15,106)	-	(15,106)	-	(15,106)
A1	3	-	3	-	3	-	3

The bank's derivative activities are monitored by its Asset-Liability Management Committee (ALCO) as part of the ALCO's bank asset/liability and treasury functions. The ALCO is responsible for approving hedging strategies that are developed through its analysis of data derived from financial simulation models and other internal and industry sources. The resulting hedging strategies are then incorporated into the bank's overall interest rate risk management strategies.

Cash Flow Hedges

For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings.

Fair Value Hedges

For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item (principally, debt securities) attributable to the hedge risk are recognized in current earnings. The bank includes the gain or loss on the hedged items in the same line item (interest expense) as the offsetting loss or gain on the related pay floating interest rate swaps. Recorded in the bank's balance sheet are cumulative basis adjustments for fair value hedges for systemwide debt securities (bonds and notes). At December 31, 2019, the bank had a carrying amount of $150.0 million for the hedged items, of which included $95 for the cumulative amount of fair value hedging adjustments. The bank did not have fair value hedges at December 31, 2018 or 2017.

Fair Values of Cash Flow Derivative Instruments:

The following table represents the fair value of derivative instruments as of December 31, 2019, 2018 and 2017:

	Balance Sheet Location	**Fair Value 2019**	Fair Value 2018	Fair Value 2017	**Balance Sheet Location**	**Fair Value 2019**	Fair Value 2018	Fair Value 2017
Interest rate caps	Other assets	**$ 98**	$ 448	$ 396	Other liabilities	**$ -**	$ -	$ -
Pay fixed swaps	Other assets	**1,660**	10,253	8,536	Other liabilities	**(54,919)**	(16,143)	(248)

The following table sets forth the effect of derivative gain (loss) recognized in accumulated other comprehensive loss for the years ended December 31, 2019, 2018 and 2017:

	Gain (Loss) Recognized in AOCI on Derivatives at December 31,				**Amount of Gain Reclassified From AOCI Into Income at December 31,**		
	2019	2018	2017		**2019**	2018	2017
Interest rate caps	**$ (350)**	$ (52)	$ (553)	Interest (expense) income	**$ (290)**	$ (167)	$ 192
Pay fixed swaps	**(48,094)**	13,866	(113)	Interest (expense) income	**(1,237)**	204	779

In the next 12 months, we expect to reclassify to earnings losses of $5.6 million recorded in accumulated other comprehensive loss as of December 31, 2019. These amounts will offset the cash flows associated with the hedged forecasted transactions.

The table below provides information about derivative financial instruments and other financial instruments that are sensitive to changes in interest rates, including debt obligations and interest rate swaps. The debt information below presents the principal cash flows and related weighted average interest rates by expected maturity dates. The derivative information below represents the notional amounts and weighted average interest rates by expected maturity dates.

December 31, 2019 *(dollars in thousands)*	**Maturities of 2019 Derivative Products and Other Financial Instruments** **2020**	**2021**	**2022**	**2023**	**2024**	**Subsequent Years**	**Total**	**Fair Value**
Total Systemwide debt obligations:								
Fixed rate	$ 4,255,008	$ 3,036,225	$ 3,105,635	$ 2,314,917	$ 1,954,779	$ 2,197,765	$ 16,864,329	$ 17,038,294
Weighted average interest rate	1.85%	2.07%	2.00%	2.19%	2.22%	2.64%	2.11%	
Variable rate	$ 5,059,771	$ 1,549,806	$ -	$ -	$ -	$ -	$ 6,609,577	$ 6,617,941
Weighted average interest rate	1.75%	1.81%	-	-	-	-	1.76%	
Total Systemwide debt obligations:	$ 9,314,779	$ 4,586,031	$ 3,105,635	$ 2,314,917	$ 1,954,779	$ 2,197,765	$ 23,473,906	$ 23,656,235
Weighted average interest rate	1.80%	1.98%	2.00%	2.19%	2.22%	2.64%	2.01%	
Derivative instruments:								
Interest rate caps								
Notional value	$ 50,000	$ -	$ 30,000	$ -	$ 20,000	$ 95,000	$ 195,000	$ 98
Weighted average receive rate	-	-	-	-		-	-	
Weighted average pay rate	-	-	-	-		-	-	
Pay fixed swaps								
Notional value	$ -	$ -	$ -	$ 200,000	$ -	$ 625,000	$ 825,000	$ (53,259)
Weighted average receive rate	-	-	-	1.77%	-	1.92%	1.88%	
Weighted average pay rate	-	-	-	1.33%	-	2.97%	2.57%	
Receive fixed swaps								
Notional value	$ 100,000	$ 50,000	$ -	$ -	$ -	$ -	$ 150,000	$ 95
Weighted average receive rate	1.77%	1.67%	-	-	-	-	1.74%	
Weighted average pay rate	1.74%	1.74%	-	-	-	-	1.74%	

Note 18 — Selected Quarterly Financial Information (unaudited)

Quarterly results of operations are shown below for the years ended December 31:

	2019				
	First	**Second**	**Third**	**Fourth**	**Total**
Net interest income	**$ 63,858**	**$ 66,439**	**$ 68,958**	**$ 72,356**	**$ 271,611**
Provision (loan loss reversal) for credit losses	**260**	**157**	**(1,786)**	**781**	**(588)**
Noninterest expense (income), net	**18,977**	**15,728**	**24,127**	**10,413**	**69,245**
Net income	**$ 44,621**	**$ 50,554**	**$ 46,617**	**$ 61,162**	**$ 202,954**

	2018				
	First	Second	Third	Fourth	Total
Net interest income	$ 61,214	$ 61,889	$ 65,213	$ 68,520	$ 256,836
Provision (loan loss reversal) for credit losses	4,857	(11)	108	(283)	4,671
Noninterest expense (income), net	11,745	23,023	12,368	14,499	61,635
Net income	$ 44,612	$ 38,877	$ 52,737	$ 54,304	$ 190,530

	2017				
	First	Second	Third	Fourth	Total
Net interest income	$ 61,737	$ 62,673	$ 63,527	$ 63,384	$ 251,321
Loan loss reversal	(944)	(114)	(29)	(586)	(1,673)
Noninterest expense (income), net	15,909	17,227	10,696	13,176	57,008
Net income	$ 46,772	$ 45,560	$ 52,860	$ 50,794	$ 195,986

Note 19 — Combined Districtwide Financial Statements

The accompanying financial statements exclude financial information of the bank's affiliated associations. The bank and its affiliated associations are collectively referred to as the "Texas District." The bank separately publishes certain unaudited combined financial information of the Texas District, including a condensed statement of condition and statement of income, which can be found on the bank's website at *www.farmcreditbank.com.* Such information is not incorporated by reference to, and should not be considered part of, this annual report.

Note 20 — Subsequent Events

The bank has evaluated subsequent events through February 28, 2020, which is the date the financial statements were issued. There are no other significant subsequent events requiring disclosure as of February 28, 2020.

Disclosure Information and Index (unaudited)

DISCLOSURES REQUIRED BY FARM CREDIT ADMINISTRATION REGULATIONS

DESCRIPTION OF BUSINESS

A description of territory served, persons eligible to borrow, types of lending activities engaged in, financial services offered and related Farm Credit organizations required to be disclosed in this section are incorporated herein by reference to Note 1, "Organization and Operations," to the accompanying financial statements.

The description of significant developments that had or could have a material impact on results of operations or interest rates to borrowers, acquisitions or dispositions of material assets, material changes in the manner of conducting business, seasonal characteristics and concentrations of assets, if any, required to be disclosed in this section are incorporated herein by reference to "Management's Discussion and Analysis" of the bank included in this annual report to shareholders.

Board of Directors and Bank Senior Officers

FCBT is governed by a seven-member board of directors. Five directors are farmers or ranchers, who are elected by the customers of the 14 associations that own the bank. Two directors, who are not stockholders of any of the associations, are appointed by the elected board members. The board of directors is responsible for directing the operations of the bank. The bank's senior officers, through the bank's chief executive officer, are accountable to the board of directors and work with the board of directors to set the bank's direction, goals and strategies.

The following represents certain information regarding the board of directors and senior officers of the bank as of December 31, 2019, including business experience during the past five years:

DIRECTORS

James F. "Jimmy" Dodson, 66, chair of the board of directors, is from Robstown, Texas. He grows cotton, corn, wheat and milo on four family farm operations. Mr. Dodson serves on the bank's audit and compensation committees and is chair of the Tenth District Farm Credit Council. He is one of the board's designated financial experts on the board audit committee for the bank. He serves as chair of the national Farm Credit Council, where he has served as chair since 2019, and is a former director of FCC Services. He is also president of Dodson Farms, Inc. and Dodson Ag, Inc., and is a partner in Legacy Farms and 3-D Farms. He is manager of Weber Station LLC, which is the managing partner of Weber Greene, Ltd., both of which are family farm real estate management firms. Mr. Dodson is a founding member of Cotton Leads, a responsible cotton production initiative of U.S. and Australian Cotton Producer organizations. He also serves on the boards of Gulf Coast Cooperative, an agricultural retail cooperative, and the Texas Agricultural Cooperative Council, an industry trade association. He is past chair of the National Cotton Council of America, the American Cotton Producers and the Cotton Foundation, and formerly served as a director of Cotton Incorporated. He is past chair of the Texas AgFinance, FCS board of directors and a former member of the Texas District's Stockholders Advisory Committee. Mr. Dodson became a director of the bank in 2003 and his term expires at the end of 2020.

Lester Little, 69, vice chair of the board of directors, is from Hallettsville, Texas. He owns and operates a farm and offers custom-farming services, primarily reclaiming farms and handling land preparation. His principal crops are corn, milo, hay and wheat. Mr. Little is a member of the bank's audit committee and served as vice chair of the bank's compensation committee during 2019. He is also a member of the Tenth District Farm Credit Council. In addition, he is a member of the Farm Bureau, an agricultural trade organization, and served on the Lavaca Regional Water Planning Group, a regional water planning authority in Texas, during 2016. He previously was a board member of the Lavaca Central Appraisal District, a county organization in Texas that hires the chief appraiser for the county for purposes of assigning real estate values for tax assessments and was board chair of the Hallettsville Independent School District Board of Trustees. He is former chair of the Capital Farm Credit board of directors and previously served as vice chair of the Texas District's Stockholders Advisory Committee. Mr. Little became a director in 2009 and his term expires at the end of 2020.

Ralph W. "Buddy" Cortese, 73, is from Fort Sumner, New Mexico. He is president of Cortese Farm and Ranch, Inc., a farming and ranching operation. He was chair of the bank's compensation committee during 2019 and is a member of the bank's audit committee. Mr. Cortese also is a member of the Tenth District Farm Credit Council. He currently serves on the board of the Federal Farm Credit Banks Funding Corporation. Mr. Cortese served as chair of the board of directors of the bank from 2000 through 2011. He is a member of the Texas Agricultural Cooperative Council board of directors, an industry trade association. From 2003 to 2008, he served on the board of Federal Agricultural Mortgage Corporation (Farmer Mac), a government agency chartered to create a secondary market for agricultural loans, and is a former board member of the American Land Foundation, a property rights organization. Prior to joining the bank board, he was chair of the PCA of Eastern New Mexico board of directors. Mr. Cortese became a director in 1995 and his term expires at the end of 2022.

John L. "Jack" Dailey, 64, is from Extension, Louisiana. He is owner and operator of Boeuf Prairie Farm, which produces cotton, corn, soybeans and beef cattle and is a manager and serves as treasurer of Franklin Farmers Alliance, LLC, a farmer-owned agricultural retail store. He is a member of the bank's audit and compensation committees. In January 2020, Mr. Dailey was elected vice chair of the bank's audit committee. He is a member of the Tenth District Farm Credit Council. He chairs the Louisiana Boll Weevil Eradication Commission and Franklin Parish Fire Protection District 2 and is treasurer of the Franklin Parish Farm Bureau, an agricultural trade organization. He also serves on the executive committee of the Louisiana Cotton and Grain Association, a trade organization, and the water management task force of the Louisiana Department of Natural Resources. Prior to joining the bank board, he was vice chair of the Louisiana Land Bank board of directors. Mr. Dailey became a director in 2019 and his term expires at the end of 2021.

Linda C. Floerke, 58, is from near Lampasas, Texas. She is vice chair of the Tenth District Farm Credit Council. During 2019, she was vice chair of the bank's audit committee and served as a member of the bank's compensation committee. In January 2020, Ms. Floerke was appointed chair of the bank's compensation committee. She is the managing partner of Buena Vista Ranch, FLP, which is a hay and cattle operation. She is also co-owner of Agro-Tech Services Inc., an agricultural consultation business, where she is secretary/treasurer. She also owns and manages rental property in Uvalde, Real and Williamson counties. She is a co-owner of Casa Floerke LLC, a rental property business, and is the secretary/treasurer and co-owner of Jarrell Farm Supply, Inc. Ms. Floerke serves on the Lampasas First United Methodist Church Finance Committee and serves on the Texas A&M AgriLife Extension Leadership Advisory Board, which provides oversight of agricultural extension services. She is a member of the Texas Agricultural Cooperative Council board of directors, an industry trade association. She previously served as a trustee of the Lampasas Independent School District. Ms. Floerke was a director of Lone Star Ag Credit, formerly Texas Land Bank, from 2012 through the end of 2016. She became a director in 2017 and her term expires at the end of 2022.

M. Philip Guthrie, 74, is one of two appointed members on the board. He is chair of the bank's audit committee and serves on the bank's compensation committee. He is also a member of the Tenth District Farm Credit Council. He is one of the board's designated financial experts on the board audit committee for the bank. Mr. Guthrie is the chief executive officer of Denham Partners LLC, a Dallas-based private investment firm, and the chief executive officer of Neuro Holdings International LLC, which is a medical devices firm. He also has served as a director for Neuro Resources Group, a medical devices firm. Early in his career, he was chief financial officer of Southwest Airlines, and later served as chief financial officer of Braniff International during that airline's reorganization. Mr. Guthrie also was the managing director of Mason Best Co., a Dallas-based investment firm that managed operations in over $2 billion in equity investments in a broad spectrum of industries, for 10 years, and has served as chair, director or chief executive officer of numerous private and public financial service companies, both in banking and insurance. He is also currently an advisor to several large private equity firms, focusing on the financial services industry worldwide and serves as general partner of Ke'e Associates, a private investment company. A Certified Public Accountant and a Chartered Global Management Accountant, Mr. Guthrie is audit committee–qualified under the guidelines of the Securities and Exchange Commission, the New York Stock Exchange and Nasdaq. He is a stockholder of his family-managed 125-year-old livestock and crop operation in northern Louisiana. Mr. Guthrie became a director in 2015 and his term expires at the end of 2020.

Dorothy Nichols, 68, is one of two appointed members on the board and joined the bank board on May 1, 2019. She serves on the bank's audit and compensation committees. In January 2020, she was appointed vice chair of the bank's compensation committee. Ms. Nichols had a 23-year career with the Farm Credit System Insurance Corporation (FCSIC), the government insurer for Farm Credit System debt obligations. She joined the FCSIC in 1995 as its first in-house general counsel, and from 2006 to 2018 served as its chief operating officer. Previously, she was the first chief operating officer of the Farm Credit Administration (FCA), the independent federal agency that regulates and examines Farm Credit institutions and related entities. Prior to that position, Ms. Nichols was associate general counsel at the Federal Deposit Insurance Corporation. She began her government career in 1982 as a trial attorney with the Federal Home Loan Bank Board and the Federal Savings and Loan Insurance Corporation. She holds a bachelor's degree in history from the University of Maryland and a doctorate in law from George Washington University. Ms. Nichols' term expires at the end of 2021.

Committees

The board of directors has established an audit committee and a compensation committee. All members of the board serve on both the audit committee and the compensation committee. As the need arises, a member of the board of directors will also participate in the functions of the bank's credit review committee. The responsibilities of each board committee are set forth in its respective approved charter.

The disclosure of director and senior officer information included in this disclosure information and index was reviewed by the compensation committee prior to the annual report's issuance (including the disclosure information and index).

Compensation of Directors

Directors of the bank are compensated in cash for service on the bank's board. Effective December 20, 2018, the Agriculture Improvement Act of 2018 repealed the limitations on bank director compensation contained in section 4.21 of the Farm Credit Act. The board of directors has adopted a compensation philosophy under which it will evaluate bank director compensation based on competitive market factors, aligning with the methodology utilized for the bank's employee compensation program. An annual compensation amount is considered as a retainer for all services performed by the director in an official capacity during the year and is approved by the board annually. In addition, directors may receive additional compensation in the amount approved by the board for any leadership position to which the director has been elected or assigned. The annual retainer fee is to be paid in equal monthly installments, including any additional compensation. Compensation for 2019 was paid at the rate of $115,000 per year, payable at $9,583 per month. Additional compensation was paid for leadership positions on the board and committees as follows: the chair of the board of directors in the amount of $60,000 and vice chair of the board of directors in the amount of $15,000, audit committee chair in the amount of $15,000 and compensation committee chair in the amount of $15,000. No director received non-cash compensation exceeding $5,000 in 2019. Total cash compensation paid to all directors as a group during 2019 was $910,000.

Information for each director for the year ended December 31, 2019, is provided below:

Board Member	Days Served at Board Meetings*	Days Served on Other Official Assignments**	Total Compensa-tion Paid***
James F. Dodson	30.70	36.05	$ 175,000
Lester Little	30.70	34.05	130,000
Ralph W. Cortese	30.70	26.05	130,000
John L. Dailey	30.70	36.05	115,000
Linda C. Floerke	30.70	35.05	115,000
Elizabeth G. Flores****	7.25	8.75	38,333
M. Philip Guthrie	30.70	35.05	130,000
Dorothy Nichols****	19.20	11.80	76,667
			$ 910,000

*Includes travel time, but does not include time required to prepare for board meetings. Also includes attendance via teleconference.

**Includes audit committee meetings, compensation committee meetings, credit review committee meetings, special assignments, training and travel time.

***Reflects regular compensation and additional compensation for year presented.

****Elizabeth G. Flores retired from the board of directors at the end of April 2019. Dorothy Nichols was appointed to the board of directors effective May 1, 2019.

Directors are reimbursed for reasonable travel, subsistence and other related expenses while conducting bank business. The aggregate amount of expenses reimbursed to directors in 2019, 2018 and 2017 totaled $195,142, $148,603 and $177,377, respectively. A copy of the bank's travel policy is available to shareholders upon request.

BANK SENIOR OFFICERS

Name and Title	Time in Position	Experience – Past Five Years	Other Business Interests – Past Five Years
Larry R. Doyle, *Chief Executive Officer*	16.5 years		He serves as a member of the bank's executive committee and served on the National Council of Farmer Cooperatives Executive Council and currently serves on the Farm Credit System Presidents Planning Committee (PPC), business practices committee. He is the managing member of the following organizations: Lone Star Plantation LLC, a family-owned farming and land ownership operation, K&R Farm LLC, a family-owned farming operation and K&R Land Holdings, a family-owned land ownership operation.
John Sloan, *Senior Vice President, Chief Credit Officer*	2 years	Vice President and Unit Manager, 2014-2017; Vice President and Relationship Manager, prior to 2014, Association Direct Lending Group, FCBT	He serves as a member of the bank's executive committee.

Name and Title	Time in Position	Experience – Past Five Years	Other Business Interests – Past Five Years
Nanci Tucker, *Senior Vice President, General Counsel and Corporate Secretary*	2 years	Chief Legal, Compliance and Chief Ethics Officer, Texas Guaranteed Student Loan Corporation; General Counsel, U.S. Financial Services Division, EZCORP, Inc.	She serves as a member of the bank's executive committee.
Amie Pala, *Senior Vice President, Chief Financial Officer*	9 years		She serves as a member of the bank's executive committee and as a member of the Farm Credit System Capital Workgroup and of the Farm Credit System Disclosure Committee. She also serves as a member of the board of governors and audit committee for the Farm Credit System Captive Insurance Corporation.
Stan Ray, *Chief Administrative Officer*	9 years		He serves as member of the bank's executive committee, serves on the AgFirst/FCBT Plan Sponsor Committee, the Texas District Benefits Administration Committee and the Farm Credit System's Reputation Risk Analysis and Planning Workgroup. He is president of the Tenth District Farm Credit Council, a trade organization. He is a member of the board of directors for the following organizations: Texas FFA Foundation, a nonprofit organization promoting youth in agriculture; Texas Agricultural Cooperative Council, an industry association; and Rodeo Austin, a nonprofit organization promoting youth education and Western heritage.
Nisha Rocap, *Chief Audit Executive*	2 years	Risk Assurance Director, PricewaterhouseCoopers	Her certifications include a Certified Public Accountant, a Certified Information Systems Auditor and a Certified Internal Auditor. She serves as a member of the bank's executive committee. She also serves as a member of the Audit and Risk Advisory Group for the Farm Credit Council Services Director Leadership Conference.
Ed Benson, *Chief Information and Business Systems Officer*	1 month	Vice President and Unit Manager, 2014-2019; Director of Business Systems, 2013-2014, Business Systems Departments, FCBT	He serves as a member of the bank's executive committee.

Compensation Discussion and Analysis – Senior Officers

Overview

The board of directors of the Farm Credit Bank of Texas, through its compensation committee, has pursued a compensation philosophy for the bank that promotes leadership in the adoption and administration of a comprehensive compensation program.

A description of the bank's compensation plans is as follows.

Base Pay

Market-based salaries along with the other incentive and benefits described below are critical to attracting and retaining needed talent in a highly competitive job market and at a time of high retirement risks.

Defined Benefit Pension Plan

The Defined Benefit Pension Plan (Pension Plan) is a final average pay plan which was closed to new participants in 1996, and later fully closed to all participants, including rehires who had formerly participated in the plan. The Pension Plan benefits are based on the average monthly eligible compensation over the 60 consecutive months that produce the highest average after 1996 (FAC60). The Pension Plan's benefit formula for a Normal Retirement Pension is the sum of (a) 1.65% of FAC60 times "Years of Benefit Service" and (b) 0.50% of (i) FAC60 in excess of Social Security covered compensation times (ii) "Years of Benefit Service" (not to exceed 35).

The Pension Plan's benefit formula for the Normal Retirement Pension assumes that the employee's retirement age is 65, that the employee is married on the date the annuity begins, that the spouse is exactly two years younger than the employee and that the benefit is payable in the form of a 50% joint and survivor annuity. If any of those assumptions are incorrect, the benefit is recalculated to be the actuarial equivalent benefit. The Pension Plan benefit is offset by the pension benefits any employee may have from another Farm Credit System institution.

The Pension Plan was amended in 2013 to allow those retiring after September 1, 2013, to elect a lump-sum distribution option. The plan was also amended to allow participating employers to exclude from pension compensation new long-term incentive plans which began after January 1, 2014.

In 2014 the plan was amended to allow terminated employees with a vested benefit to also elect a lump-sum distribution beginning January 1, 2015.

401(k) Plan – Elective

Farm Credit Benefits Alliance (FCBA) 401(k) Plan is open to all bank employees and includes up to a 4% employer match on employee deferrals up to Internal Revenue Service (IRS) directed limits. Employees become fully vested in the plan upon participation. The plan allows for self-directed investment choices by participants.

401(k) Plan – Non-Elective Defined Contribution Plan

FCBA 401(k) Plan's Defined Contribution component is open to employees not participating in the Defined Benefit Pension Plan. Employees become fully vested in the plan upon participation and receive a 5% employer contribution each pay period up to IRS-directed limits to the participant's account which is invested in the self-directed investment choices available.

Nonqualified Supplemental 401(k) Plan

With the exception of the CEO, this plan is open to all employees who meet the minimum salary requirements set by the IRS. It has three features: elective deferral of employee compensation; discretionary employer contributions; and restored employer contributions that make an employee "whole" when 401(k) IRS limitations are met. Deferred money is invested with similar investment fund choices as the qualified 401(k) Plan at the participant's direction.

Success Sharing Plan

The purpose of the Farm Credit Bank of Texas Success Sharing Plan (SSP) is to advance the mission of the bank by recognizing employees with variable pay through a discretionary bonus. The SSP (also categorized as a bonus or profit-sharing plan), rewards employees as the overall organization experiences success and performs within the realities of the current market environment and in accordance with business planning goals and objectives. Additionally, it is expected to help to attract, motivate and retain bank staff.

The SSP provides an annual award that is paid after the bank's operational results and strategic objectives are reported and assessed by the compensation committee of the board. The compensation committee has the final authority to determine if a success sharing award is to be paid and what percentage of the award target will be funded. The CEO does not participate in this plan; otherwise, all employees are eligible to participate in the SSP for that year. This program applies the concept of differential factors for all eligible bank participants, and is tiered into five groups according to employee job grades and their accountability level inside the entire organization. Each employee group has its own Success Sharing Award Factor for this plan. This factor is multiplied by the employee's December 31st annualized base compensation to arrive at the Success Sharing Plan award target for the year.

When a promotion or salary adjustment occurs during the year that elevates an employee's job grade into a higher employee group in the plan, the plan's award calculation will be prorated and paid at the separate employee group percentages for the periods the employee was in each of the employee groups. Additionally, when a salary adjustment occurs, the plan's award calculation will be prorated and paid at the separate employee salaries for the periods the employee was at each salary.

FCBT Retention Plan

This is a nonqualified plan for bank employees that provides dollar incentives to remain employed for specific time periods to accomplish important bank initiatives or to aid in leadership succession. It is paid according to the agreement arranged for each participant. The CEO approves participants, plan provisions and participant agreements. Several employees were offered and accepted two-year retention plans in 2018. These employees have expertise with current software and systems from which the bank is transitioning to new software/system solutions. In order to retain these employees with critical knowledge, the bank offered retention plans that were accepted by the employees. The two-year retention plans are back loaded. The employees received 15% payout at the end of the first and second time period and at the end of 2019, the employees received the last payment of 70% of the agreed-upon amount.

Additionally, three employees received two-year retention agreements ending on December 31, 2021. These three employees are deemed to be critical to the deployment of a major software implementation. In order to retain these employees, the bank offered them retention plans. The plans pay out 15% at 6 months, 15% at 1 year and 70% on December 31, 2021.

Spot Awards Program

This bank program allows for discretionary awards to be paid to employees throughout the year in recognition of outstanding performance events or service provided to the bank's customers. Senior officers do not participate in this program.

Bank-Owned Vehicle Program

Use of bank-owned vehicles is provided to three groups within the bank: the executive group, which is comprised of voting members of the bank's executive committee; the senior management group, which includes members defined by the CEO exclusive of the voting members of the executive committee; and the other group consisting of employees who have been identified by executive committee members as requiring a vehicle for job performance. Any current employee who was in possession of a bank-provided vehicle when vehicle eligibility guidelines were set was grandfathered for their remaining uninterrupted employment term at the bank. Employees assigned use of a bank-owned vehicle are required to maintain written records of their business and personal use. This data is used to annually impute to the employee's taxable wages the personal use value of the vehicle following the IRS lease value rule.

Educational and Training Program

This program was established in recognition that ongoing enrichment of employees' skills, knowledge and expertise is essential not only for the success of the bank and the retention of key employees, but for the realization of employees' personal growth and achievement.

This program is directed to employees at all levels and includes formal orientation of new hires, a continuing education and degree program, and a licensing and certification program. The degree program reimbursement is open to full-time employees who have been with the bank at least six months. This program covers tuition, lab fees, books and registration fees if the employee receives a grade of C or better in undergraduate courses and B or better in graduate-level courses and expenses are in excess of those reimbursable by a scholarship or other sources.

Tuition reimbursement will not normally exceed the cost per semester hour charged at state-supported universities. Expenses incurred above the state-supported university baseline are the responsibility of the employee. Certain positions in the bank must be staffed by employees who hold professional licenses and/or certifications. In these instances, the membership and license fees, training and educational expenses for obtaining and maintaining professional status, licenses and certifications are reimbursable.

Compensation, Risk and Performance

One of the critical strategic goals of the bank is to provide market-driven financial products and support services to add value to our association customers. The bank succeeds at this through robust customer communications and relationships to stay aware of their business needs. Our staff provides technical, credit, operational and marketing support, and offers leadership in talent acquisition, retention and development. Our ability to succeed in these areas is dependent upon having a knowledgeable and experienced customer-service-focused workforce that is responsive but also proactive in meeting our district's business challenges and recognizing and taking advantage of opportunities, including promoting the bank's mission as a government-sponsored enterprise.

Market and higher compensation programs are required to keep Farm Credit competitive in the talent war currently being waged in Austin, Texas. The bank is located in one of the nation's top economic markets. It has become known as the "Silicon Hills" for the large number of technology firms located here that pay top salaries to information technology professionals as well as many other employee classifications. The unemployment rate has for years been lower than the national average (currently less than 3% compared to about 4% nationally), which makes attracting talent a struggle with not only the aggressive tech sector, but also with competition from major medical, real estate and government employers. Austin is one of the country's fastest growing regions bringing new talent into the market, but also attracts new employers seeking those same resources. All these factors exert an upward pressure on all aspects of the employee value proposition and stress in acquiring and retaining the skilled workforce needed to achieve the bank's goals.

While external factors impact compensation programs, internal measures are in place to make certain there is alignment with the bank's performance. Market-driven base salaries are combined with a bonus program that is at risk each year. The compensation committee of the district board annually determines the structure and the award for the Success Sharing Plan, a short-term bonus plan. This gives them the agility to modify or discontinue the plan in response to changing circumstances. The bank is not locked into an incentive program for any extended period of time.

The SSP in regard to the total compensation mix is not overly significant or significantly larger than the market practice. Multiple performance measures are considered, which include financial and operational metrics. Although awards are based on a single year's performance, because the bank's customers are its cooperative associations, performance in the time period measured is less uncertain than in businesses with larger and lesser known customer bases. The board and compensation committee review the bank's financial and operational performance at each meeting, so SSP decisions are reviewed by the same centralized group who hear those reports all year. Additionally, the compensation committee has external resources to support its oversight and uses that independent compensation consultant to review SSP awards with its annual executive compensation update.

In making its decision on the SSP award at year end, the compensation committee analyzes the bank's performance against the business plan for the year. The business plan is approved by the full composition of the board at the beginning of the year and is monitored all year as the CEO and senior team members deliver management and other reporting on bank performance and respond to director questions. Financial metrics include net income, the associations' direct note volume, allowance for loan losses, nonaccrual loans, capital market and investment income, total asset growth, credit quality, permanent capital ratio, and at year end, the association patronage. Operational accomplishments considered vary but typically include staff outreach to associations, participation and leadership in System workgroups and initiatives, debt issuances, credit and technology products and services delivered, marketing support, talent acquisition and talent management support, and continued progress in diversity and inclusion efforts.

Chief Executive Officer (CEO) Compensation Table and Policy for Bank

In December 2019, a memorandum of understanding between the bank and the CEO was executed with an effective date of January 1, 2020, which supersedes the previous memorandum of understanding effective January 1, 2017. The memorandum of understanding is effective for a term of approximately one year. The base salary for the CEO will be $1,375,000. Bonus payments, if any, are at the sole discretion of the compensation committee. The employment relationship between the bank and CEO remains at-will, meaning the bank may terminate the CEO's employment at any time, and the CEO may choose to leave at any time.

As previously mentioned, the CEO bonus is discretionary and subject to the approval of the bank's compensation committee. The compensation committee reviews the same bank financial performance and operational metrics that the committee evaluates for purposes of the SSP. Additionally, for both the CEO and senior officer group, the compensation committee has annual peer market data it reviews with its third-party consultant before making CEO base and bonus pay decisions. The compensation committee also reviews seven dimensions of CEO performance and has discussions about goals set for the current year and successes in meeting those goals. The seven dimensions of CEO performance are: strategy and vision; leadership; innovation/technology; operating metrics; risk management; people management; and external relationships.

The following table summarizes the compensation paid to the CEO of the bank during 2019, 2018 and 2017.

Summary Compensation Table for the Bank's CEO

		Annual					
Name of Chief Executive Officer	Year	Salary (a)	Bonus (b)	Change in Pension Value (c)	Deferred/Perquisites (d)	Other (e)	Total
Larry R. Doyle	2019	$ 1,375,053	$ 1,700,000	$ 332,731	$ 16,627	$ -	$ 3,424,411
Larry R. Doyle	2018	1,375,053	1,500,000	(75,943)	16,666	-	2,815,776
Larry R. Doyle	2017	1,375,053	1,500,000	181,118	16,932	-	3,073,103

(a) Gross salary for year presented.

(b) Bonus compensation is presented in the year earned, and bonuses are paid within the first 31 days of the subsequent calendar year. For each of the years presented, bonus compensation was paid in January of the following year based on the performance of the bank during the previous year.

(c) For 2019, 2018 and 2017, disclosure of the change in pension value represents the change in the actuarial present value of the accumulated benefit under the defined benefit pension plan, the Farm Credit Bank of Texas Pension Plan, from the pension measurement date used for financial statement reporting purposes with respect to the audited financial statements for the prior completed fiscal year to the pension measurement date used for financial statement reporting purposes with respect to the audited financial statements for the covered fiscal year. For 2019, the increase in pension value is primarily due to the decline in the discount rate. For 2018, the negative (or decrease) change in pension value is due to the increase in discount rate as compared to the prior year. For 2017, the change in pension value is primarily associated with a decline in the discount rate as compared to the prior year.

(d) Deferred/Perquisites for 2019, 2018 and 2017 includes contributions to a 401(k) plan and premiums paid for life insurance.

(e) No values to disclose.

Compensation of Senior Officers for Bank

The following table summarizes the compensation paid to the aggregate number of senior officers, plus two highly compensated individuals that were not senior officers of the bank, during 2019. Amounts reflected in the table are presented in the year the compensation is earned.

Summary Compensation Table for Other Officers

		Annual					
Aggregate Number in Group (excludes CEO)	Year	Salary (a)	Bonus (b)	Change in Pension Value (c)	Deferred/Perquisites (d)	Other (e)	Total
9 Officers	2019	$ 2,740,360	$ 966,718	$ -	$ 398,975	$ 659,503	$ 4,765,556
7 Officers	2018	2,045,745	1,022,873	-	294,269	775	3,363,662
9 Officers	2017	2,195,979	1,034,423	583,589	274,901	51,658	4,140,550

(a) Gross salary for year presented, including retention plan compensation for one highly compensated individual.

(b) Bonuses paid within the first 31 days of the subsequent calendar year.

(c) For 2017, disclosure of the change in pension value represents the change in the actuarial present value of the accumulated benefit under the defined benefit pension plan, the Farm Credit Bank of Texas Pension Plan, from the pension measurement date used for financial statement reporting purposes with respect to the audited financial statements for the prior completed fiscal year to the pension measurement date used for financial statement reporting purposes with respect to the audited financial statements for the covered fiscal year.

(d) Deferred/Perquisites include contributions to 401(k) and defined contribution plans, supplemental 401(k) discretionary contributions and employer match, automobile benefits and premiums paid for life insurance.

(e) For 2019, Other includes physical fitness compensation, severance payment and annual leave payout to a senior officer who left employment and severance payment to one highly compensated individual. For 2018, Other includes physical fitness compensation and service awards. For 2017, Other includes physical fitness compensation, service and retirement rewards, and an annual leave payment to a senior officer who retired at December 31, 2017.

For 2018, the aggregate number of officers includes one senior officer who retired from the bank effective December 31, 2018.

Disclosure of the compensation paid during 2019 to any senior officer or officer included in the table is available and will be disclosed to shareholders of the bank upon written request.

Neither the CEO nor any other senior officer received non-cash compensation exceeding $5,000 in 2019.

Senior officers, including the CEO, are reimbursed for reasonable travel, subsistence and other related expenses while conducting bank business. A copy of the bank's travel policy is available to shareholders upon request.

Pension Benefits Table for the CEO for Bank

The following table presents the total annual benefit provided from the defined benefit pension plan applicable to the CEO for the year ended December 31, 2019. There were no other senior officers eligible for the defined benefit pension plan.

Name	Plan Name	Number of Years Credited Service	Present Value of Accumulated Benefit	Payments During 2019
Larry R. Doyle	Farm Credit Bank of Texas Pension Plan	46.321	$ 2,181,072	$ -

Description of Property

On September 30, 2003, the bank entered into a lease for approximately 102,500 square feet of office space to house its headquarters facility located at 4801 Plaza on the Lake Drive, Austin, Texas. The lease was effective September 30, 2003, and its term was from September 1, 2003, to August 31, 2013. On November 16, 2010, the bank entered into a lease amendment which extended the term of the lease to August 31, 2024. In addition, the lease amendment included expansion of the leased space to approximately 111,500 square feet of office space and an "early out" option to terminate the lease in 2020. On August 6, 2019, the bank entered into a lease amendment which extended the term of the lease to December 31, 2034.

Legal Proceedings

There were no matters that came to the attention of the board of directors or management regarding the involvement of current directors or senior officers in specified legal proceedings which are required to be disclosed.

Description of Capital Structure

The bank is authorized to issue and retire certain classes of capital stock and retained earnings in the management of its capital structure. Details of the capital structure is described in Note 11, "Shareholders' Equity," to the accompanying financial statements.

Description of Liabilities

The bank's debt outstanding is described in Note 10, "Bonds and Notes," to the accompanying financial statements. The bank's contingent liabilities are described in Note 14, "Commitments and Contingencies," to the accompanying financial statements. See also Note 12, "Employee Benefit Plans," with regard to obligations related to employee retirement plans.

Selected Financial Data

The selected financial data for the five years ended December 31, 2019, required to be disclosed, is incorporated herein by reference to the "Five-Year Summary of Selected Financial Data" included in this annual report to stockholders.

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

"Management's Discussion and Analysis," which precedes the financial statements in this annual report, is incorporated herein by reference.

Transactions With Senior Officers and Directors

The policies on loans to and transactions with the bank's officers and directors, required to be disclosed in this section, are incorporated herein by reference to Note 13, "Related Party Transactions," to the accompanying financial statements.

Related Party Transactions

As discussed in Note 1, "Organization and Operations," the bank lends funds to the district associations to fund their loan portfolios. Interest income recognized on direct notes receivable from district associations was $380.4 million, $320.4 million and $269.1 million for 2019, 2018 and 2017, respectively. Further disclosure regarding these related party transactions is found in Note 4, "Loans and Reserves for Credit Losses," and Note 11, "Shareholders' Equity."

In addition to providing loan funds to district associations, the bank also provides banking and support services to them, such as accounting, information systems, marketing and other services. Income derived by the bank from these activities was $3.9 million, $3.7 million and $3.9 million for 2019, 2018 and 2017, respectively, and was included in the bank's noninterest income.

The bank had no transactions with nor loans to directors or senior officers, their immediate family members, or any organizations with which such senior officers or directors are affiliated, during 2019, 2018 and 2017.

Relationship With Public Accountants

There were no changes in independent qualified public accountants since the prior annual report to shareholders, and there were no material disagreements with our independent qualified public accountants on any matter of accounting principles or financial statement disclosure during the period.

Fees for professional services paid by the bank during 2019 to PricewaterhouseCoopers LLP, the bank's independent qualified public accountants, were as follows.

- Audit services of $825,000 and of $833,000 related to the integrated audit for the bank for 2019 and 2018, respectively, and $45,000 related to out-of-pocket expenses for 2018. Engagement letter for audit services for 2019 for the integrated audit for the bank reflect an estimated fee of $950,000, plus reasonable out-of-pocket expenses.
- Non-audit services of $3,000 associated with accounting research and disclosure tools.
- Tax services of $6,000 associated with the completion of a tax filing.

Fees paid for the audit of the Farm Credit Benefits Alliance (FCBA) 401(k) plan for 2018 as engaged by the AgFirst/FCBT Plan Fiduciary Committee totaled $17,000 and represented the bank's proportionate share of fees paid.

With the exception of the audit of the FCBA 401(k) plan, the non-audit services and tax services for the bank listed above required pre-approval of the bank's audit committee, which was obtained.

Information regarding the fees for services rendered by the qualified public accountants for the district associations is disclosed in the individual associations' annual reports.

Relationships With Unincorporated Business Entities (UBEs)

The bank and a district association are among the forming limited partners for a $154.5 million Rural Business Investment Company (RBIC), Advantage Capital Agribusiness Partners, LP (ACAP), established on October 3, 2014. Additionally, the bank is among the forming limited partners for a $31.3 million RBIC, Innova Ag Innovation Fund IV, LP (Innova), established on December 12, 2016. The bank and Farm Credit System partners are among the forming limited partners for a $113.5 million third RBIC investment, Midwest Growth Partners II Fund (Midwest), established on November 14, 2018. The RBICs will facilitate private equity investments in agriculture-related businesses that will create growth and job opportunities in rural America. The Midwest RBIC fund will focus on late and growth stage investments. Each limited partner has a commitment to contribute up to $20.0 million, $5.0 million and $5.0 million to ACAP, Innova and Midwest, respectively, over a 10-year period and, as of December 31, 2019, FCBT has invested $19.7 million in the three RBICs, included in other assets on the balance sheets. FCBT entered into an RBIC fourth investment on September 30, 2019. The bank committed to invest $10.0 million alongside Farm Credit System partners in the new Pharos Capital Partners IV Fund. The fund had no activity through year end 2019.

Information regarding UBEs for district associations is disclosed in the individual association annual reports.

Financial Statements

The financial statements, together with the report thereon of PricewaterhouseCoopers LLP dated February 28, 2020, and the report of management in this annual report to shareholders, are incorporated herein by reference.

The Farm Credit Bank of Texas' and its affiliated associations' (district) annual and quarterly reports are available free of charge, upon request. These reports can be obtained by writing to Farm Credit Bank of Texas, Corporate Communications, P.O. Box 202590, Austin, Texas 78720 or by calling (512) 483-9260. Copies of the bank's quarterly and annual stockholder reports can be requested by sending an e-mail to *fcb@farmcreditbank.com*. The bank's quarterly report is available approximately 40 days after the end of each fiscal quarter. The bank's annual report will be posted on the bank's website (*www.farmcreditbank.com*) within 75 calendar days of the end of the bank's fiscal year. This posting coincides with an electronic version of the report being provided to its regulator, the Farm Credit Administration. Within 90 calendar days of the end of the bank's fiscal year, a copy of the bank's annual report will be provided to its stockholders.

Borrower Information Regulations

Farm Credit Administration (FCA) regulations require that borrower information be held in strict confidence by Farm Credit institutions, their directors, officers and employees. These regulations provide Farm Credit institutions clear guidelines for protecting their borrowers' nonpublic personal information.

On November 10, 1999, the FCA board adopted a policy that requires Farm Credit institutions to formally inform new borrowers at loan closing of the FCA regulations on releasing borrower information and to address this information in the annual report to shareholders. The implementation of these measures ensures that new and existing borrowers are aware of the privacy protections afforded them through FCA regulations and Farm Credit System institution efforts.

Credit and Services to Young, Beginning and Small (YBS) Farmers and Ranchers, and Producers or Harvesters of Aquatic Products

In line with its mission, the district associations have policies and programs for making credit available to young, beginning and small farmers and ranchers.

The definitions for YBS, as prescribed by FCA regulations, are provided below.

Young Farmer or Rancher – A farmer, rancher or producer or harvester of aquatic products who was age 35 or younger as of the date the loan was originally made.

Beginning Farmer or Rancher – A farmer, rancher or producer or harvester of aquatic products who had 10 years or less of experience at farming, ranching or producing or harvesting aquatic products as of the date the loan was originally made.

Small Farmer or Rancher – A farmer, rancher or producer or harvester of aquatic products who normally generated less than $250,000 in annual gross sales of agricultural or aquatic products at the date the loan was originally made.

For the purposes of YBS, the term "loan" means an extension of, or a commitment to extend, credit authorized under the Farm Credit Act, whether it results from direct negotiations between a lender and a borrower or is purchased from, or discounted for, another lender, including participation interests. A farmer/rancher may be included in multiple categories as they are included in each category in which the definition is met.

The bank and associations' efforts to respond to the credit and related needs of YBS borrowers are evidenced by the following table:

(dollars in thousands)	At December 31, 2019 Number of Loans	Volume
Total loans and commitments	80,007	$ 31,615,361
Loans and commitments to young farmers and ranchers	14,757	$ 2,826,677
Percent of loans and commitments to young farmers and ranchers	18.44%	8.94%
Loans and commitments to beginning farmers and ranchers	42,520	$ 9,725,013
Percent of loans and commitments to beginning farmers and ranchers	53.15%	30.76%

The following table summarizes information regarding new loans to young and beginning farmers and ranchers:

(dollars in thousands)	For the year ended December 31, 2019 Number of Loans	Volume
Total loans and commitments	16,318	$ 8,382,957
Loans and commitments to young farmers and ranchers	3,055	$ 900,683
Percent of loans and commitments to young farmers and ranchers	18.72%	10.74%
New loans and commitments to beginning farmers and ranchers	7,817	$ 2,600,486
Percent of loans and commitments to beginning farmers and ranchers	47.90%	31.02%

The following table summarizes information regarding loans to small farmers and ranchers:

	At December 31, 2019				
	Loan Size				
(dollars in thousands)	$50 Thousand or Less	$50 to $100 Thousand	$100 to $250 Thousand	More Than $250 Thousand	Total
Total number of loans and commitments	12,057	16,559	25,496	25,895	80,007
Number of loans and commitments to small farmers and ranchers	9,601	13,625	20,560	14,234	58,020
Percent of loans and commitments to small farmers and ranchers	79.63%	82.28%	80.64%	54.97%	72.52%
Total loans and commitments volume	$ 249,528	$ 879,647	$ 3,171,189	$ 27,314,997	$ 31,615,361
Total loans and commitments to small farmers and ranchers volume	$ 200,812	$ 730,564	$ 2,562,982	$ 7,880,801	$ 11,375,159
Percent of loans and commitments volume to small farmers and ranchers	80.48%	83.05%	80.82%	28.85%	35.98%

The following table summarizes information regarding new loans made to small farmers and ranchers:

	At December 31, 2019				
	Loan Size				
(dollars in thousands)	$50 Thousand or Less	$50 to $100 Thousand	$100 to $250 Thousand	More Than $250 Thousand	Total
Total new number of loans and commitments	2,969	2,956	4,401	5,992	16,318
Number of new loans and commitments to small farmers and ranchers	2,367	2,303	3,370	2,722	10,762
Percent of new loans and commitments to small farmers and ranchers	79.72%	77.91%	76.57%	45.43%	65.95%
Total new loans and commitments volume	$ 86,454	$ 224,307	$ 733,111	$ 7,339,085	$ 8,382,957
Total new loans and commitments to small farmers and ranchers volume	$ 68,778	$ 175,213	$ 554,027	$ 2,047,447	$ 2,845,465
Percent of loans and commitments volume to small farmers and ranchers	79.55%	78.11%	75.57%	27.90%	33.94%

Additional Regulatory Information – Farm Credit Bank of Texas

(unaudited)

Overview

As described in "Structural Risk Management" beginning on page 17 of this annual report, the Farm Credit Administration (FCA) adopted final rules relating to capital requirements for the Farm Credit System (System) in 2016, which became effective January 1, 2017. These include public disclosure requirements set forth in Title 12 of the Code of Federal Regulations parts 628.61 through 628.63.

Disclosure Map

The following table summarizes the annual disclosure requirements and indicates where each matter is disclosed in this annual report.

Disclosure Requirement	Description	2019 Annual Report Reference
Scope of Application	Corporate entity and structure	Page 13, Page 41, Pages 91 to 92
	Restrictions on transfers of funds or capital	Page 92
Capital Structure	Terms and conditions of capital instruments	Note 11 – Pages 61 to 67; Pages 92 to 93
	Regulatory capital components	Pages 64, 93
Capital Adequacy	Capital adequacy assessment	Pages 25 to 26, Page 94
	Risk-weighted assets	Page 94
	Regulatory capital ratios	Page 12, 26; Note 11 – Page 64
Capital Buffers	Quantitative disclosures	Page 94
Credit Risk	Credit risk management and policies	Page 18, Pages 95 to 96
	Summary of exposures	Page 97
	Geographic distribution	Page 97
	Industry distribution	Page 97
	Contractual maturity	Page 97
	Impaired loans and allowance for credit losses	Note 4 – Pages 50 to 58, Pages 95 to 96
Counterparty Credit Risk-Related Exposures	General description	Page 18, Pages 97 to 98
	Counterparty exposures	Note 15 – Page 70; Note 17 – Page 76 to 78
Credit Risk Mitigation	General description	Pages 96 to 98
	Exposures with reduced capital requirements	Page 98
Securitization	General description	Note 3 – Pages 47 to 49, Page 98
	Securitization exposures	Note 3 – Pages 47 to 49, Note 16 – Pages 71 to 76, Page 99
Equities	General description	Page 99
Interest Rate Risk for Non-Trading Activities	General description	Pages 21 to 23, Page 99
	Interest rate sensitivity	Page 23

The following disclosures contain regulatory disclosures as required under Farm Credit Administration Regulation (FCA) 628.63 for risk-adjusted ratios: common equity tier 1, tier 1 capital and total capital. Refer to Note 11 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 Farm Credit Bank of Texas' website at *www.farmcreditbank.com.*

Scope of Application

The Farm Credit Bank of Texas (FCBT or bank) is one of the banks of the Farm Credit System (System), a nationwide system of cooperatively owned banks and associations established by acts of Congress. The System is subject to the provisions of the Farm Credit Act of 1971, as amended (Farm Credit Act). The accounting and reporting policies of the bank conform to generally accepted accounting principles in the United States of America (GAAP) and prevailing practices within the banking industry.

The bank and its related associations collectively are referred to as the Farm Credit Bank of Texas and affiliated associations (district). The district's one FLCA (Federal Land Credit Association), 13 ACA (Agricultural Credit Associations) parent associations, each containing two wholly-owned subsidiaries (an FLCA and a Production Credit Association [PCA]), certain Other Financing Institutions (OFIs) and preferred stockholders jointly owned the bank at December 31, 2019. The FLCA and ACAs collectively are referred to as associations. The bank is the primary funding source for the district associations. FCBT has no subsidiaries; therefore, the financial statements are only those of the bank 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 (Funding Corporation), the Farm Credit System Building Association (FCSBA), and the Farm Credit System Association Captive Insurance Company. Certain of the bank's investments in other System institutions, including the investment in the Funding Corporation and FCSBA, are deducted from capital as only the institution who issued the equities may count the amount as capital. The bank's unincorporated business entities (UBEs), including its investment in the Rural Business Investment Companies (RBICs), and its investment in the Farm Credit System Association Captive Insurance Company are included in risk-weighted assets and are not deducted from any capital component in accordance with FCA regulations. The bank has no consolidated subsidiaries: therefore, there are no consolidated entities for 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 that is below the minimum total capital requirement.

Capital Structure

The par value of the bank's common stock is $5 and the par value of the Class B Series 1, 2 and 3 Noncumulative Perpetual Preferred Stock is $1,000, $100 and $1,000 per share, respectively. The minimum initial borrower investment is equal to the greater of one thousand dollars or 2% of the associations' and OFIs' average borrowing from the bank. Our bylaws permit the bank's board of directors to set the required level of association and OFI investment in the bank within a range of 2 to 5% of the average association and OFI borrowings. In 2019, the required investment level was 2%. There are no capital sharing agreements between the bank and its affiliated associations.

Description of Bank Equities

Descriptions of the bank's equities, capitalization requirements and restrictions are provided as follows:

Class B Series 1 Noncumulative Subordinated Perpetual Preferred Stock (Class B-1 preferred stock) – On August 26, 2010, the bank issued $300 million of Class B noncumulative subordinated perpetual preferred stock, representing 300,000 shares at $1,000 per share par value for net proceeds of $296.6 million. Dividends on the preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable semi-annually in arrears on the fifteenth day of June and December in each year, commencing December 15, 2010, at an annual fixed rate of 10% of par value of $1,000 per share. The Class B-1 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the bank after the dividend payment date in June 2020. The Class B-1 preferred stock ranks, both as to dividends and upon liquidation, senior to all outstanding capital stock. Class B-1 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of bank investment and direct note patronage to associations and OFIs can be paid.

Class B Series 2 Noncumulative Subordinated Perpetual Preferred Stock (Class B-2 preferred stock) – On July 23, 2013, the bank issued $300 million of Class B noncumulative subordinated perpetual preferred stock, Series 2, representing three million shares at $100 per share par value, for net proceeds of $296.0 million. Dividends on the Class B-2 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2013, at an annual fixed rate of 6.75% of par value of $100 per share up to, but excluding September 15, 2023, from and after which date will be paid at an annual rate of the 3-Month USD LIBOR plus 4.01%. The Class B-2 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the bank on any dividend payment date on or after September 15, 2023. The Class B-2 preferred stock ranks, both as to dividends and upon liquidation, pari passu with respect to the existing Class B-1 preferred stock, and senior to all other classes of the bank's outstanding capital stock. Class B-2 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of bank investment and direct note patronage to associations and OFIs can be paid.

Class B Series 3 Noncumulative Subordinated Perpetual Preferred Stock (Class B-3 preferred stock) – On June 25, 2018, the bank issued $100.0 million of Class B noncumulative subordinated perpetual preferred stock, Series 3, representing one hundred thousand shares at $1,000 per share par value, with issuance costs on preferred stock of $1.3 million for net proceeds of $98.7 million. Dividends on the Class B-3 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2018, at an annual fixed rate of 6.20% of par value of $1,000 per share up to, but excluding June 15, 2028, from and after which date will be paid at an annual rate of the 3-Month USD LIBOR plus 3.223%. The Class B-3 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the bank on any dividend payment date on or after June 15, 2028. The Class B-3 preferred stock ranks pari passu with respect to the existing Class B-1 and Class B-2 preferred stock, and senior to all of the bank's outstanding capital stock. Class B-3 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of bank investment and direct note patronage to associations and OFIs can be paid.

Class A Voting Common Stock – According to the bank's bylaws, the minimum and maximum stock investments that the bank may require of the ACAs and FLCA are 2% (or one thousand dollars, whichever is greater) and 5%. The investments in the bank are required to be in the form of Class A voting common stock (with a par value of $5 per share) and allocated retained earnings. The current investment required of the associations is 2% of their average borrowings from the bank. Under the Capitalized Participation Pool (CPP) program, the stock investment that the bank requires is 1.6% of each Farmer Mac AMBS pool and 8% of each loan pool. Under the Capitalized and Non-Capitalized Participation Pool (NCPP) program, the bank redeems stock in the amount of 2.0% of the par value of the loans purchased. No Class A voting common stock may be retired except at the sole discretion of the bank's board of directors, and provided that after such retirement, the bank shall meet minimum capital adequacy standards as may from time to time be promulgated by the FCA or such higher level as the board may from time to time establish in the bank's Capital Plan. There were 66.9 million shares, 63.1 million shares and 60.1 million shares of Class A voting common stock issued and outstanding at December 31, 2019, 2018 and 2017, respectively.

Class A Nonvoting Common Stock – The bank requires OFIs to make cash purchases of Class A nonvoting common stock (with a par value of $5 per share) in the bank based on a minimum stock investment of 2% (or one thousand dollars, whichever is greater) and on a maximum of 5%. The current investment required of the OFIs is 2% of their average borrowings from the bank. No Class A nonvoting common stock may be retired except at the sole discretion of the bank's board of directors, and provided that after such retirement, the bank shall meet minimum capital adequacy standards as may from time to time be promulgated by the FCA or such higher level as the board may from time to time establish in the bank's Capital Plan. The bank has a first lien on these equities for the repayment of any indebtedness to the bank. There were 163 thousand shares, 163 thousand shares and 196 thousand shares of Class A nonvoting common stock issued and outstanding at December 31, 2019, 2018 and 2017, respectively.

Allocated retained earnings of $52,451, $45,685 and $39,144 at December 31, 2019, 2018 and 2017, respectively, consisted of allocated equity for the payment of patronage on loans participated with another System bank.

The following table provides a summary of the bank's capital structure at December 31, 2019:

(dollars in thousands)	Three-Month Average Daily Balance
Common equity tier 1 capital (CET1)	
Common cooperative equities:	
Purchased other required stock ≥7 years	$ 281,395
Allocated stock ≥7 years	36,042
Other required member purchased stock	-
Allocated equities:	
Qualified allocated equities subject to retirement	45,746
Nonqualified allocated equities subject to retirement	-
Nonqualified allocated equities not subject to retirement	-
Unallocated retained earnings	924,451
Paid-in capital	-
Regulatory adjustments and deductions made to CET1	(149,850)
Total CET1	$ 1,137,784
Additional tier 1 capital (AT1)	
Non-cumulative perpetual preferred stock	$ 700,000
Regulatory adjustments and deductions made to AT1 capital	-
Total AT1 capital	700,000
Total tier 1 capital	$ 1,837,784
Tier 2 capital	
Common cooperative equities not included in CET1	$ -
Tier 2 capital elements (allowance for loan losses)	12,525
Regulatory adjustments and deductions made to Tier 2 capital	-
Total tier 2 capital (T2)	12,525
Total capital	$ 1,850,309
Reconciliation to statement of condition:	
Total capital	$ 1,757,650
Additions:	
Accumulated other comprehensive income	(51,631)
Regulatory adjustments and deductions	173,073
Subtractions:	
Tier 2 allowance and reserve	(13,296)
Regulatory deductions	(21,613)
Total shareholders' equity*	$ 1,844,183

*The amount of total capital presented in the Regulatory Capital Components table above is the three-month average daily balance used in calculating capital ratios, as required by FCA regulations, whereas this amount is the amount outstanding as of December 31, 2019.

Capital Adequacy and Capital Buffers

In conjunction with the annual business and financial planning process, the board of directors reviews and approves a capital adequacy plan. As part of our business planning process, we perform stress tests to examine the bank's financial condition and performance, including capital levels, under a variety of market and economic environments, including unanticipated loan growth and prolonged periods of financial and loan quality stress. These stress tests illustrate the bank's ability to continue to maintain compliance with regulatory requirements through severe market conditions while continuing to fulfill our mission. Results of these stress tests are reviewed with the board of directors and the FCA. The bank regularly assesses 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 support financial viability and growth. 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. The bank periodically reviews and modifies 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 the bank's board of directors.

Risk-Weighted Assets at December 31, 2019:

(dollars in thousands)	**Three-Month Average Daily Balance**
On-Balance Sheet Assets:	
Exposures to sovereign entities	$ -
Exposures to supranational entities and Multilateral Development Banks	-
Exposures to government-sponsored entities (direct notes to associations)	2,582,704
Exposures to depository institutions, foreign banks and credit unions	3,060
Exposures to public sector entities	-
Corporate exposures, including borrower loans and exposures to other financing institutions	6,244,013
Residential mortgage exposures	-
Past due and nonaccrual exposures	25,153
Securitization exposures	43,583
Exposures to other assets	1,029,486
Total Risk-Weighted Assets, On-Balance Sheet	9,927,999
Off-Balance Sheet:	
Letters of credit	52,224
Commitments	1,493,439
Repo-styled transactions	471
Over-the-counter derivatives	1,086
Unsettled transactions	-
Cleared transactions	-
All other off-balance sheet exposures	1,992
Total Risk-Weighted Assets, Off-Balance Sheet	1,549,212
Total Risk-Weighted Assets Before Adjustments	**11,477,211**
Additions:	
Intra-system equity investments	149,850
Deductions:	
Regulatory capital deductions	(149,850)
Total Standardized Risk-Weighted Assets	**$ 11,477,211**

Capital Conservation and Leverage Buffers

As of December 31, 2019, the bank was well-capitalized and exceeded all capital requirements to which it was subject, including applicable capital buffers. The bank's capital conservation buffer is the lowest of the calculated buffer listed in the table below at 5.41%. The bank's leverage buffer of 3.26% is equal to the tier 1 leverage ratio minus the minimum tier 1 leverage ratio requirement. Because the bank's conservation and leverage buffers exceed the minimum buffer requirements of 2.5% and 1%, respectively, the bank currently has no limitations on its distributions and discretionary bonus payments. The aggregate amount of eligible retained income was $29,565 as of December 31, 2019. Capital conservation and leverage buffers are set forth for the year ended December 31, 2019 as follows:

	Regulatory Minimums	**Required Buffer**	**Ratios as of December 31, 2019**	**Calculated Buffer**
Common equity tier 1 capital ratio*	4.5%	2.5%	9.91%	5.41%
Tier 1 capital ratio*	6.0%	2.5%	16.01%	10.01%
Total capital ratio*	8.0%	2.5%	16.12%	8.12%
Capital conservation buffer				5.41%
Tier 1 leverage ratio	4.0%	1.0%	7.26%	3.26%
Leverage buffer				3.26%

*Includes fully phased-in capital conservation buffers which will be effective January 1, 2020. There is no phase-in period for the tier 1 leverage ratio.

Credit Risk

System entities have specific lending authorities within their chartered territories. The bank is chartered to serve its associations in Texas, Alabama, Mississippi, Louisiana and most of New Mexico. Our chartered territory is referred to as the district. FCBT serves its chartered territory by lending to the district's Federal Land Credit Association (FLCA) and Agricultural Credit Associations (ACAs). The allowance for loan losses is determined based on a periodic evaluation of the loan portfolio, which identifies loans that may be impaired based on characteristics such as probability of default (PD) and loss given default (LGD) as is further discussed in the section "Allowance for Loan Losses and Reserve for Unfunded Commitments." Allowance needs by geographic region are only considered in circumstances that may not otherwise be reflected in the PD and LGD, such as flooding or drought. There was no allowance attributed to a geographic area as of December 31, 2019.

Impaired Loans

Impaired loans are loans for which it is probable that not all principal and interest will be collected according to the contractual terms of the loan and are generally considered substandard or doubtful, which is in accordance with the loan rating model, as described below. Impaired loans include nonaccrual loans, accrual restructured loans, and loans past due 90 days or more and still accruing interest.

A loan is considered contractually past due when any principal repayment or interest payment required by the loan instrument is not received on or before the due date. A loan shall remain contractually past due until it is formally restructured or until the entire amount past due, including principal, accrued interest and penalty interest incurred as the result of past due status, is collected or otherwise discharged in full.

A restructured loan constitutes a troubled debt restructuring if for economic or legal reasons related to the debtor's financial difficulties the bank grants a concession to the debtor that it would not otherwise consider. A concession is generally granted in order to minimize the bank's economic loss and avoid foreclosure. Concessions vary by program, are borrower-specific and may include interest rate reductions, term extensions, payment deferrals or the acceptance of additional collateral in lieu of payments. In limited circumstances, principal may be forgiven. A loan restructured in a troubled debt restructuring is an impaired loan.

Impaired loans are generally placed in nonaccrual status when principal or interest is delinquent for 90 days (unless adequately secured and in the process of collection) or circumstances indicate that full collection of principal and interest is in doubt. In accordance with FCA regulations, all loans 180 days or more past due are considered nonaccrual. When a loan is placed in nonaccrual status, accrued interest that is considered uncollectible is either reversed (if current year interest) or charged against the allowance for loan losses (if prior year interest). Loans are charged off at the time they are determined to be uncollectible.

Payments received on nonaccrual loans are generally applied to the recorded investment in the loan asset. If collection of the recorded investment in the loan is fully expected and the loan does not have a remaining unrecovered prior charge-off associated with it, payments are recognized as interest income. Nonaccrual loans may be returned to accrual status when contractual principal and interest are current, the borrower has demonstrated payment performance, there are no unrecovered prior charge-offs and collection of future payments is no longer in doubt. If previously unrecognized interest income exists at the time the loan is transferred to accrual status, cash received at the time of or subsequent to the transfer is first recorded as interest income until such time as the recorded balance equals the contractual indebtedness of the borrower.

Allowance for Loan Losses and Reserve for Unfunded Commitments

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

Each of the probability of default categories carries a distinct percentage of default probability. The 14-point risk-rating scale provides for granularity of the probability of default, especially in the acceptable ratings. There are nine acceptable categories that range from a borrower of the highest quality to a borrower of minimally acceptable quality. The probability of default between 1 and 9 is very narrow and would reflect almost no default to a minimal default percentage. The probability of default grows more rapidly as a loan moves from a 9 to other assets especially mentioned and grows significantly as a loan moves to a substandard (viable) level. A substandard (nonviable) rating indicates that the probability of default is almost certain.

The credit risk-rating methodology is a key component of the bank's allowance for loan losses evaluation, and is generally incorporated into the institution's loan underwriting standards and internal lending limit. The allowance for loan losses is a valuation account used to reasonably estimate loan and lease losses as of the financial statement date. Determining the appropriate allowance for loan losses balance involves significant judgment about when a loss has been incurred and the amount of that loss. The determination of the allowance for loan losses is based on management's current judgments about the credit quality of its loan portfolio. A specific allowance may be established for impaired loans under authoritative accounting guidance. Impairment of these loans is measured based on the present value of expected future cash flows discounted at the loan's effective interest rate or, as practically expedient, at the loan's observable market price or fair value of the collateral if the loan is collateral-dependent.

The allowance for loan losses encompasses various judgments, evaluations and appraisals with respect to the loans and their underlying security that, by their nature, contain elements of uncertainty and imprecision. Changes in the agricultural economy and their impact on borrower repayment capacity will cause these various judgments, evaluations and appraisals to change over time. Accordingly, actual circumstances could vary significantly from the institutions' expectations and predictions of those circumstances. The allowance is increased through provisions for loan losses and loan recoveries and is decreased through reversals of provisions for loan losses and loan charge-offs. The level of allowance for loan losses is generally based on recent charge-off experience adjusted for relevant environmental factors. The allowance for loan losses includes components for loans individually evaluated for impairment, loans collectively evaluated for impairment and loans acquired with deteriorated credit quality. Generally, for loans individually evaluated, the allowance for loan losses represents the difference between the recorded investment in the loan and the present value of the cash flows expected to be collected discounted at the loan's effective interest rate, or at the fair value of the collateral, if the loan is collateral-dependent. For those loans collectively evaluated for impairment, the allowance for loan losses is determined using the risk-rating model.

The bank's reserves for credit losses include the allowance for loan losses and a reserve for losses on unfunded commitments. The reserve for losses on unfunded commitments includes letters of credit and unused loan commitments, and is recorded in other liabilities on the balance sheets.

Credit Risk Management

Credit Risk Mitigation Related to Loans

Credit risk arises from the potential inability of an obligor to meet its repayment obligation and exists in our outstanding loans, letters of credit, unfunded loan commitments, investment portfolio and derivative counterparty credit exposures. The bank manages credit risk associated with our lending activities through an assessment of the credit risk profile of an individual borrower.The bank sets its own underwriting standards and lending policies, approved by the board of directors that provide direction to loan officers. Underwriting standards include, among other things, an evaluation of:

- character — borrower integrity and credit history;
- capacity — repayment capacity of the borrower based on cash flows from operations or other sources of income;
- collateral — protects the lender in the event of default and represents a potential secondary source of loan repayment;
- capital — ability of the operation to survive unanticipated risks; and
- conditions — requirements that govern intended use of loan funds.

The retail credit risk management process begins with an analysis of the borrower's credit history, repayment capacity and financial position. Repayment capacity focuses on the borrower's ability to repay the loan based on cash flows from operations or other sources of income, including non-farm income. Real estate loans with terms greater than 10 years must be secured by first liens on the real estate (collateral). As required by Farm Credit Administration regulations, each institution that makes loans on a secured basis must have collateral evaluation policies and procedures. Real estate loans with terms greater than 10 years may be made only in amounts up to 85% of the original appraised value of the property taken as security or up to 97% of the appraised value if guaranteed by a state, federal or other governmental agency. The actual loan to appraised value when loans are made is generally lower than the statutory maximum percentage. Appraisals are required for loans of more than $250,000. This credit risk-rating process incorporates objective and subjective criteria to identify inherent strengths and weaknesses and risks in a particular relationship.

This credit risk-rating process uses a two-dimensional loan rating structure, incorporating a 14-point risk-rating scale to identify and track the probability of borrower default and a separate 4-point scale addressing loss given default. The 14-point risk-rating scale provides for nine "acceptable" categories, one "other assets especially mentioned" category, two "substandard" categories, one "doubtful" category and one "loss" category. The loss given default scale establishes ranges of anticipated economic loss if the loan defaults. The calculation of economic loss includes principal and interest as well as collections costs, legal fees and staff costs.

By buying and selling loans or interests in loans to or from other institutions within the System or outside the System, we limit our exposure to either a borrower or commodity concentration. This also allows us to manage growth and capital, and to improve geographic diversification. Portfolio credit risk is also evaluated with the goal of managing the concentration of credit risk. Concentration risk is reviewed and measured by industry, commodity, geography and customer limits.

Refer to the Risk-Weighted Asset table on page 94 for the bank's total and average loans, investment securities, off-balance sheet commitments and over-the-counter (OTC) derivatives. The following table illustrates the bank's total exposure (including commitments) by loan type as of December 31, 2019.

	Total Exposure
Direct notes receivable from district associations	$ 17,172,242
Real estate mortgage	808,253
Production and intermediate term	1,133,824
Agribusiness	
Loans to cooperatives	792,448
Processing and marketing	4,080,496
Farm-related business	168,508
Communications	487,274
Energy (rural utilities)	1,840,732
Water and waste disposal	170,380
Mission-related	16,195
Leases	12,194
Loans to other financing institutions	76,000
Total	$ 26,758,546

The following table provides an overview of the remaining contractual maturity of the bank's credit risk portfolio categorized by exposure at December 31, 2019:

(dollars in thousands)	Due in one year or less	Due after one year through five years	Due after five years	Total
Loans	$ 2,916,262	$ 9,321,649	$ 7,260,382	$ 19,498,293
Off-balance sheet commitments:				
Financial letters of credit	57,999	6,641	-	64,640
Performance letters of credit	7,503	5,743	-	13,246
Commercial letters of credit	1,828	2	-	1,830
Unfunded commitments	4,770,348	2,266,759	143,430	7,180,537
Investments	411,242	430,825	4,424,025	5,266,092
Derivatives (notional)	150,000	300,000	720,000	1,170,000
Total	$ 8,315,182	$ 12,331,619	$ 12,547,837	$ 33,194,638

The following table illustrates the bank's total exposure (including commitments) by geographic distribution as of December 31, 2019.

State	Percentage
Texas	49%
Mississippi	6
Alabama	6
Louisiana	3
California	3
All other states	33
	100%

Refer to Note 4 of the accompanying financial statements for amounts of impaired loans with or with no 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 credit losses.

Counterparty Credit Risk and Credit Risk Mitigation

Credit Risk Mitigation Related to Derivatives

By using derivative instruments, the bank exposes itself to credit and market risk. The bank's derivative activities are monitored by its Asset-Liability Management Committee (ALCO) as part of the ALCO's bank asset/liability and treasury functions. The ALCO is responsible for approving hedging strategies that are developed through its analysis of data derived from financial simulation models and other internal and industry sources. The resulting hedging strategies are then incorporated into the bank's overall interest rate risk-management strategies.

If a counterparty fails to fulfill its performance obligations under a derivative contract, the bank's credit risk will equal the fair value gain of the derivative. Generally, when the fair value of a derivative contract is positive, this indicates that the counterparty owes the bank, thus creating a repayment risk for the bank. When the fair value of the derivative contract is negative, the bank owes the counterparty and, therefore, assumes no repayment risk. To minimize the risk of credit losses, the bank maintains collateral agreements to limit exposure to agreed-upon thresholds. The bank deals with counterparties that have an investment grade or better credit rating from a major rating agency, and also monitors the credit standing of, and levels of exposure to, individual counterparties. When certain thresholds are met, the bank's over-the-counter derivative contracts require the bank or its counterparties to post cash or securities as collateral when the fair values of the derivatives change based on changes in interest rates. The bank typically enters into master agreements that contain netting provisions. These provisions allow the bank to require the net settlement of covered contracts with the same counterparty in the event of default by the counter party on one or more contracts. The amount of collateral the bank would have to provide if the bank's own creditworthiness deteriorated would be dependent upon the terms of the contract with the counterparty, including agreed-upon thresholds to limit exposure, and changes in interest rates. At December 31, 2019, the bank had cash collateral posted of $17.7 million. Refer to Note 17 of the accompanying financial statements for details on the notional, fair value, collateral held and credit ratings of the bank's derivative contracts. The bank did not hold any purchased credit derivatives for its own credit portfolio as of December 31, 2019.

The table below shows derivatives by underlying exposure type, segregated among interest rate caps, pay fixed swaps and pay floating swaps which are traded in over-the-counter markets as of December 31, 2019.

	Notional Amount	Gross Positive Fair Value
Interest rate caps	$ 195,000	$ 98
Pay fixed swaps	825,000	1,660
Pay floating swaps	150,000	95
Total Derivatives	**$ 1,170,000**	**$ 1,853**

Credit Risk Mitigation Related to Investments

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. At December 31, 2019, 47.40% of our $5.30 billion investment portfolio consisted of securities that carry a full faith and credit guarantee of the U.S. government. Such securities include mortgage-backed securities issued by the Government National Mortgage Association (Ginnie Mae), Export-Import Bank of the United States and U.S. Treasury. The bank's investment portfolio consisted of 40.89% of securities issued by government agencies that carry the implicit backing of the U.S. government, including mortgage-backed securities (MBS) issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and Farmer Mac. Another 11.71% of our investment portfolio is made up of asset-backed investments and corporate debt which primarily represents the credit risk in the bank's investment portfolio.

Credit risk in our investment portfolio also arises from the inability of guarantors and third-party providers of other credit enhancements, such as bond insurers or Farmer Mac, to meet their contractual obligations to us.

For each separately disclosed credit risk portfolio, see the following table for the total exposure that is covered by guarantees/credit derivatives, and the risk-weighted asset amount associated with that exposure. The bank did not hold eligible financial collateral for its loan, investment and derivative portfolios at December 31, 2019.

(dollars in thousands)

Government Guaranteed Asset Type	90-Day Average	Risk Weighting	Risk-Weighted Amount
Investments	$ 3,128,247	0%	$ -
Loans	2,277	0%	-
Total	$ 3,130,524		$ -

Securitization

Securitizations are transactions in which:

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

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

The bank currently only participates in credit-related securitizations as investors through the purchase of highly rated asset-backed securities (ABS) as included in its investment portfolio. The bank also holds securitization exposures through the purchase of U.S. government and agency guaranteed securities. The bank has not transferred any exposures that it has originated or purchased from a third party in connection with a securitization of assets as of December 31, 2019, nor does it have any outstanding exposures that it intends to be securitized as of December 31, 2019. The bank did not recognize any gain or loss on securitized assets for the twelve months ended December 31, 2019.

We are subject to liquidity risk with respect to our purchased securitization exposures. In volatile market conditions, it could be difficult to sell such investments, if the need arises, and the discounts from face value could likely be significant. In addition, because of the inherent uncertainty of determining the fair value of such investments that do not have a readily available market value during volatile market conditions, 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. The bank monitors its purchased ABS holdings on an ongoing basis, reviewing monthly credit performance metrics against outstanding credit enhancements, monitoring issuer and servicer performance, and tracking relevant ABS market conditions and credit spreads.

Below is an overview of our purchased securitization exposures held as of December 31, 2019, by exposure type and categorized by risk weighting band and risk-based capital approach. Refer to Note 3 of the accompanying financial statements:

Description of Securitization	Risk-Based Capital Approach	Exposure Amount (dollars in thousands)	Risk Weighted
Agency MBS:			
GNMA	Standardized Risk Weight	$ 2,165,953	0%
FNMA and FHLMC	Standardized Risk Weight	2,139,207	20%
Total Agency MBS		$ 4,305,160	
Asset-backed securities			
Small Business Administration	Standardized Risk Weight	$ 125,048	0%
Asset-backed securities	Gross-up	37,067	20%-100%
Total Asset-backed securities		$ 162,115	

Equities

The bank is a limited partner in certain Rural Business Investment Companies (RBICs) for various relationship and strategic reasons. These RBICs facilitate equity and debt investments in agriculture-related businesses that create growth and job opportunities in rural America. There have been no sales or liquidations of these investments during the period. These investments are accounted for under the equity method as the bank is considered to have significant influence. These investments are not publicly traded and the book value reflects fair value. The bank had realized gains or losses recognized either on the balance sheet or through earnings.

(dollars in thousands)	Disclosed in Other Assets	Life-to-Date Gains (Losses) Recognized in Retained Earnings*
RBICs	$14,495	$(5,241)

*Retained earnings is included in common equity tier 1 and total capital ratios.

Interest Rate Risk

Asset/liability management is the bank's process for directing and controlling the composition, level and flow of funds related to the bank's and district's interest-rate-sensitive assets and liabilities. The bank is able to manage the balance sheet composition by using various debt issuance strategies and hedging transactions to match its asset cash flows. Management's objective is to generate adequate and stable net interest income in a changing interest rate environment.

The bank uses a variety of techniques to manage its financial exposure to changes in market interest rates. These include monitoring the difference in the maturities or repricing cycles of interest-rate-sensitive assets and liabilities; simulating changes in net interest income under various interest rate scenarios; and monitoring the change in the market value of interest-rate-sensitive assets and liabilities under various interest rate scenarios. The bank measures interest rate risk on a quarterly basis.

The interest rate risk inherent in a district association's loan portfolio is substantially mitigated through its funding relationship with the bank. The bank manages district interest rate risk through its direct loan pricing and funding processes. Under the Farm Credit Act, a district association is obligated to borrow only from the bank unless the bank approves borrowing from other funding sources. An association's indebtedness to the bank, under a general financing agreement between the bank and the association, represents demand borrowings by the association to fund the majority of its loan advances to association members and is secured by the total assets of the association.

The bank's net interest income is determined by the difference between income earned on loans and investments and the interest expense paid on funding sources, typically Systemwide bonds and discount notes.

The bank's level of net interest income is affected by both changes in market interest rates and timing differences in the maturities or repricing cycles of interest-rate-sensitive assets and liabilities.

Depending upon the direction and magnitude of changes in market interest rates, the bank's net interest income may be affected either positively or negatively by the mismatch in the maturity or the repricing cycle of interest-rate-sensitive assets and liabilities.

The bank maintains a loan pricing philosophy that loan rates should be based on competitive market rates of interest. The district associations offer a wide variety of products, including LIBOR- and prime-indexed variable-rate loans and loans with fixed-rate terms ranging from under one year to 30 years. The interest rates on these loans are directly related to the bank's cost to issue debt in the capital markets and a credit spread added for borrower risk.

The bank offers an array of loan programs to associations that are designed to meet the needs of the associations' borrowers. These loan programs have varying repayment terms, including fixed and level principal payments, and a choice of payment frequencies, such as monthly, quarterly, semi-annual and annual payments. Additionally, the bank offers a choice of prepayment options to meet customer needs.

Refer to the net interest income and market value of equity table in the Management's Discussion and Analysis on page 23, which sets forth the bank's projected sensitivity to interest rate movements as prescribed by policy as of December 31, 2019, based on the bank's interest-earning assets and interest-bearing liabilities at December 31, 2019.

OUR MISSION is to enhance the quality of life in rural communities by using cooperative principles to provide competitive credit and superior service to our member-owners.

Farm Credit Bank of Texas

4801 Plaza on the Lake Drive | Austin, Texas 78746
512.465.0400 | FAX 512.465.0675
farmcreditbank.com | findfarmcredit.com